

PLANNING STAFF REPORT
(Exhibit 1)

Reviewed and Approved:


Adam Trimble – Planning Manager

TO: Cowlitz County Hearing Examiner Dept. of Origin: Building & Planning
FROM: Cody Crytzer, Senior Environmental Planner Date Submitted: February 26, 2026
RE: Shoreline Substantial Development Permit 25-1051
Port of Kalama Rail Yard Expansion Project

QUASI-JUDICIAL PROCEDURE – OPEN RECORD PUBLIC HEARING

Public Hearing Objective: Determine if the proposed improvements are in conformance with the Shoreline Management Act of 1971 (SMA) and the 2018 Cowlitz County Shoreline Master Program (SMP)

Property Owner: Port of Kalama

Applicant: Port of Kalama

Summary of Proposal: Expansion of existing rail system and public recreational improvements

Location: 400 Toteff Road, Kalama, WA; Project to traverse seven Port of Kalama parcels, including five within Cowlitz County jurisdiction (6005501, 60066, WC2015004, 600540200, and 6005401). Two parcels are within City of Kalama jurisdiction (410560200 and 410560500). Section 20, Township 6 North, Range 1 West, Willamette Meridian

Zoning: Unzoned (U)

Comp. Plan: Economic Resource Land – Industrial

Shoreline Env. Designation: High Intensity

Existing Land Use: Unzoned (U) – Industrial with Transportation elements

Surrounding Land Uses North: Unzoned (U) and City of Kalama jurisdiction – Commercial, Industrial, and Recreational uses
 South: Unzoned (U) – Commercial, Industrial, and Residential uses
 East: Unzoned (U) – Industrial uses and Interstate
 West: Columbia River

Staff Recommendation: **Approval with conditions** of Level II Shoreline Substantial Development Permit 25-1051

A. PUBLIC HEARING OBJECTIVE

The subject application is being processed as a Level II Shoreline Substantial Development Permit, pursuant to CH. 90.58 RCW and Section 8.6 SMP, which all applications are to be heard and granted, conditioned, or denied by the Hearing Examiner after considering the findings in this report, public testimony, and the advice of the Director or their designee.

The objective of this hearing is to determine whether the proposed improvements are in conformance with the Shoreline Management Act of 1971 (SMA) and the 2018 Cowlitz County Shoreline Master Program (SMP).

The Hearing Examiner may make his/her decision following the close of the public hearing but shall render such decision within 10 days following the public hearing date.

B. DESCRIPTION OF PROPOSAL

The applicant has submitted a Level II Shoreline Substantial Development for proposed expansion of the existing rail system and freight mobility at the subject parcel, located at the Port of Kalama. The rail expansion will primarily occur throughout an approximately 5,800-foot-long corridor parallel to Hendrickson Drive and the existing TEMCO rail yard and portions of the Southport site and former Chemtrade site. Proposed construction activities required for the project include removal of portions of the existing track within the TEMCO rail yard, construction of new incoming and departure tracks, including four new arrival tracks and six new departure tracks, grading and placement of fill for construction of the railbed, installation of associated rail infrastructure, improvement and / or relocation of existing utilities, stormwater system construction, construction of a new 13-foot-wide access drive, and construction of a new rail crossing along Hendrickson Drive. Per SMP Table 8-1, the proposed project will require a Level II Shoreline Substantial Development Permit (SSDP), due to being an industrial development use 4,000 square feet or greater with transportation elements. The five parcels within County jurisdiction are industrial sites that have been previously disturbed or currently are made up of entirely built environment conditions. Per the applicant's submitted Shoreline Narrative (Exhibit 2), the vegetation and habitat within these areas are extremely limited or devoid of vegetation.

The applicant's Shoreline Narrative identifies that the project will include:

- Removal of approximately 16,000 track feet (TF) of existing track.
- Construction of four new arrival tracks (14,700 total TF), six new departure tracks (15,300 total TF), with connections to the BNSF-owned lead tracks and BNSF mainline.
- Installation of a new security fence around expanded areas of the project site to separate the TEMCO Terminal operations from adjacent publicly accessible areas.
- One new at-grade crossing of Hendrickson Drive. Existing rail crossings will be maintained. New rail crossing will include signage and lighting.
- Realignment of a portion of Hendrickson Drive will be completed to reduce the length of the new at-grade rail crossing and for the purposes of traffic calming and public safety.
- A 13-foot-wide access drive will be constructed parallel to the new tracks along the western border of the site as well as between the tracks through the central portion of the site.
- Stormwater infrastructure will include a new infiltration system within the rail yard and bioretention facilities/infrastructure outside of the expanded rail yard.
- Utility work including improvements and/or extension of existing utility infrastructure and/or relocation of existing infrastructure. Utility work includes waterlines, electrical utilities, lightning, sanitary sewer, gas, and communication lines. A new fire hydrant will also be installed at the proposed Hendrickson Drive rail crossing to improve safety and emergency response accessibility to waterlines.

The two parcels within the City of Kalama's jurisdiction are undeveloped parcels to serve for recreational improvements. The applicant has indicated that they will acquire all permits required from the City of Kalama for development proposed within City limits.

C. BACKGROUND INFORMATION REGARDING PROPOSAL

1. **Project History:** Department staff received a Level II Shoreline Substantial Development Permit application on December 04, 2025, and determined the application to be complete on December 18, 2025.
2. **Zoning:** The subject property is zoned Unzoned (U). Per CCC 18.10.275(U), all uses which have not been declared a nuisance by statute, resolution, ordinance, or court of competent jurisdiction are permitted.
3. **Comprehensive Plan:** The subject parcel is designated as Economic Resource Land – Industrial Use per the Comprehensive Plan. Economic Resource Lands have a significant role in the long-term economic viability of Cowlitz County. The Comprehensive Plan states that a sustained regional economy relies on industry. The County will strive to provide for a balanced distribution of land for industrial activities to accommodate economic growth. Development of industrial sites, however, can require balancing many interests and needs. The County will seek to protect sites for industry, while at the same time considering potential impacts to the public.
4. **Shoreline Environment Designation:** The shoreline on and adjacent to the subject parcel is designated as High-Intensity per the SMP. Shoreline Use Regulations for Industrial uses can be found in SMP 7.2.6 and Transportation uses can be found in SMP 7.2.13.

D. STATE ENVIRONMENTAL POLICY ACT COMPLIANCE

Finding: The Port of Kalama issued a Determination of Non-Significance on December 5, 2025, with a comment period ending on December 22, 2025. Comments were received from the Department of Ecology (ECY) regarding Shorelands and environmental assistance, solid waste management, spill prevention, preparedness, and response, and toxics cleanup (Exhibit 3).

Conclusion: Comments received are reflected within the findings of this report. Staff conclude that SEPA compliance has been achieved.

E. FINDINGS REGARDING LAND USE

1. **Zoning:** The subject parcel is zoned U. Industrial uses have not been deemed a nuisance by the County and would be a permitted use.
2. **Cowlitz County Comprehensive Plan: Economic Resource Land – Industrial Use:** According to the Cowlitz County Comprehensive Plan, Economic Resource Land, including Industrial Land, Forest Resource Land, Agricultural Resource Land and Mineral Resource Land, have a significant role in the long-term economic viability of Cowlitz County. It is physically and economically challenging to reclaim these lands once they are converted to other uses. Economic Resource Land merits additional protection from development pressures. The County will actively seek to prevent

conversion of existing Economic Resource Land to non-compatible uses. The objective of the Economic Resource Land Use Category is to retain the viability of Economic Resource Land for present and future generations. The guideline is for a minimum lot size of 38 acres and minimum lot width of 100 feet.

A sustained regional economy relies on industry. The County will strive to provide for a balanced distribution of land for industrial activities to accommodate economic growth. Development of industrial sites, however, can require balancing many interests and needs. The County will seek to protect sites for industry, while at the same time considering potential impacts to the public.

Goal LU 16: Identify Industrial Land.

Finding: Policy LU 16.1 Encourage industrial development in areas with few environmental constraints and in areas where development can be made compatible with the environment. Policy LU 16.2 Ensure industrial areas have access to communication networks, as well as major transportation routes, such as truck routes, highways, railroads, waterways, and air terminals. Policy LU 16.3 Industrial lands at minimum are to include existing land identified in the Land Use Ordinance as industrial, as well as all Port property excluding those locations owned by Ports as off-site environmental mitigation areas. Policy LU 16.4 Industrial lands are located within a fire district or are served by a local fire district through formal agreement. They have fire protection available, or the ability to ensure fire protection is available prior to development approval.

Conclusion: The proposed rail expansion will occur within Port of Kalama property and is designed to avoid and minimize impacts to critical areas to the extent feasible. The project is to occur landward of the ordinary high-water mark (OHWM), outside of the floodplain, outside of riparian habitat areas, and within existing developed areas to the maximum extent feasible. The project will improve communication network access for industrial uses.

Goal LU 17: Protect Industrial Land.

Finding: Policy LU 17.1 Utilize the Cowlitz County Commercial and Industrial Binding Site Plan Code (Chapter 18.64) to provide for the subdivision of Industrial property into smaller parcels than otherwise permitted in the Economic Resource Land classification. Policy LU 17.2 Review development proposals for potential impacts on subject or surrounding Industrial land, and services needed to support industry. Policy LU 17.3 Protect Industrial Land from incompatible uses that could have the potential to prevent or substantially restrict industrial activity. Policy LU 17.4 Ensure meaningful opportunity for public involvement is provided during any permitting process associated with development of industrial land. Policy LU 17.5 Impacts associated with Industrial development should be mitigated consistently with state, federal and local regulations and plans.

Conclusion: Proposed rail expansion will not require subdivision of industrial property into smaller parcels and will allow for improved rail service and shipping capacity at the terminal. Public notice for application and for public hearing provided ample opportunity for public engagement. Project will generate minimal to no impacts and will be mitigated to ensure compliance with state, federal, and local regulations.

3. Findings Regarding Shoreline Management Act/Shoreline Master Program Compliance

- a. ***Permitting Required:*** The site is located within a High-Intensity Shoreline Environment Designation. A Level II Shoreline Substantial Development Permit is required due to the total area of disturbance required for development, per Table 8-1, 2018 SMP.

b. **Public Notice:** Notice of the proposal was advertised in *The Daily News* on December 30, 2025. Written notice of the proposal was sent to property owners within 300 feet of the property on December 30, 2025. Staff posted the Notice of Application on and near the subject property on December 30, 2025. All Notices of Application included notice of future public hearing, with time and location of the hearing advertised in *The Daily News* on February 14, 2026, with Notice of Public Hearing sent to property owners within 300 feet and posted on and near the subject property by staff on February 23, 2026.

c. **Priorities for Development within Shorelines of Statewide Significance:** In addition to the general shoreline regulations and shoreline use and modification regulations, development proposals within a Shoreline of Statewide Significance must be consistent with the priorities outlined in RCW 90.58.020 and within Section 5.5 of the SMP. The proposal must be consistent with the following priorities:

i. **Recognize and protect statewide interests over local interest.**

Finding: The development proposal is subject to review under the County's SMP, including state agencies with jurisdiction, affected tribes, citizen's advisory committees, and elected officials.

Conclusion: Through public notice and comment periods SEPA compliance has been achieved with state agency feedback included in review materials.

ii. **Preserve the natural character of the shoreline.**

Finding: The portion of the Columbia River adjacent to the subject property is located in the High-Intensity SED and is characterized by land disturbance associated with industrial development.

Conclusion: The development footprint is to occur in areas that intensive development already exists. The project has been designed to avoid and minimize adverse impacts to the environment to the maximum extent feasible, with best management practices (BMPs) to be implemented during construction to avoid the potential for inadvertent adverse impacts.

iii. **Support actions that result in long-term over short-term benefit.**

Finding: Per applicant the project will increase efficiency and will allow the continuation of the Port's existing authorized uses in the County. The resources and values of the shoreline, including economic value, will be protected through BMPs, compliance with applicable regulations, and with no net loss of ecological value.

Conclusion: Proposed project will provide long-term economic benefits and will continue to make use of the previously disturbed transportation corridor.

iv. **Protect the resources and ecological function of the shoreline.**

Finding: Any time construction activity occurs adjacent to a water body, there is a potential for water contamination because of construction materials, sediment, or hazardous materials entering the water body. The proposed project is to occur within a highly industrial and previously developed portion of the shoreline. Per submitted

assessments, the development footprint does not provide suitable habitat for protected species, and the project has been designed with best management practices to ensure that the project does not result in net loss of ecological shoreline functions.

Conclusion: Per submitted habitat assessment, the proposal will not change any ecological functions of the shoreline.

v. ***Increase public access to publicly owned areas of the shoreline.***

Finding: The proposed project will not interfere with or restrict public access to publicly owned areas of the shoreline. Additionally, the project proposes recreational improvements with increased parking and accessible ADA features.

Conclusion: The proposal will improve public access to the shoreline, thus being consistent with this priority.

vi. ***Increase recreational opportunities for the public on the shoreline.***

Finding: The project includes recreational improvements and an increase in public access to the shoreline through increased parking, ADA-accessible features, and a designated access path to allow visitors to safely access the shoreline.

Conclusion: Through proposed improvements, the project would result in an increase in recreational opportunities.

d. **General Shoreline Regulations:** The proposal is subject to the General Shoreline Regulations within section 6 of the SMP; conformance with each section is discussed below:

- i. ***Section 6.1, No Net Loss of Ecological Function:*** All development activities within shoreline jurisdiction must demonstrate no net loss in ecological function because of undertaking project activities. In addition, mitigation sequencing is required when a project results in adverse impacts on the environment.

Finding: The project has been designed to avoid and minimize impacts on ecological functions of the shoreline to the maximum extent possible. The project will occur landward of the OHWM, outside of the floodplain, outside of riparian habitat areas, and within existing developed areas to the maximum extent feasible. The proposed planting plan includes native deciduous and evergreen trees, shrubs, grasses, and ground cover species that will be planted to offset impacts related to removal of existing vegetation (Exhibit 4).

Conclusion: The project as proposed is consistent with mitigation sequences and would result in no net loss of ecological function, satisfying the requirements of this section of the SMP through the avoidance and minimization measures proposed.

- ii. ***Section 6.2, Archaeological, Cultural and Historical Resources:*** Shorelines are often locations where archaeological, cultural and historical resources are often found. The SMP requires that inadvertent discovery language be applied to each permit, and that archaeological surveys be completed in the event a proposal is located within an area of known or probable archaeological significance.

Finding: A cultural resource survey for the project was conducted by Archaeological Investigations Northwest which found that the project will occur within two historic-period resources, the Chemtrade building and a Dredge Materials Placement Site. Both were evaluated according to the National Register for Historic Places (NRHP) criteria and were recommended to not be eligible for listing in the NRHP. The Federal Railroad Administration (FRA) consulted with the State Historic Preservation Office (SHPO) and Tribes in August 2025. The project resulted in a finding of no historic properties affected, and FRA received concurrence from SHPO.

Conclusion: Standard inadvertent discover language will be applied to all permits as required per Section 6.2 of the SMP, ensuring compliance with this section of the SMP.

- iii. **Section 6.3, Critical Areas Protection:** The SMP provides for the protection of critical areas within shoreline jurisdiction through the adoption of the regulations contained within the County Critical Areas Ordinance (CCC 19.15), and in some instances, provides additional modifications and clarifications to the adopted regulations.

Finding: The proposed water-related industrial use within a High-Intensity SED has a 50' shoreline buffer and a 10' building setback, for a combined 60' setback. All development within shoreline jurisdiction must be located, designed, constructed, conducted, and maintained in a manner that maintains ecological function. Findings of above Section 6.d.i apply. Per submitted critical areas assessment, none of the project work will occur within the riparian habitat area boundary. The critical areas assessment also indicates that the project is not anticipated to have an adverse impact on the riparian habitat area as the development will occur within an industrial previously developed site and will not result in net loss of ecological functions. The applicant's biologists have prepared a planting plan that will establish native vegetative species adjacent to the development to improve native species diversity and complexity which is anticipated to offset impacts for any minor vegetation removal required for project development. The applicant proposed to plant a variety of native deciduous and evergreen trees, shrubs, and ground cover species as well as removing invasive species.

Conclusion: As proposed, the project would not result in impacts to stream or habitat functions. The project would result in no net loss of ecological function and would satisfy the requirements of this section of the SMP in addition to CCC 19.15 through the avoidance and minimization measures proposed.

- iv. **Section 6.4, Flood Prevention and Flood Damage Minimization:** The SMP addresses flooding impacts through the application of Ch. 16.25 CCC and the requirements for development in floodways and channel migration zones (CMZs) included in Section 6.4.

Finding: The project has been designed to avoid development within the floodplain. The project will not result in floodplain impacts or an increase in flood hazards.

Conclusion: No floodplain permit will be required for this project.

- v. **Section 6.5, Public Access:** Public access provisions apply to all shorelines of the state unless stated otherwise and are intended to protect the ability of the public to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline from adjacent locations.

Finding: The project has been designed to avoid and minimize impacts on shoreline vegetation, occurring in previously developed areas to the maximum extent feasible. The project includes an expanded shoreline public access pathway and parking adjacent to Hendrickson Drive. The new and expanded pathway will be ADA accessible, and parking includes ADA-compliant parking.

Conclusion: As proposed, the project will result in improved public access to existing shoreline. The project will meet the requirements of Section 6.5 of the SMP.

- vi. **Section 6.6, Vegetation Conservation:** The SMP provides limitations as to the amount of vegetation removed for a proposal, as well as the vegetation used for restoration and mitigation efforts.

Finding: The project has been designed to avoid and minimize impacts on vegetation to the maximum extent feasible. The proposed impacts within Cowlitz County consist of developed industrial parcels without substantial vegetation or habitat. Vegetation removal within the County jurisdiction would be limited to short statured grasses and shrubs within the former Chemtrade facility site. The project includes a planting plan that will offset minor impacts to the vegetation that will occur during construction.

Conclusion: Through avoidance and mitigation replanting proposed, the project will meet requirements of Section 6.6 of the SMP.

- vii. **Section 6.7, Water Quality and Quantity:** Development proposals within shorelands are required to comply with applicable Stormwater and sewage requirements, in addition to requirements specific to the shoreline environment.

Finding: The project will comply with the County's Stormwater manual and best management practices to prevent impacts on water quality and stormwater quantity. Stormwater management will not be altered as a result of the proposed project. Stormwater within the project footprint is currently infiltrated. The project includes bioswales that will allow continued infiltration within the site and stormwater will not be redirected, collected, or discharged as a result of the project.

Conclusion: Applicant will acquire applicable construction stormwater permits. The proposal will conform to the requirements of Section 6.7 of the SMP.

- e. **Shoreline Use and Modification Regulations:** Sections 7.1, 7.2.6, 7.2.11, and 7.2.13 of the SMP apply to this proposal and are discussed below.

- i. **Section 7.1, Shoreline Use, Modification, and Standards Table:** Table 7-1 provides an overview of the permitted uses within each Shoreline Environment Designation. Table 7-2 defines the RHA buffer widths and other dimensional standards within each SED. Section 7.1 provides additional guidance and clarification of the application of standards and uses within shoreline jurisdiction.

Finding: The Shoreline Environmental Designation (SED) along the section of the Columbia River adjacent to the subject parcel is designated High-Intensity. Per Table 7-1, the proposed water-related industrial, water-related recreational, railroad transportation, and parking transportation are all permitted uses through an SSDP within High-Intensity SED.

SED Table 7-2 describes the shoreline buffers (interchangeable with RHA) and building setbacks as applied to water-dependent uses. For the proposed uses within High-Intensity SED, the combined critical areas and building setback would be 60' from the OHWM.

Conclusion: Per submitted project plans, no project elements are proposed within the 60' setback.

- ii. **Section 7.2.6, Industrial:** The SMP regulations regarding Industrial uses within shoreline jurisdiction.

Finding: Per Section 7.2.6.A water dependent industrial uses are preferred over non-water dependent industrial uses.

Per Section 7.2.6.B water-related and non-water-oriented industrial uses shall not be allowed if they displace existing viable water-dependent uses or if they are proposed to occupy space designated for water-dependent uses identified in previously approved SSDP or other approval.

Conclusion: Proposed development is an expansion of previously approved water-related use. It will also support the existing water-dependent TEMCO Terminal. The project, as proposed. Will not displace existing water-dependent uses.

Finding: Per Section 7.2.6.C where industrial use is proposed for location on land in public ownership, public access shall be required consistent with Section 6.5, Public Access. Industrial development and redevelopment shall be encouraged to locate where environmental cleanup and restoration of the shoreline can be incorporated.

Conclusion: The proposed project includes public access, and the location of the expanded rail yard is constrained by its necessary proximity to TEMCO.

Finding: Per Section 7.2.6.D new non-water-oriented industrial development may be allowed in shoreline jurisdiction if the site is physically separated from the shoreline by another property or public right of way, and public access and/or ecological protection is provided.

Conclusion: Proposed development is expansion of existing water-related use.

Finding: Per Section 7.2.6.E waterward expansion of existing non-water-oriented development shall conform to the buffer and setback provisions of this chapter. If the existing non-water-oriented industrial use does not conform to the setback and buffer provisions, the structure can still be expanded but only on the landward sides of the structure.

Conclusion: The proposed project is water-related and does not include non-water-oriented waterward expansion.

Finding: Per Section 7.2.6.F proposed development shall maximize the use of existing industrial facilities and avoid duplication of dock or pier facilities.

Conclusion: Proposed development does not include any dock or pier facilities and will be located within existing industrial areas and will not encroach within unimproved natural areas.

Finding: Per Section 7.2.6.G siting of accessory development or use within shoreline jurisdiction shall be limited to facilities required to serve water-oriented uses.

Conclusion: The proposed project will support the existing TEMCO terminal and includes required public access elements, both of which are water-related uses. Accessory developments within the SED would be limited to those required to serve the primary proposed use.

Finding: Per Section 7.2.6.H in the High-Intensity SED, water-oriented structures and facilities are not subject to the height restrictions defined in SMP Table 7-2, providing the applicant demonstrates a need for the proposed height of the structure or facility and the view of a substantial number of residences in areas adjoining such shorelines will not be obstructed.

Conclusion: The proposed development is located within the High-Intensity SED and will not obstruct any adjacent views.

Finding: Per Section 7.2.6.I overwater structure, or other structures waterward of the OHWM, are allowed only for those portions of water-dependent industrial uses that require overwater facilities as an essential feature of their function and when allowed within the adjacent upland SED. Design of overwater structures or structures beyond the OHWM shall demonstrate that they will not interfere with normal stream geomorphic processes, require additional future shoreline stabilization, or interfere with navigation or normal public use of the water.

Conclusion: The proposed project does not include overwater structures.

- iii. **Section 7.2.11, Recreational:** The SMP regulations regarding Recreational uses within shoreline jurisdiction.

Finding: Per Section 7.2.11.A recreation areas or facilities on the shoreline shall provide physical or visual access to the shoreline.

Conclusion: The project as proposed includes both physical and visual access to shoreline and recreation elements.

Finding: Per Section 7.2.11.B recreation facilities and activities are permitted when they do not displace water-dependent uses and are consistent with existing water-related and water-enjoyment uses.

Conclusion: The proposed development would not displace water-dependent uses. The rail expansion would occur within parcels with existing industrial activities. The proposed recreation and shoreline public access elements would connect to and expand existing public access areas.

Finding: Per 7.2.11.C only water-oriented elements of a recreational proposal may encroach on required vegetation buffers of this program, except as outlined in the Critical Areas Regulations incorporated herein, Section 6.3. Per 7.2.11.D recreational

development shall be located, designed, and operated in a manner consistent with the purpose of the environment designation in which it is located and shall meet the criterion of no net loss of ecological functions and the preferred mitigation sequence of this program, set forth in Section 6.1, No Net Loss of Ecological Function.

Conclusion: As proposed, the project elements would not encroach within critical areas and building setbacks. Recreational elements have been designed to avoid and minimize impacts to the shoreline environment to the maximum extent feasible. The intent of the High-Intensity SED is to provide for high-intensity, water-oriented commercial, transportation, and industrial uses while protecting existing ecological functions and restoring ecological functions in areas that have been previously degraded. Recreational elements that would occur within the High-Intensity SED are include walking paths, an access drive, and parking adjacent to the expanded rail yard. Per submitted critical areas assessment, the project will result in no net loss of ecological functions.

Finding: Per 7.2.11.E parking areas shall be located outside of shoreline jurisdiction, unless infeasible. When permitted within shoreline jurisdiction, parking areas shall be sited as far from the immediate shoreline as feasible. Applicants shall demonstrate the need for the proposed location.

Conclusion: The location of the proposed development is constrained by existing conditions of the project site which is bound to the west by the Columbia River and to the east by Hendrickson Drive. Parking elements have been located as far from the shoreline as feasible and would be separated from the shoreline by the public access pathway.

Finding: Per 7.2.11.F provisions shall be made for adequate vehicular parking and safe pedestrian crossings. Design of parking areas shall comply with all applicable County and State stormwater regulations.

Conclusion: The project includes adequate parking and safe pedestrian pathways and crossings. Stormwater will be managed with bioswales similar to existing stormwater management.

Finding: Per 7.2.11.G all permanent, substantial recreational structures and facilities shall be located outside officially mapped floodways. Minor accessory uses (including, but not limited to, picnic tables and playground equipment) may be allowed in the floodway when it can be demonstrated by the applicant that there will be no net loss of ecological functions as set forth in Section 6.1, and all flood hazard criteria of this Program and the County's flood protection code (Chapter 16.25 CCC, Floodplain Management) are met.

Conclusion: The project has been designed to avoid development within the floodplain.

Finding: Per 7.2.11.H new non-motorized trails and paths for recreational use shall comply with the provisions of subsection 7.2.13.B, Non-Motorized Facilities.

Conclusion: See Transportation section below.

Finding: Per 7.2.11.I new overwater structures for recreation use shall be allowed only when:

1. They accommodate water-dependent recreation use or facilities; or
2. They provide access for the public to enjoy the shorelines of the state; and
3. No net loss of ecological functions will be achieved as set forth in Section 6.1, No Net Loss of Ecological Function.

Conclusion: The project does not include a proposal for new overwater structures.

Finding: Per 7.2.11.J recreational facilities shall provide adequate facilities for potable water supply, sewage disposal, and/or garbage collection where feasible.

Conclusion: The project includes restroom facilities with water supply and sewage connections to municipal wastewater infrastructure. The restroom facilities would be located within the City's jurisdiction but would be developed as part of the overall project that crosses jurisdictional boundaries.

- iv. **Section 7.2.13, Transportation and Parking:** The SMP regulations regarding Transportation and Parking uses within shoreline jurisdiction.

Finding: Per Section 7.2.13.A.1 new or expanded surface transportation facilities not related to and necessary for the support of existing or planned authorized uses in shoreline jurisdiction shall be located outside of the shoreline jurisdiction unless infeasible. Where location outside of the shoreline jurisdiction is not possible, facilities except for bridge components) shall comply with the buffers identified in Table 7-2, be set back from the OHWM a distance sufficient to make shoreline stabilization unnecessary and shall demonstrate the need for the facility within the shoreline.

Conclusion: The project includes an expanded rail yard that will directly support the TEMCO Terminal and has functional necessity for being located adjacent to the terminal. The development location of the rail expansion is constrained by existing site conditions. All project components are located outside of the shoreline buffers established in Table 7-2 including rail and roadway infrastructure.

Finding: Per Section 7.2.13.A.2 the applicant shall demonstrate that new or expanded facilities are designed to:

- a. Minimize impacts to critical areas and associated buffers and to minimize alterations to the natural or existing topography to the extent feasible;
- b. Avoid or minimize the need for shoreline stabilization; and
- c. Follow the mitigation sequence of this Program to achieve no net loss of ecological functions as set forth in Section 6.1, No Net Loss of Ecological Functions.

Conclusion: The project has been designed to avoid and minimize impacts on natural resources to the maximum extent feasible.

Finding: Per Section 7.2.13.A.3 new transportation crossings over streams shall be avoided, but where necessary shall utilize bridges rather than culverts to the extent feasible. Per 7.3.13.A.4 requirements for bridge and culvert installation crossing all streams shall be consistent with flow-, debris- and/or fish-passage requirements in

Washington Department of Fish and Wildlife's site-specific Hydraulic Project Approval.

Conclusion: The proposed project does not include stream crossings, bridges, and/or culverts.

Finding: Per Section 7.2.13.A.5 all excavation materials and soils exposed to erosion by all phases of road, railroad, bridge, and culvert work shall be stabilized and protected by seeding, mulching, or other effective means, both during and after construction.

Conclusion: The applicant will prepare an erosion and sediment control plan to be implemented for project construction. Soils exposed after construction will be managed until vegetation has been established and the risk of erosion is mitigated.

Finding: Per Section 7.2.13.A.6 private access roads or driveways providing ingress and egress for individual single-family residences or lots shall be limited to the minimum width allowed by the fire code.

Conclusion: The project does not include access roads or driveways for single family residences.

Finding: Per Section 7.2.13.A.7 bridges shall provide the maximum length of clear spans feasible with pier supports to produce the minimum amount of deflection feasible.

Conclusion: The project does not include bridges.

Finding: Per Section 7.2.13.B.1 non-motorized facilities, such as trails, shall comply with provisions for public access that are part of this Program.

Conclusion: The project has been designed to expand shoreline public access and parking adjacent to Hendrickson Drive, being consistent with public access requirements.

Finding: Per Section 7.2.13.B.2 new or expanded non-motorized transportation facilities shall be located outside of critical areas and their associated buffers. With demonstration that the trail cannot be located outside of the buffer, the trail may be located in o the outer 25 percent of the critical area buffer.

Conclusion: Per applicant's critical areas assessment, the project elements will not be located within critical areas or their associated buffers.

Finding: Per Section 7.2.13.B.3 elevated walkways shall be utilized where feasible to cross wetlands and streams if a trail is not feasible outside of the critical areas and associated buffer.

Conclusion: Public access trails are not located where stream or wetland crossings would be necessary.

Finding: Per Section 7.2.13.B.4 non-motorized facilities constructed for water enjoyment and water access are encouraged; any impacts to ecological functions shall be avoided, minimized, and mitigated.

Conclusion: The applicant proposes expansion of public access trails for recreation and public shoreline enjoyment. Per critical areas assessment, the project has been designed to avoid and minimize impacts to the shoreline environment to the maximum extent possible.

Finding: Per Section 7.2.13.C parking facilities are not a preferred use and shall be allowed only where necessary to support an authorized use. Parking facilities accessory to a permitted use shall be:

1. Set back as far as possible from the OHWM and outside shoreline jurisdiction unless limited by lot size, topography, critical areas, or some other similar circumstances;
2. Parking facilities shall be located on the landward side of the primary structure unless demonstrated to be infeasible.

Conclusion: The proposed parking is not a primary use but is to support shoreline public access and recreation. The parking location is determined by existing conditions of the site as the site is bound to the west by the Columbia River and to the east by Hendrickson Drive. Parking elements have been located as far from the shoreline as feasible and are separated from the shoreline by the public access pathway.

Finding: Per Section 7.2.13.D facility lighting shall be designed and operated to avoid illuminating nearby properties or public areas; prevent glare on adjacent properties, public areas, or roadways to avoid infringing on the use and enjoyment of such areas; and to prevent hazards. Methods of controlling spillover light include, but are not limited to, limits on height of structure, limits on light levels of fixtures, light shields, setbacks, buffer areas, and screening. Lighting must be directed away from critical areas and adjacent waterbodies, unless necessary for public health and safety.

Conclusion: Lighting for public safety of users will be provided. Lighting will be designed and implemented to avoid impacts on adjacent properties and to avoid hazards.

4. Conclusion and Staff Recommendation

The individual findings and conclusions stated above establish that this proposal either meets, or if conditioned as recommended below, will meet: the applicable standards established in the SMP and the four criteria for granting a substantial development permit on a shoreline of statewide significance. Completion of this project, if constructed as conditioned below, will therefore be consistent with the Shoreline Management Act, the County's Shoreline Master Program, and existing land uses in the project area.

Recommendation: Level II Shoreline Substantial Development Permit 25-1051 be approved, subject to the following conditions:

-
1. Permit to Construct: Prior to any construction activities, all necessary and required building permit applications shall be made to the Department of Building and Planning.
 - a. The applicant shall comply with all applicable sections of the currently adopted Building Codes at the time of permit submittal.
 - b. Work shall substantially conform to the plans and specifications submitted with this permit request, as shown on the site plan submitted with this application, Exhibit 3. Substantial changes to the submitted site plan may require further special use approval.
 2. In the event of the discovery of cultural and/or archeological sites during construction, the project shall be halted, and the applicant shall immediately notify the Washington State Department of Archaeology and Historic Preservation and copy such notification to the Cowlitz County Department of Building and Planning.
 3. The permittee shall provide a copy of all permits, conditions, and drawings to all contractors performing their respective work.
 4. Representatives from this department shall be allowed to inspect the authorized activity at any time deemed necessary to ensure that the project is being, or has been, accomplished in accordance with the terms and conditions of this permit.
 5. The permittee shall maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. The permittee shall notify this department immediately should the authorized activity cease or be abandoned.

Attachments: (Exhibits 2 - 4)

Exhibit 2 – Port of Kalama Rail Expansion Cowlitz County Shoreline Substantial Development Permit Project Narrative

Exhibit 3 – State of Washington Department of Ecology SEPA Comments

Exhibit 4 – Port of Kalama Landscape Planting Plans

REPORT

Produced For Port of Kalama
December 2025



moffatt & nichol

PORT OF KALAMA RAIL EXPANSION

Cowlitz County Shoreline Substantial Development Permit
Project Narrative



Document Verification

Client	Port of Kalama
Project name	Port of Kalama Rail Expansion
Document title	Cowlitz County Shoreline Substantial Development Permit Project Narrative
Status	Final
Date	December 2025
Project number	222897-03

Revision	Description	Issued by	Date	Checked
00	Draft Cowlitz County Shoreline Substantial Development Permit Project Narrative	A. Kinney	10/30/2025	A. Roesler
01	Cowlitz County Shoreline Substantial Development Permit Project Narrative	A. Kinney	12/02/2025	A. Roesler

Produced by:

Moffatt & Nichol
 915 Broadway Street, Suite 310
 Vancouver, Washington 98660
www.moffattnichol.com



Table of Contents

1. INTRODUCTION	1
2. EXISTING CONDITIONS.....	2
3. PROJECT DESCRIPTION	3
3.1. Rail Expansion	3
3.1.1. Components	3
3.1.2. Construction	4
3.2. Recreational Improvements	5
3.3. Best Management Practices	6
4. REGULATORY CONTEXT.....	7
4.1. Zoning, Comprehensive Plan, and Shoreline Environment Designations.....	7
4.2. Critical Areas.....	7
4.3. State Environmental Policy Act Review	7
5. REGULATORY COMPLIANCE.....	8
5.1. State Shoreline Management Act Policies	8
5.1.1. Revised Code of Washington (RCW) Chapter 90.58	8
5.1.2. Washington Administrative Code (WAC) Chapter 173-27.....	8
5.2. Cowlitz County Shoreline Master Program	10
5.2.1. Shoreline Master Program Goals and Policies (SMP Chapter 4).....	10
5.2.2. Shoreline Designations and Shorelines of Statewide Significance (SMP Chapter 5)	12
5.2.3. General Shoreline Regulations (SMP Chapter 6)	15
5.2.4. Shoreline Use and Modification Regulations (SMP Chapter 7).....	20
6. CONCLUSION.....	30

Appendix A: Critical Areas Evaluation

List of Tables

Table 1: Land Use and Zoning.....	7
Table 2: Land Use and Zoning Permitting Requirements for Shoreline Uses and Modifications (SMP Table 7-1).....	20
Table 3: Dimensional Standards (SMP Table 7-2)	21



Glossary

ADA	Americans with Disabilities Act
AINW	Archaeological Investigations Northwest Inc
BMPs	Best Management Practices
BNSF	Burlington Northern Santa Fe
CCC	Cowlitz County Code
City	City of Kalama
County	Cowlitz County
EPIC	Environmental Planning Internet Clearance
ERL IND	Economic Resource Land – Industrial Use
FRA	Federal Railroad Administration
I-5	Interstate 5
NRHP	National Register for Historic Places
OHWM	Ordinary High-Water Mark
Port	Port of Kalama
RCW	Revised Code of Washington
RM	River Mile
SED	Shoreline Environment Designation
SEPA	State Environmental Policy Act
SHPO	State Historic Preservation Office
SMA	Shoreline Management Act
SMP	Shoreline Master Program
SPCC	Spill Prevention, Control, and Countermeasures
SSDP	Shoreline Substantial Development Permit
TEMCO	Tacoma Export Marketing Co
TESC	Temporary Erosion and Sediment Control
TF	Track Feet
UP	Union Pacific
WAC	Washington Administrative Code



1. INTRODUCTION

The Port of Kalama (Port) is located on the eastern shoreline of the Columbia River. The Port owns approximately 1,200 acres in Cowlitz County (County), including 7 miles of shoreline (Figure 1). In-water facilities include three terminals (Tacoma Export Marketing Co [TEMCO], North Port, and Kalama Export) and a public marina located between River Miles (RM) 72 and 77. The Port's industrial area is riverfront property located adjacent to the 43-foot deep-draft navigation channel of the Columbia River. The Burlington Northern Santa Fe (BNSF) Railway and Union Pacific (UP) Railroad serve the Port.

The Port is proposing a Rail Expansion Project (herein referred to as “the Project”) that will improve the existing rail system and freight mobility for its tenant TEMCO (a marine grain export loading facility) (See Figures 2 through 4). The Port is proposing to expand its rail network at the TEMCO grain export terminal to improve rail service and shipping capacity at the terminal. Operations at TEMCO are currently constrained by bottlenecks associated with limited track space and capacity. The proposed Project would alleviate these bottlenecks and improve operational efficiency at the terminal. Project elements include removal of portions of the existing track within the TEMCO rail yard, construction of new incoming and departure track, improvement and/or relocation of existing utilities and stormwater infrastructure, a new access drive, and construction of a new rail crossing along Hendrickson Drive. The proposed Project also includes recreational and public access improvements along the Columbia River Shoreline. Additional Project details are included in Section 3.

The proposed Project occurs within the jurisdictions of both Cowlitz County (County) and the City of Kalama (City) (See Figure 2). The portion of the project that is within the County is located within the County's shoreline jurisdiction which includes lands extending two hundred (200) feet in all directions from the ordinary high water mark (OHWM) as well as floodways and contiguous floodplain areas landward two hundred (200) feet from such floodways and associated wetlands, river deltas associated with the streams, and lakes and tidal waters (See Figure 5).

The Project will require a Shoreline Substantial Development Permit (SSDP) from the County under the authority of the Shoreline Management Act (SMA) and the County's Shoreline Master Program (SMP).

The purpose of this report is to document compliance with the applicable goals, policies, and regulations of the County's SMP. This Project narrative includes descriptions of proposed activities and demonstrates how the Project is compliant with the SMA and the County's SMP¹.

¹ Note: A portion of the proposed Project occurs within the City's shoreline jurisdiction. This document addresses only compliance requirements under the County SMP. The application materials required for a City SSDP are being submitted separately to the City.



2. EXISTING CONDITIONS

The proposed Project footprint is bounded by the Columbia River to the west, an informal beach access area to the north, Hendrickson Drive, BNSF Railway and I-5 to the east and the TEMCO grain facility to the south.

The proposed Project footprint traverses seven parcels owned by the Port as shown on Figure 6. Five of the parcels are currently used for industrial purposes and are all located within the County's jurisdiction (Parcel Nos. 6005501, 60066, WC2015004, 600540200, and 6005401). The remaining two parcels are currently used for informal recreational/beach access and are located within the City's jurisdiction (Parcel Nos. 410560200 and 410560500).

The industrial parcels are occupied by the existing TEMCO Terminal and associated rail yard, the Port's Southport upland dredged material placement site (herein referred to as "Southport"), and the former Chemtrade Performance Chemicals U.S. LLC property which has been vacant since 2017 (herein referred to as "Chemtrade"). All of the industrial sites are previously disturbed and/or made up of entirely built-environment conditions. Vegetation and habitat within these areas are extremely limited. The TEMCO site is devoid of vegetation. The Southport site is actively managed with heavy equipment preventing the establishment of vegetation within the site. Vegetation within the former Chemtrade site is limited to short-statured grasses and scattered shrubs in areas that are not currently paved/developed.

The parcels associated with the proposed recreational improvements include undeveloped parcels within the City's jurisdiction and portions of the abovementioned industrial parcels (see Figures 3, 4, and 6). The undeveloped parcels are characterized by an unvegetated sandy beach immediately adjacent to the river and a reinforced, vegetated slope farther inland adjacent to Hendrickson Drive. The industrial parcels include a portion of the Chemtrade and Southport sites adjacent to the Columbia River.

The Columbia River is a Type S shoreline of the state. The river supports a diverse variety of species including fish, marine mammals, and birds (including migratory and resident species, raptors, and shore birds), among other species. It should be noted that all of the proposed Project elements will occur landward of the Ordinary High-Water Mark (OHWM) of the Columbia River and within a developed shoreline as shown on Figure 5. Therefore, the proposed Project will not impact the Columbia River.



3. PROJECT DESCRIPTION

The purpose of the proposed Project is to improve the existing rail system and the freight mobility at the TEMCO Terminal. The track expansion will allow the Port to always store either two inbound and four outbound trains or three inbound and three outbound trains, greatly reducing downtime between trains and increasing throughput by 25–30 percent. The new rail configuration will cut train repositioning time in half. The track expansion reduces the time between trains for switch out to 1 hour, increasing the volume handled by the TEMCO export terminal by 220,000–250,000 bushels per day, or 7 million bushels per month, in addition to the current throughput of 25 million bushels per month.

The rail expansion will primarily occur throughout an approximately 5,800-foot-long corridor parallel to Hendrickson Drive and includes the existing TEMCO rail yard and portions of the Southport site and former Chemtrade site (Figure 2).

Construction activities required for the Project will include removal of portions of the existing track within the TEMCO rail yard, construction of new incoming and departure tracks (including four new arrival tracks and six new departure tracks), grading and placement of fill for construction of the railbed, installation of associated rail infrastructure (e.g., turnouts, crossings), improvement and/or relocation of existing utilities, stormwater system construction, construction of a new 13-foot-wide access drive, and construction of a new rail crossing along Hendrickson Drive. Recreational components of the proposed Project are summarized in Section 3.2.

3.1. Rail Expansion

3.1.1. Components

The rail upgrades involve construction of up to 22,400 Track Feet (TF) (net increase) of new rail to the Port's rail system, increasing loading efficiency by up to 30% in direct grain loading from rail to ship. The upgrades include the following:

- **Track Removal:** Removal of approximately 16,000 TF of existing track.
- **New Storage Tracks:** Construction of four new arrival tracks (14,700 total TF) and six new departure tracks (15,300 total TF), with connections to the BNSF-owned lead tracks and the BNSF mainline.
- **New Security Fencing:** Installation of a new security fence around expanded areas of the Project site to separate the TEMCO Terminal operations from adjacent publicly accessible areas.
- **Rail Crossing:** One new at-grade crossing of Hendrickson Drive. Existing rail crossings will be maintained. Construction of the new rail crossing will include signage and lighting. The location of the proposed rail crossing is depicted on Figure 2.
- **Hendrickson Drive Realignment:** Realignment of a portion of Hendrickson Drive will be completed to reduce the length of the new at-grade rail crossing and for the purposes of traffic calming and public safety. See Figure 3.
- **Access Drive:** A 13-foot-wide access drive will be constructed parallel to the new tracks along the western border of the site as well as between the tracks through the central portion of the site.
- **Stormwater Improvements:** Stormwater infrastructure will include a new infiltration system within the rail yard and bioretention facilities/infrastructure outside of the expanded rail yard.
- **Utilities:** Utility work varies by the type of utility and location but may include improvements and/or extension of existing utility infrastructure and/or relocation of existing infrastructure. Utility work includes waterline(s), electrical utilities, lighting, sanitary sewer, gas, and communication lines. A



new fire hydrant will also be installed at the proposed Hendrickson Drive rail crossing to improve safety and emergency response accessibility to waterlines.

3.1.2. Construction

The main goal during the construction of the rail upgrades described above will be minimizing impacts to the existing Port operations.

Site preparation activities consist primarily of clearing and grading within the Southport and Chemtrade sites, removal of the existing tracks and bedding within the TEMCO rail yard to construct the new rail tracks, and demolition of miscellaneous site and utility structures. Graded aggregate and rail ballast removed from the TEMCO rail yard that conform to the specifications may be stockpiled and reused.

Excavation will be required to relocate/reconstruct various existing utilities that occur within the Project alignment, including an existing sanitary sewer force main and waterline. Excavation will also be required for the construction of new stormwater infrastructure including bioretention facilities and to modify the Port's existing stormwater system to accommodate the new track alignment.

Temporary and permanent fill placement will be required as part of the utility relocation work and to construct the additional rail tracks. Permanent fill will be placed to backfill relocated/reconstructed utility trenches, construct the subgrade, and construct the trackbed that will support the new tracks and switches.

Trackbed construction will involve the placement of ballast and subballast to support the track ties and rails and to provide a surface for the inspection driveways between the tracks. Ballast and subballast will be placed with dump trucks, excavators, backhoes, and specialized track construction equipment, which will also be used to install the railroad ties, rails, and other rail elements.

Construction is anticipated to be generally carried out as follows:

1. Preconstruction / Planning
 - a. Establish rail operational and capacity needs that must be maintained during construction.
 - b. Establish stepwise construction plan that ensures access and use of facility during construction. Balance efficiency of construction with minimal impact to site operations. The engineer will work closely with the Owner to establish this framework.
 - c. Establish means of track occupancy as needed both for work on and adjacent to the existing tracks to remain in service. The safety of the public and users of the tracks shall be the first goal.
 - d. Establish environment constraints – waterway protection including sediment control, traffic control, hours of work, and noise control.
 - e. Establish a temporary traffic plan and other site access to be maintained.
2. Demolition
 - a. Dismantle track within limits shown on the plans. Owner's representative is to assist in determining suitability of track materials for reuse.
 - b. Remove and stockpile excess ballast and aggregate materials when suitable for reuse in construction.
 - c. Demolish existing structures and other surface improvements.
 - d. Demolish utilities and underground improvements. Ensure temporary service connections where necessary to support ongoing operations.



3. Construction in Phases

- a. Conduct subgrade grading according to plans. Remove unsuitable materials where necessary. To the maximum extent possible, existing grades will be preserved where compatible with the proposed construction.
- b. Place and compact subballast. This work is normally performed for the site improvements at the same time.
- c. Construct in place the ladder track, turnouts and other track materials.
- d. Place final ballast and compact it in lifts to complete the track construction to the designed line and grade.
- e. This process is repeated as necessary to maintain site usability. New track may be constructed and placed in service to balance subsequent phases of the construction.
- f. The remaining site improvements can be constructed in independent phases aside from the track construction.

4. Quality Control

- a. The Project will require a comprehensive quality management system (QMS) during construction. The QMS will ensure the Owner is provided with the best possible product. Monitored items include:
 - i. Water quality as mandated by state and federal law in addition to best practices will be monitored during all phases of construction.
 - ii. Ground conditions will be monitored to ensure any unsuitable materials are removed to ensure stable and sound compaction.
 - iii. Material specifications and testing will be performed before, during, and as needed post construction.
 - iv. Track construction will be subject to assessment by the Owner and may include input of the operating railway. Track will be checked for conformance both horizontally and vertically as specified by the Owner, operator, and established industry standards.
 - v. All standards shall apply to both new and adjusted or shifted track.

5. Project Closeout

- a. Thoroughly inspect all tracks prior to opening to rail traffic.
- b. Close out documentation in accordance with applicable Project permits where required.
- c. Record drawings.
- d. Operator may require load testing new or shifted track by the operation of locomotive on the track. The contractor shall adjust and compact track structure as necessary during the warranty period of the Project.

It is anticipated that typical construction equipment used for the Project would include but is not limited to loaders, backhoes, excavators, bulldozers, scrapers, dump trucks, graders, rollers/compactors, ballast tampers, jackhammers, and track laying machines, as well as construction support equipment/vehicles such as water trucks, equipment maintenance trucks, light-duty trucks, portable generators, and portable lighting.

3.2. Recreational Improvements

Recreational improvements are shown on Figures 3 and 4. The recreational improvements include construction of the following:



- **Pedestrian Pathway:** Rehabilitation of approximately 880 feet of existing asphalt pathway and construction of 1,820 feet of new asphalt pedestrian path connecting the Project site to the Port's existing trail corridor.
- **Public Access Drive:** A new approximately 1,540-foot drive constructed to provide public access to parking areas and shoreline access points.
- **Shoreline Access Ramp:** A 10-foot-wide, 185-foot-long ADA compliance ramp connecting the new pedestrian pathway to the shoreline for beach access.
- **Parking:** Up to approximately 120 new parking spaces (including 4 ADA-compliant parking spaces) for public use and access to recreation and shoreline access opportunities.
- **Restrooms:** ADA-accessible public restrooms. A portion of the new restroom facilities building will also include an approximately 700 square foot area of flexible-use space. The current proposed use for this area is storage for Port maintenance equipment and supplies for maintenance of the new recreational facilities and vegetation management.
- **Accessory Public Use and Safety:** Public facilities (such as benches and covered picnic areas) and public safety elements (such as signalized pedestrian crossings between pathways and parking areas and trail lighting along the pathway).

It is anticipated that typical construction equipment used for the development of recreational Project elements would include but is not limited to loaders, backhoes, excavators, bulldozers, scrapers, dump trucks, graders, and rollers/compactors, as well as construction support equipment/vehicles such as water trucks, equipment maintenance trucks, light-duty trucks, portable generators, and portable lighting.

3.3. Best Management Practices

Best Management Practices (BMPs) from Ecology's 2024 *Stormwater Management Manual for Western Washington* (SWMMWW; Ecology 2024) will be implemented to minimize and manage erosion during construction of the Project. The following construction BMPs will be implemented at a minimum during Project construction. The following BMPs to reduce erosion and other earth-related impacts from the Project will be implemented during construction:

- All work will be performed according to the requirements and conditions of the Project permits.
- The contractor will be required to develop and implement a Spill Prevention, Control, and Countermeasures (SPCC) Plan to be used for the duration of the Project to safeguard against unintentional release of fuel, lubricants, or hydraulic fluid from construction equipment.
- A Temporary Erosion and Sediment Control (TESC) Plan will be developed to minimize and manage erosion during construction of the Project.
- The contractor will be required to properly maintain construction equipment and vehicles to prevent them from leaking fuel or lubricants; if there is evidence of leakage, the further use of such equipment will be suspended until the deficiency has been satisfactorily corrected.
- The Project area perimeter and any stockpile of materials will be staked and marked with silt fencing; wattle may be used, as well, to ensure that the contractor does not impact any areas outside of the work area.
- Watering of fill material will be performed if there is a potential for wind erosion to occur.
- Staging areas will be located in uplands where feasible.
- Disturbed areas will be reseeded with native seed mix to restore them to their previous conditions.
- Construction entrances will be locked.



4. REGULATORY CONTEXT

4.1. Zoning, Comprehensive Plan, and Shoreline Environment Designations

The zoning, comprehensive plan, and SMP designations of the portions of the Project site within the County’s jurisdiction are shown in Table 1 and on Figure 7.

TABLE.1: LAND USE AND ZONING

Parcel Numbers	Current Land Use	Zoning	Comprehensive Plan Designation	Shoreline Environment
6005501, 60066, WC2015004	TEMCO Terminal Operations and existing rail yard	Unzoned	Economic Resource Land – Industrial Use (ERL IND)	High Intensity
600540200	Southport dredged material disposal site.			
6005401	Former Chemtrade manufacturing facility. Currently vacant.			

Review of the County’s Environmental Planning Internet Clearance (EPIC) database indicates that the Project site is classified as “Unzoned.” According to Cowlitz County Code (CCC) 18.10.270, unzoned areas are “those areas not precisely zoned by the Official Land Use Map. The areas to which this classification is applied are generally those areas of Cowlitz County which have not had extensive urban development and probably will not have any degree of such development in the foreseeable future.” CCC 18.10.275 states that in the unzoned district all uses which have not been declared a nuisance by statute, resolution, ordinance, or court of competent jurisdiction are permitted.

Review of the County’s EPIC database indicates that the Comprehensive Plan Designation of the Project site is Economic Resource Land – Industrial Use (ERL IND). The Cowlitz County Comprehensive Plan states that economic resource lands, including the Industrial Land sub-category, “have a significant role in the long-term economic viability of Cowlitz County. It is physically and economically challenging to reclaim these lands once they are converted to other uses. Economic Resource Land merits additional protection from development pressures.”

The proposed rail expansion includes expansion of the existing rail yard and an addition of 22,400 TF of support tracks to the Port’s rail system which will expand their rail infrastructure and improve the efficiency of off-loading grain directly from railcars onto ships at the TEMCO Terminal. Therefore, the proposed Project is consistent with the intent of the County zoning and comprehensive plan designations.

This narrative provides justification for the proposed rail expansion in support of the issuance of shoreline permits under the County’s SMP.

4.2. Critical Areas

Section 6.3 of the SMP and the County’s Critical Areas Regulations (CCC Chapter 19.15) regulate critical areas in shoreline jurisdiction. An evaluation of critical areas prepared for the proposed Project is included as Appendix A. The report concludes that there would be no adverse impacts to critical areas or net loss of ecological function as a result of the proposed rail expansion Project. See Appendix A for additional details.

4.3. State Environmental Policy Act Review

A State Environmental Policy Act (SEPA) Threshold Determination is pending with the Port as the lead agency. The SEPA determination will be provided to the County when it is received.



5. REGULATORY COMPLIANCE

This section demonstrates compliance with applicable state and County requirements for approval of an SSDP.

5.1. State Shoreline Management Act Policies

5.1.1. Revised Code of Washington (RCW) Chapter 90.58

5.1.1.1. Legislative Findings—State Policy Enunciated—Use Preference (RCW 90.58.020)

The legislature declares that the interest of all of the people shall be paramount in the management of shorelines of statewide significance. The department, in adopting guidelines for shorelines of statewide significance, and local government, in developing master programs for shorelines of statewide significance, shall give preference to uses in the following order of preference which:

1. *Recognize and protect the statewide interest over local interest;*
2. *Preserve the natural character of the shoreline;*
3. *Result in long term over short term benefit;*
4. *Protect the resources and ecology of the shoreline;*
5. *Increase public access to publicly owned areas of the shorelines;*
6. *Increase recreational opportunities for the public in the shoreline;*
7. *Provide for any other element as defined in Revised Code of Washington (RCW) 90.58.100 deemed appropriate or necessary.*

Response: The policies of RCW 90.58.020 are primarily meant to shape a local government’s SMP (in this case Cowlitz County) in terms of how uses are prioritized within the shoreline. Water-dependent uses requiring a shoreline location receive the highest priority for a shoreline location, followed by water-related and water-enjoyment uses, while non-water-dependent uses receive the lowest priority. The rail expansion Project is a water-related use because there is a functional requirement for its location within the shoreline for access to the TEMCO Terminal. Rail reconfiguration and expansion also facilitate existing and ongoing Port operations, including industrial which are water dependent and water related. The Project includes new recreational development that will increase public access to the shoreline and recreational opportunities. The proposed Project meets the requirements of the SMP as demonstrated throughout Section 5.2, and also meets the policies of RCW 90.58.020, as it proposes a use that will meet objectives (1) through (7) above.

5.1.2. Washington Administrative Code (WAC) Chapter 173-27

5.1.2.1. Review Criteria for All Development (WAC 173-27-140)

- A. *No authorization to undertake use or development on shorelines of the state shall be granted by the local government unless upon review the use or development is determined to be consistent with the policy and provisions of the Shoreline Management Act and the master program.*

Response: The SMA promotes water-dependent and water-related uses in areas designated as shorelines of the state. The SMA specifically states, “uses shall be preferred which are...unique to or dependent upon use of the state’s shoreline” and



... shall be given priority for... Ports, shoreline recreational uses including but not limited to parks, marinas, piers, and other improvements facilitating public access to shorelines of the state, industrial and commercial developments which are particularly dependent on their location on or use of the shorelines of the state and other development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines of the state. (RCW 90.58.020)

The proposed Project involves reconfiguring and expanding existing rail lines at a Port-owned terminal operated by TEMCO and new recreational and shoreline public access features. The WAC defines water-related use as a use or portion of a use which is not intrinsically dependent on a waterfront location but whose economic viability is dependent upon a waterfront location. The proposed rail expansion is a water-related use because there is a functional requirement for its location in proximity to the existing water-dependent TEMCO Terminal. New recreational improvements will increase recreational opportunities and public access to the shoreline and improve accessibility for a diverse range of users including cyclists, wheelchair users, and people with limited mobility, as the new pathway and parking areas will be Americans with Disabilities Act (ADA) compliant.

(2) No permit shall be issued for any new or expanded building or structure of more than thirty-five feet above average grade level on shorelines of the state that will obstruct the view of a substantial number of residences on areas adjoining such shorelines except where a master program does not prohibit the same and then only when overriding considerations of the public interest will be served.

Response: The proposed Project does not include new or expanded structures greater than 35 feet above grade or that could result in obstructed views.

5.1.2.2. Review Criteria for Substantial Development Permits (WAC 173-27-150)

Consistent with this permit request, the review criteria required by the SMA are discussed below; County regulations pertaining to this request are discussed in Section 5.2.

(1) A substantial development permit shall be granted only when the development proposed is consistent with:

(a) The policies and procedures of the act;

Response: As a Port-related development containing water-dependent, water-related, and water-enjoyment elements, the Project is consistent with the intent of the SMA. The SMA encourages water-oriented development (water dependent, water related, and water enjoyment) within shoreline areas and discourages non-water-dependent uses. Water-dependent uses are given the highest priority followed by water-related and water-enjoyment uses, as stated in RCW 90.58.020. The purpose of the proposed Project is to improve export and import efficiencies by expanding and reconfiguring the existing rail yard. Therefore, the Project meets the objectives of the SMA to encourage water-dependent and water-oriented uses in the state's shorelines. Consistency with these and other County policies is outlined further in Section 5.2.

(b) The provisions of this regulation; and

Response: In compliance with this regulation, the packet containing this narrative constitutes a complete SSDP application.

(c) The applicable master program adopted or approved for the area. Provided, that where no master program has been approved for an area, the development shall be reviewed for consistency with the provisions of chapter 173-26 WAC, and to the extent feasible, any draft or approved master program which can be reasonably ascertained as representing the policy of the local government.

Response: The Project's compliance with the approved County SMP is discussed below in Section 5.2.



5.2. Cowlitz County Shoreline Master Program

5.2.1. Shoreline Master Program Goals and Policies (SMP Chapter 4)

This section summarizes how the Project is generally consistent with the goals and policies of the SMP. Policies establish broad shoreline management directives and are the basis for regulations and as such do not generally include provisions that specifically regulate work within the shoreline jurisdiction but rather direct governing officials on procedures, preferences, and use conflict resolutions for development within the shoreline jurisdiction. The following sections include discussion of how the Project is generally consistent with the goals and policies of the SMP but do not address individual policies for the sake of brevity.

5.2.1.1. General Shoreline Goals (SMP Section 4.2)

Goal: To implement the mandate of the Shoreline Management Act of 1971 in a manner that reflects the aspirations of the citizens of Cowlitz County.

Response: The proposed Project involves reconfiguring and expanding existing rail lines at a Port-owned terminal operated by TEMCO and new recreational and shoreline public access features. The rail yard expansion is a water-related use as it has a functional requirement to be located in proximity to the TEMCO Terminal (a water-dependent use). The recreational improvements are water-related and water-enjoyment uses as they provide shoreline public access and recreational opportunities. The Project would not impact private ownership or other property uses of the shorelines in the County, would support economic development, has been designed to avoid and minimize impacts to the shoreline environment to the maximum extent feasible, has been evaluated for potential impacts to natural and historic/cultural resources, and will provide new safe public access to the shoreline.

5.2.1.2. Historic, Cultural, Archaeological, and Educational Resources (SMP Section 4.3)

Goal: Protect, preserve, and restore those historical, cultural, educational, and scientific sites in the shorelines of Cowlitz County for the general public. In addition, see CCC 18.80 Historic Preservation.

Response: Archaeological Investigations Northwest Inc (AINW) completed a Cultural Resource Survey for the Port of Kalama Rail Expansion Project and reported that two historic-period resources were identified within the site—the Chemtrade building at 404 North Hendrickson Drive, and a Dredge Materials Placement Site which underlies the entire Project area. Both were evaluated according to the National Register for Historic Places (NRHP) criteria and are recommended to be not eligible for listing in the NRHP. The survey was completed to assist the Port in complying with Section 106 of the NHPA, as amended, and its implementing regulations (36 CFR 800) in anticipation of federal funding for the railroad work as well as Washington SEPA review.

The Federal Railroad Administration (FRA) (federal lead agency) initiated consultation with the State Historic Preservation Office (SHPO) and Tribes on August 18, 2025. The Project resulted in a finding of no historic properties affected, and FRA received concurrence from SHPO on August 20, 2025.

5.2.1.3. Conservation and Restoration (SMP Section 4.4)

Goal: Preserve, protect, and restore natural resources including areas that support ecological processes and functions and aesthetic resources.

Response: Areas proposed for development as part of the proposed Project within the County's jurisdiction are currently developed industrial land that provide limited habitat or shoreline functions. The proposed Project includes a planting plan that is anticipated to result in a net increase in native vegetative species and offset negligible impacts resulting from vegetation removal to accommodate construction.



5.2.1.4. Economic Development (SMP Section 4.5)

Goal: To encourage the economic development of Cowlitz County through development of resource, industrial, and commercial activities that support economic growth, with a preference for uses that are particularly dependent on their location relative to the shoreline.

Response: The proposed Project will contribute to maintaining existing, authorized shoreline uses that provide economic benefits. The proposed Project will be conducted in accordance with specific BMPs that were established in order to minimize the environmental impacts of the proposed activity. As detailed in the critical areas evaluation (Appendix A), the Project will not result in a net loss of ecological functions. The proposed Project would support ongoing use of the Columbia River Navigation Channel and would result in an increase of commodity throughput at the TEMCO Terminal.

5.2.1.5. Flood Prevention and Flood Damage Mitigation (SMP Section 4.6)

Goal: Protect existing development from flood damage while minimizing adverse impacts on natural functions of floodplains.

Response: The proposed Project would not occur within the floodplain and does not include any activities that would affect floodplain functions or management of the floodplain.

5.2.1.6. Public Access (SMP Section 4.7)

Goal: Assure safe and reasonable public access to public property along the shorelines in Cowlitz County.

Response: The proposed Project includes new recreational improvements that will connect to and expand existing public shoreline access areas and increase recreational opportunities for the public. The Project will also improve accessibility for a more diverse range of users including cyclists, wheelchair users, and people with limited mobility, as the new pathway, beach access ramp, restrooms, and parking areas will be ADA compliant.

5.2.1.7. Recreation (SMP Section 4.8)

Goal: Assure that recreational opportunities, adequate to satisfy the diversity of demands from the region's population, are provided. Water-oriented recreational facilities should be encouraged within the County shoreline jurisdiction.

Response: The proposed Project includes new recreational improvements that will connect to and expand existing public shoreline access areas and increase recreational opportunities for the public. The Project will also improve accessibility for a more diverse range of users including cyclists, wheelchair users, and people with limited mobility, as the new pathway, beach access ramp, restrooms, and parking areas will be ADA compliant.

5.2.1.8. Transportation and Utilities (SMP Section 4.9)

Goal: Develop a safe, convenient, multi-modal circulation system to serve movement of information, goods, and people for shoreline and other uses important to the economic development of the County and region with minimum disruption to the shoreline environment. Provide utility services necessary to protect the public and safety in a cost effective and efficient manner.

Response: The proposed Project includes transportation elements (Hendrickson Drive realignment, signalized at-grade rail crossing, and pedestrian pathway) that will improve safety along Hendrickson Drive. The expansion of the rail yard will reduce congestion on Hendrickson Drive because it will allow all inbound trains to only be broken once, therefore reducing the frequency and duration of blockage of Hendrickson



Drive. Utilities will be provided to maintain public safety including a new fire hydrant for fire fighting capabilities.

5.2.1.9. Other Shoreline Uses and Modifications (SMP Section 4.10)

Response: SMP Section 4.10.1 includes goals for Aquaculture, Boating Facilities, Institutional Uses, In-stream Structures, and Residential Development. The proposed Project does not include any of these shoreline uses or modifications, and these provisions are not applicable.

SMP Section 4.10.2 includes policies for several shoreline modifications that are not applicable to the proposed Project including Shoreline Stabilization, Breakwaters, Jetties, Rock Weirs, and Groins, Residential Moorage Facilities (Docks, Buoys, and Marine Railways), and Dredging and Dredge Material Disposal.

The proposed Project is consistent with the general shoreline modification policies because proposed activities are necessary to support a permitted use, the Project has been designed to avoid and minimize adverse impacts to shoreline environments to the maximum extent feasible, and it will not result in a net loss of ecological functions.

Additionally, the Project has been designed to limit fill and excavation in the shoreline jurisdiction to the minimum extent necessary to complete the proposed Project, and no fill is proposed below the OHWM.

5.2.2. Shoreline Designations and Shorelines of Statewide Significance (SMP Chapter 5)

5.2.2.1. High-Intensity Environment (SMP Section 5.4.1)

Purpose:

The purpose of the High-Intensity SED is to provide for high-intensity, water-oriented commercial, transportation, and industrial uses while protecting existing ecological functions and restoring ecological functions in areas that have been previously degraded.

Response: The purpose of the proposed Project is to reconfigure and expand the existing Port rail lines to improve efficiency at the Port's TEMCO Terminal. As evaluated in the Project critical areas evaluation (Appendix A), the proposed Project will not result in net loss of ecological shoreline functions.

Policies:

A. *Priority should be given to water-dependent, water-related, and water-enjoyment uses in that order of preference. Non-water-oriented uses should be allowed in limited instances when they do not interfere with or limit water oriented development or where there is no direct access to the shoreline because of another property or public right-of-way separating it from the shoreline.*

Response: The proposed rail expansion Project is a water-related use as defined by WAC 173-26-020: a use or portion of a use which is not intrinsically dependent on a waterfront location but whose economic viability is dependent upon a waterfront location. The Project is water related because it has a functional requirement to be located in proximity to the TEMCO Terminal (an existing water-dependent use).

B. *Full utilization of existing urban and extensively altered areas should be achieved before further expansion of intensive development is allowed.*

Response: The proposed Project entirely utilizes existing industrial Port parcels and will not expand into undeveloped areas of the shoreline.

C. *Non-water-oriented uses on sites adjacent to the water should provide public benefit in the form of ecological enhancement and/or public access in compliance with the provisions of this Program.*



Response: The proposed Project is a water-related use as it supports Port imports and exports from the Columbia River and has a functional necessity to be located adjacent to the TEMCO Terminal. Public access improvements are included in the proposed Project.

- D. Where unavoidable impacts to ecological functions occur, appropriate mitigation should be provided in accordance with this Program to assure no net loss of ecological function. Where applicable, development should include environmental cleanup and restoration of the shoreline in accordance with relevant state and federal law.*

Response: The Project has been designed to avoid and minimize impacts to natural resources to the maximum extent feasible and includes a planting plan that will improve vegetative species diversity within developed areas. There will be no net loss of shoreline ecological functions as a result of the Project. (See Appendix A for additional information.)

- E. Where feasible as described by this Program, visual and/or physical public access should be provided.*

Response: Proposed recreational improvements will improve the existing recreational area to include ADA accessibility, more parking for visitors, and a safe pathway for public access to the shoreline.

- F. Aesthetic objectives of this Program should be considered consistent with the primary purpose of accommodating high-intensity development. Implementation of these objectives may include means such as sign regulations, maintenance of natural vegetative buffers, screening and architectural standards, and other standards.*

Response: The proposed Project will be within the existing industrial portion of the shoreline and will not affect visual aesthetics of the shoreline.

5.2.2.2. Shorelines of Statewide Significance (SMP Section 5.5)

- A. Every project located on a Shorelines of Statewide Significance (SSWS) shall demonstrate consistency with the following priorities, in order of preference, in all permit review, in addition to compliance with other criteria provided by this Program:*
- 1. Recognize and protect the statewide interest over local interest.*
 - a. Solicit comments and opinions from groups and individuals representing state-wide interests by circulating amendments to the Program, and any proposed amendments affecting SSWS, to state agencies, affected tribes, adjacent jurisdictions, citizen's advisory committees and local officials, and statewide interest groups.*
 - b. Recognize and take into account state agencies' policies, programs, and recommendations in developing and administering use regulations and in approving shoreline permits.*
 - c. Solicit comments, opinions, and advice from individuals with expertise in ecology and other scientific fields pertinent to shoreline management.*

Response: The Columbia River is designated as a shoreline of statewide significance. As explained in Section 5.1.1, the Project recognizes the statewide interest over local interest. The Project does not involve any proposed amendments to the SMP. Local and state environmental permitting and reviews (including SEPA and Shoreline permitting) require public notification and comment periods prior to permit authorization.



2. *Preserve the natural character of the shoreline.*
 - a. *Designate and administer shoreline environment designations and use regulations to minimize damage to the ecology and environment of the shoreline as a result of man-made intrusions on shorelines.*
 - b. *Restore, enhance, and/or redevelop those areas where intensive development or uses already exist in order to reduce adverse impact on the environment and to accommodate future growth rather than allowing high-intensity uses to extend into low-intensity use or underdeveloped areas.*
 - c. *Protect and preserve existing diversity of vegetation and habitat values, wetlands, and riparian corridors associated with shoreline areas.*

Response: The proposed Project is located in the High-Intensity Shoreline Environmental Designation (SED) and is a permitted use in this designation, thereby meeting the SED and use regulations. The Project had been designed to avoid and minimize adverse impacts to the environment to the maximum extent feasible, and BMPs will be implemented during construction to avoid the potential for inadvertent adverse impacts. The proposed Project will take place in areas that intensive development already exists and includes a planting plan that will increase native species diversity in the area.

3. *Support actions that result in long-term over short-term benefit.*
 - a. *Evaluate the short-term economic gain or convenience of developments relative to the long-term and potentially costly impairments to the natural shoreline.*
 - b. *Protect resources and values of SSWS for future generations by modifying or prohibiting development that would irretrievably damage shoreline resources.*
 - c. *Actively promote aesthetic considerations when contemplating new development, redevelopment of existing facilities, or general enhancement of shoreline areas.*

Response: The proposed Project will increase efficiency and will allow the continuation of the Port's existing authorized uses in the County. The resources and values of the shoreline, including economic value, will be protected by the Project through BMPs and compliance with local and state regulations, with no net loss of ecological value.

4. *Protect the resources and ecological function of the shoreline.*
 - a. *Minimize development activity that will interfere with the natural functioning of the shoreline ecosystem, including, but not limited to, stability, drainage, aesthetic values, and water quality.*
 - b. *All shoreline development should be located, designed, constructed, and managed to avoid disturbance of and minimize adverse impacts to wildlife resources, including spawning, nesting, rearing, and habitat areas and migratory routes.*
 - c. *Balance public access demands with the need to preserve shoreline ecology. Public access shall be discouraged where it has the potential to impact sensitive shoreline resources.*
 - d. *Shoreline materials including, but not limited to, bank substrate, soils, beach sands, and gravel bars should be left undisturbed by shoreline development. Gravel mining should be severely limited in SSWS shoreline areas.*
 - e. *Preserve environmentally sensitive wetlands for use as open space or buffers and encourage restoration of currently degraded wetland areas.*



Response: The proposed Project will take place within a highly industrial, previously developed portion of the shoreline that does not provide suitable habitat for protected species. The Project has been designed with BMPs to ensure that the Project does not result in net loss of ecological shoreline functions.

5. *Increase public access to publicly owned areas of the shoreline.*
 - a. *Retain and enhance public access to the shoreline including passive enjoyment, recreation, fishing, and other enjoyment of the shoreline and public waters consistent with the enjoyment of property rights of adjacent lands.*
 - b. *Give priority to developing a system of linear access consisting of paths and trails along the shoreline areas, providing connections across current barriers wherever feasible.*
 - c. *Provide multipurpose non-motorized trail facilities in accordance with the provisions of the American's with Disabilities Act, wherever feasible.*

Response: The proposed rail expansion will not interfere or restrict public access to publicly owned areas of the shoreline. The Project includes recreational improvements which will improve public access to the shoreline by increasing parking, including ADA-accessible features and a designated access path to allow visitors to safely access the shoreline.

6. *Increase recreational opportunities for the public on the shoreline.*
 - a. *Plan for and encourage development of public facilities for water-oriented recreational use of the shoreline.*

Response: The Project includes recreational improvements which will improve public access to the shoreline by increasing parking, including ADA-accessible features and a designated access path to allow visitors to safely access the shoreline. Recreational portions of the Project are discussed in detail in Section 3.2.

5.2.3. General Shoreline Regulations (SMP Chapter 6)

This section addresses general shoreline regulations which apply to all shorelines of the state that are located in the County. Responses may address multiple provisions were applicable.

5.2.3.1. No Net Loss of Ecological Function (SMP Section 6.1)

Response: The Project has been designed to avoid and minimize impacts to ecological functions to the maximum extent feasible. The proposed Project will have no effect on water flow; erosion and accretion; infiltration; groundwater recharge and discharge; sediment delivery, transport, and storage; large woody debris recruitment; organic matter input; nutrient and pathogen removal; and/or stream channel formation/maintenance because the Project:

- Does not include any in-water or over-water work;
- Will implement BMPs (including those for temporary erosion and sediment control) during construction;
- Will maintain existing stormwater management (infiltration) and will not result in any water diversion or discharge; and
- Will not result in the removal of shoreline trees, shrubs, or overhanging vegetation that contribute to nutrient cycling.

The proposed Project meets the requirements of mitigation sequencing as detailed in Appendix A.



5.2.3.2. Archaeological, Cultural, and Historic Resources (SMP Section 6.2)

Response: AINW completed a Cultural Resource Survey for the Project and reported that two historic-period resources were identified within the site—the Chemtrade building at 404 North Hendrickson Drive, and a Dredge Materials Placement Site which underlies the entire Project area. Both were evaluated according to the NRHP criteria and are recommended to be not eligible for listing in the NRHP. The survey was completed to assist the Port in complying with Section 106 of the NHPA, as amended, and its implementing regulations (36 CFR 800) in anticipation of federal funding for the railroad work as well as Washington SEPA review.

The FRA (federal lead agency) initiated consultation with the SHPO and Tribes on August 18, 2025. The Project resulted in a finding of no historic properties affected, and FRA received concurrence from SHPO on August 20, 2025.

In accordance with the provisions of federal, state, and local laws, if historic, cultural, or archaeological sites or artifacts are discovered, work will stop immediately, the site will be secured, and the find reported as soon as possible to the County’s Director. The Port would also notify the Washington Department of Archaeology and Historic Preservation and the affected tribes.

5.2.3.3. Critical Areas Protection (SMP Section 6.3)

Response: Critical areas and critical areas buffers that are within shoreline jurisdiction are regulated by the Critical Areas Regulations (CCC Chapter 19.15) and incorporated into the SMP. An evaluation of the presence, absence, and potential impacts to critical areas is provided in Appendix A and includes review of the modifications of critical areas provisions as provided in the SMP.

5.2.3.4. Flood Prevention and Flood Damage Minimization (SMP Section 6.4)

Response: The Project has been designed to avoid development within the floodplain entirely. The Project will not result in floodplain impacts or an increase in flood hazards.

5.2.3.5. Public Access (SMP Section 6.5)

This section addresses public access regulations established in SMP Section 6.5. The Port has a strong commitment to creating recreational opportunities for residents and visitors and to support tourism and commerce within the local community. Recreational development is a foundational aspect of the Port’s Comprehensive Plan and the Port incorporates recreation and shoreline public access into their development projects whenever feasible.

SMP 6.5.A (Applicability) identifies 1) when public access is required, and 2) circumstances which do not require shoreline public access. The proposed Project includes new recreation and shoreline public access elements that will improve and expand public access to the shoreline. Public access elements will be situated adjacent to and north of the proposed rail expansion Project elements. The expanded rail yard will be secured by a fence and will not be publicly accessible for safety and security purposes. The following sections address applicable public access standards.

B. Public Access Standards

1. *When public access is required and provided on site, it shall be:*
 - a. *Located and designed to be compatible with the natural shoreline character, to avoid adverse impacts to shoreline ecological functions, and to ensure public safety.*

Response: The Project has been designed to avoid and minimize impacts to shoreline vegetation and to be compatible with the natural shoreline character. The Project includes a planting plan that will increase native species diversity and create an aesthetically pleasing environment.



- b. *Allowed to encroach into the shoreline buffer when necessary to provide physical and or visual access to the water's edge when otherwise consistent with this Program and the Critical Areas Regulations incorporated herein.*

Response: The Project has been designed so that development would occur in previously developed areas to the maximum extent feasible. The County SMP requires a 50-foot shoreline buffer/riparian habitat area, and all shoreline access/recreational components would be located greater than 50 feet landward from the OHWM (see Figure 5).

- c. *Connected to the nearest public street, where feasible, and shall include improvements that conform to the requirements of the (ADA) when feasible or required by law.*

Response: The Project includes an expanded shoreline public access pathway and parking adjacent to Hendrickson Drive. The new/expanded pathway will be ADA accessible, and new parking includes ADA-compliant parking.

- d. *Fully developed and available for public use prior to final occupancy when required for public land, commercial, port or industrial use/development.*

Response: The shoreline public access elements will be constructed in tandem with the expanded rail yard and will be fully developed and accessible for public use.

- e. *Clearly identified by signage installed and maintained in easily visible locations indicating the public's right of access, hours of access, and other information as needed to control or limit access according to conditions of approval.*

Response: The public access elements will be clearly identifiable as open for public access including (where necessary) signage, hours of access, and other applicable information.

- g. *Consistent with all relevant constitutional and other legal limitations on regulation of private property.*

Response: The public access components of the Project will be consistent with all relevant constitutional and legal limitations of private property. The shoreline recreation and public access features included in the Project will be constructed on Port-owned property and will not interfere with any privately owned property. The Port owns parcels to the north and south of the proposed shoreline public access elements, and these Project elements will not impact adjacent property use.

5.2.3.6. Vegetation Conservation (SMP Section 6.6)

This section addresses shoreline conservation requirements of the SMP. Responses may address multiple provisions were applicable.

- A. *All development shall minimize vegetation removal in areas of shoreline jurisdiction to the amount necessary to accommodate the permitted use. Mitigation sequencing per Section 6.1(E) of this Program shall be applied unless specifically excluded by this Program, so that the design and location of the development minimizes short- and long-term vegetation removal.*

Response: The proposed Project has been designed to avoid and minimize impacts to vegetation to the maximum extent feasible. Project parcels within the County's jurisdiction consist of developed industrial parcels that do not include substantial vegetation or habitat. Vegetation removal within the County's jurisdiction would be limited to short statured grasses and shrubs within the former Chemtrade facility site. The Project includes a planting plan that will offset minor impacts to vegetation to accommodate construction and is anticipated to increase native species diversity.



- B. *Vegetation within shoreline buffers, other stream buffers, wetlands or wetland buffers, or other critical areas shall be managed consistent with Table 7-2 of this Program and the Critical Areas Regulations incorporated herein. Buffers are defined for all shoreline waterbodies in Table 7-2 of this Program.*
- C. *Other vegetation within shoreline jurisdiction, but outside of shoreline buffers, other stream buffers, wetlands and wetland buffers, and other critical areas shall be managed according to Section 6.1, No Net Loss of Ecological Function, of this Program, and any other regulations specific to vegetation management contained in this Program and Cowlitz County Code.*

Response: Table 7-2 requires a 50-foot shoreline buffer/riparian habitat area. All proposed Project elements would be located greater than 50 feet from the OHWM, and the Project is consistent with shoreline and critical area buffer requirements. The Project includes a planting plan that will offset minor impacts consistent with mitigation sequencing and no net loss provisions. See Appendix A for additional details.

- D. *Vegetation conservation standards of this Program shall not apply retroactively in a way which requires lawfully existing uses and developments, including residential landscaping and gardens, to be removed, except as required as mitigation for new and expanded development. Routine maintenance of existing landscaping and gardens is allowed.*

Response: Not applicable. The Project would not require removal of existing lawful uses. Routine maintenance of vegetation planted as part of the Project is anticipated to maintain vegetation health and prevent conditions that could interfere with either the expanded rail yard or the public's shoreline access (e.g., overgrowth, downed limbs).

- E. *When restoring or enhancing shoreline vegetation, proponents shall use native species that are of a similar diversity, density, and type to that occurring in the general vicinity of the site prior to any shoreline alteration. The vegetation shall be nurtured and maintained to ensure establishment of a healthy and sustainable native plant community over time.*

Response: The planting plan includes native species and is anticipated to improve species diversity. Vegetation planted in the area will be maintained by the Port to support vegetation health and to prevent conditions that could interfere with either the expanded rail yard or the public's shoreline access (e.g., overgrowth, downed limbs).

- F. *Mitigation plans shall be approved before initiation of other permitted activities unless a phased schedule that ensures completion prior to occupancy has been approved.*

Response: A compensatory mitigation plan is not proposed. The Project includes a planting plan that will restore and rectify minor impacts to vegetation to accommodate construction. The planting plan is anticipated to improve vegetative species diversity in the area. The planting plan will be implemented as part of construction, and vegetation will be maintained by the Port in perpetuity to support vegetation health.

- G. *Aquatic weed control shall only occur to protect native plant communities and associated habitats or where an existing water-dependent use is restricted by the presence of weeds. Aquatic weed control shall occur in compliance with all other applicable laws and standards and shall be done by a qualified professional.*

Response: Not applicable. The Project does not include any in-water work including aquatic weed control.

- H. *Limbing or crown thinning shall comply with the Tree Care Industry Association pruning standards, unless the tree poses a safety hazard that cannot be eliminated by pruning, crown thinning, or other technique that maintains some habitat function. If a safety hazard cannot be easily determined by the Director, a written report by a certified arborist or other qualified professional is required to evaluate potential safety hazards. No more than 25 percent of the limbs of any single tree may be removed*



and no more than 20 percent of the canopy cover in any single stand of trees may be removed for view preservation.

Response: Not applicable. The Project does not include tree thinning or crowning.

- I. Vegetation may be removed from levees, dikes, docks, airports, roads, and railways in accordance with the provisions of this Program, including the requirement to result in no net loss of ecological functions; as well as applicable federal, state, and local standards, including but not limited to the requirements of the U.S. Army Corps of Engineers, the Federal Aviation Administration, the Washington State Department of Transportation Aviation Division, and Cowlitz County.*

Response: The Project does not include vegetation removal from levees, dikes, docks, airports, or roads. Vegetation in the vicinity of the proposed Project will be maintained by the Port to prevent conditions that could interfere with either rail yard operations or the public's shoreline access (e.g., overgrowth, downed limbs) once the Project is complete.

5.2.3.7. Water Quality and Quantity (SMP Section 6.7)

- A. All shoreline development shall comply with the applicable requirements of the County's Stormwater Manual and best management practices to prevent impacts to water quality and stormwater quantity that would result in a net loss of shoreline ecological functions and/or a significant impact to aesthetic qualities or recreational opportunities.*

Response: The Project will comply with the County's Stormwater Manual and best management to prevent impacts to water quality and stormwater quantity. Stormwater management will not be altered as a result of the proposed Project. Stormwater within the Project footprint is currently infiltrated. The Project includes low impact development (bioswales) that will allow continued infiltration within the site. Stormwater will not be redirected, collected, or discharged as a result of the Project. The proposed Project would not result in a net loss of ecological functions, aesthetic values, and/or recreational opportunities.

- B. Stormwater management structures including ponds, basins, and vaults shall be located outside of shoreline jurisdiction where feasible, as far from the water's edge as feasible, and shall minimize disturbance of buffers. Low-impact development facilities (which do not substantially change the character of the shoreline) such as vegetation filter strips, grass-lined swales, and vegetated bioretention and infiltration facilities, are encouraged in association with development allowed in shoreline jurisdiction.*

Response: The Project will utilize low-impact development facilities (bioswales) for stormwater management. Stormwater ponds, basins, and/or vaults are not proposed.

- C. Aerial application of pesticides, herbicides and fertilizers within shoreline jurisdiction is prohibited unless as part of a public agency program for control of noxious species or specific pests, or for quarantine or public health purposes.*

Response: Not applicable. The proposed Project does not include application of pesticides, herbicides, and/or fertilizers within shoreline jurisdiction.

- D. Sewage management. To avoid water quality degradation, sewer service is subject to the requirements outlined below.*
 - 1. Sewage disposal facilities for any proposed use shall meet all applicable Department of Health standards, as set forth in WAC 173-272A, On-Site Sewage Systems.*
 - 2. Any existing septic system or other on-site system that fails or malfunctions will be required to connect to an existing municipal sewer service system if feasible,*



or make system corrections approved by the Cowlitz County Environmental Health Unit.

3. *Any new development, which consists of an occupied use such as a business, park or recreation facility, single-family or multi-family unit, in an urban area will be required to connect to an existing municipal sewer service system, if service is available, or install an on-site septic system approved by Cowlitz County Environmental Health Unit.*

Response: Not applicable. The Project does not include facilities within the County’s jurisdiction that would require sewage treatment, nor are there existing septic systems that would require connection to an existing municipal sewer service system.

5.2.4. Shoreline Use and Modification Regulations (SMP Chapter 7)

SMP Chapter 7 includes Shoreline Use regulations for specific uses. The following uses are not applicable and are not addressed herein: Agriculture, Aquaculture, Boating Facilities, Commercial, Forest Practices, Institutional, Instream Structures, Log Storage, Mining, Residential, and Utilities². Responses may address multiple provisions where applicable.

5.2.4.1. Shoreline Use, Modification, and Standards Table (SMP Section 7.1)

Table 2 includes a summary of permit requirements for shoreline uses and modifications applicable to the Project as provided in SMP Table 7-1.

TABLE 2: LAND USE AND ZONING PERMITTING REQUIREMENTS FOR SHORELINE USES AND MODIFICATIONS (SMP TABLE 7-1)

Shoreline Use or Modification	High-Intensity Shoreline Environmental Designation
Water-Related Industrial	Permitted
Water-Related Recreational	Permitted
Transportation (Parking)	Permitted
Fill and Excavation	Permitted

Response: All Project activity areas are located within the High-Intensity SED. The County SMP permits water-related industrial uses, water-related and water-enjoyment recreational uses, transportation (parking)³, and fill/excavation in High-Intensity SED. Therefore, the proposed activities are permitted uses in the SEDs.

Table 3 includes a summary of dimensional standards as provided by SMP Table 7-2.

² SMP Section 7.2.14 Utilities is applicable to utilities as a primary use. On-site utilities serving a primary use, such as a water, sewer, or gas line to a residence or other approved use, are accessory utilities and shall be considered a part of the primary use. The provisions of SMP Section 7.2.14 are not addressed for this reason.

³ A footnote to SMP Table 7-1 indicates that Parking must support an allowed primary use and parking as a primary use is prohibited. Parking is not proposed as a primary use, would support the primary use of shoreline public access and recreation, and is therefore a permitted use.



TABLE 3: DIMENSIONAL STANDARDS (SMP TABLE 7-2)

Dimensional Standard	High-Intensity Shoreline Environmental Designation
Shoreline Buffer	Water related: 50 ft
Building Setback	10 ft
Maximum Height	35 ft
Maximum Lot Coverage	N/A

1. *Shoreline buffers.*

- a. *Buffer widths for shorelines of the State are defined in Table 7-2 Dimensional Standards. With respect to shorelines of the State, the term “shoreline buffer” is interchangeable with the term “Riparian Habitat Area,” or “RHA,” used in the County’s Critical Areas Regulations. For non-shoreline streams and other critical areas in shoreline jurisdiction, see the Critical Areas Regulations, incorporated herein, for applicable buffers.*
- b. *Water-dependent uses and developments do not require shoreline buffers. Mitigation sequencing shall be applied to ensure no net loss of shoreline ecological functions, consistent with Section 6.1 of this Program.*

2. *Building setbacks.*

- a. *Building setback widths for shorelines of the State are defined in Table 7-2 Dimensional Standards. Setbacks are required in addition to the shoreline buffer in order to ensure the integrity of the full buffer width, and shall be measured from the landward edge of the shoreline buffer.*
- b. *Building setbacks do not apply to water-dependent uses and developments. Mitigation sequencing shall be applied to ensure no net loss of shoreline ecological functions, consistent with Section 6.1 of this Program.*

Response: All Project components are consistent with the dimensional standards for shoreline buffers and setbacks of SMP Table 7-2. There are no Project elements proposed within the 50-foot shoreline buffer or 10-foot building setback. See Appendix A for additional details.

3. *Building height restrictions.*

- a. *There shall be a 35-foot maximum building height for all structures, except that the following are not subject to this restriction: bridges and, in the High-Intensity shoreline environment, water-oriented industrial structures and facilities meeting the requirements of Section 7.2.6(H) of this Program, and in-stream structures meeting the requirements of Section 7.2.8(B) of this Program.*
- b. *Outside of the allowances of Subsection a. above, to exceed the 35-foot maximum building height an applicant must obtain a Shoreline Variance and comply with the following criteria in addition to standard Shoreline Variance criteria:*
 - i. *Demonstrate that the public interest will be served by accommodating the increased height;*
 - ii. *Demonstrate that the view of a substantial number of residences in areas adjoining such shorelines will not be obstructed; and*
 - iii. *Demonstrate that the increased height will not substantially interfere with views from a designated public place, vista, or*



feature specifically identified in an adopted local, state, or federal plan or policy.

Response: The proposed Project does not include buildings or structures that would exceed 35 feet in height.

4. *Maximum lot coverage. Maximum lot coverage shall be consistent with the County's Land Use Ordinance (CCC 18.10) and the standards in Table 7-2.*

Response: SMP Table 7-2 indicates that maximum lot coverage is not applicable in the High-Intensity shoreline designation.

5.2.4.2. Shoreline Use Regulations - Industrial (SMP Section 7.2.6)

This section addresses the shoreline use regulations for industrial development. Responses may address multiple provisions where applicable.

- A. *Water-dependent industrial uses are preferred over non-water-dependent industrial uses.*
- B. *Water related and non-water-oriented industrial uses shall not be allowed if they displace existing viable water-dependent uses or if they are proposed to occupy space designated for water-dependent uses identified in a previously approved SSDP or other approval.*

Response: The proposed Project will support the existing water-dependent TEMCO Terminal and is considered a water-related use, as it has a functional necessity for proximity to the terminal. The proposed Project would not displace existing water-dependent uses.

- C. *Where industrial use is proposed for location on land in public ownership, public access shall be required consistent with Section 6.5, Public Access. Industrial development and redevelopment shall be encouraged to locate where environmental cleanup and restoration of the shoreline area can be incorporated.*

Response: The proposed Project includes public access elements. Location of the expanded rail yard is constrained by its necessary proximity to TEMCO and by site conditions (location between existing transportation infrastructure and the Columbia River).

- D. *New nonwater-oriented industrial development may be allowed in shoreline jurisdiction if:*
 1. *The use is part of a mixed-use project that includes water-dependent uses and provides a significant public benefit with respect to the Shoreline Management Act's objectives such as providing public access and/or ecological restoration; or*
 2. *Navigability is severely limited at the proposed site, and the industrial use provides a significant public benefit with respect to the Shoreline Management Act's objectives such as providing public access and/or ecological restoration; or*
 3. *The site is physically separated from the shoreline by another property or public right of way, and public access and/or ecological protection is provided.*

Response: Not applicable. The proposed Project is a water-related use.

- E. *Waterward expansion of existing non-water-oriented industrial development shall conform to the buffer and setback provisions of this chapter. If the existing nonwater-oriented industrial use does not conform to the setback and buffer provisions, the structure can still be expanded but only on the landward sides of the structure.*

Response: Not applicable. The proposed Project does not include a proposal for non-water-oriented waterward expansion.



- F. Proposed developments shall maximize the use of existing industrial facilities and avoid duplication of dock or pier facilities. Proposals for new industrial and port developments shall demonstrate the need for expansion into an unimproved natural area. Only water-dependent elements of a proposal for industrial use may encroach on required vegetated buffers of this Program.*

Response: The proposed Project is located within the existing development shoreline and does not include dock or pier facilities. It would utilize existing industrial areas for expansion and would not require encroachment into unimproved natural areas.

- G. Siting of accessory development or use within shoreline jurisdiction shall be limited to facilities required to serve approved water-oriented uses.*

Response: The proposed Project will support the existing TEMCO Terminal and includes required public access elements, both of which are water-related uses. Accessory developments within the shoreline jurisdiction would be limited to those required to serve the primary uses proposed.

- H. In the High-Intensity Shoreline Environment Designation, water-oriented structures and facilities which meet the following criteria are not subject to the height restrictions defined in Table 7-2 of this Program:*

- 1. The applicant demonstrates a need for the proposed height of the structure or facility; and*
- 2. The view of a substantial number of residences in areas adjoining such shorelines will not be obstructed.*

Response: The proposed Project is located within the High-Intensity SED and the Project will not obstruct views of the shoreline.

- I. Overwater structures, or other structures waterward of the OHWM, are allowed only for those portions of water-dependent industrial uses that require overwater facilities as an essential feature of their function and when allowed within the adjacent upland SED. Design of overwater structures or structures beyond the OHWM shall demonstrate that they will not interfere with normal stream geomorphic processes, require additional future shoreline stabilization, or interfere with navigation or normal public use of the water.*

Response: Not applicable. The proposed Project does not include overwater structures.

5.2.4.3. Recreational (SMP Section 7.2.11)

This section addresses the shoreline use regulations for recreation development. Responses may address multiple provisions where applicable.

- A. Recreation areas or facilities on the shoreline shall provide physical or visual access to the shoreline.*

Response: Recreation and shoreline public access elements of the Project include both physical and visual access to the shoreline.

- B. Recreation facilities and activities are permitted when they do not displace water-dependent uses and are consistent with existing water related and water-enjoyment uses.*

Response: The proposed Project would not displace water-dependent uses. The rail expansion would occur within existing industrial parcels. The proposed recreation and shoreline public access elements would connect to and expand existing public access areas.



- C. *Only water-oriented elements of a recreational proposal may encroach on required vegetated buffers of this Program, except as outlined in the Critical Areas Regulations incorporated herein, Section 6.3.*
- D. *Recreational development shall be located, designed, and operated in a manner consistent with the purpose of the environment designation in which it is located and shall meet the criterion of no net loss of ecological functions and the preferred mitigation sequence of this Program, set forth in Section 6.1, No Net Loss of Ecological Function.*

Response: Project elements would not encroach within required shoreline buffers. Recreational elements have been designed to avoid and minimize impacts to the shoreline environment to the maximum extent feasible. The purpose of the High-Intensity SED is to provide for high-intensity, water-oriented commercial, transportation, and industrial uses while protecting existing ecological functions and restoring ecological functions in areas that have been previously degraded. Recreational elements that would occur within the High-Intensity shoreline area include walking paths, an access drive, and parking adjacent to the expanded rail yard. The Project will not result in a net loss of ecological functions. (See Appendix A for more information.)

- E. *Parking areas shall be located outside of shoreline jurisdiction, unless infeasible. When permitted within shoreline jurisdiction, parking areas shall be sited as far from the immediate shoreline as feasible. Applicants shall demonstrate the need for the proposed location.*

Response: The location of Project elements is constrained by existing conditions of the Project site which is bound to the west by the Columbia River and to the east by Hendrickson Drive. Parking elements have been located as far from the shoreline as feasible and would be separated from the shoreline by the public access pathway.

- F. *Provisions shall be made for adequate vehicular parking and safe pedestrian crossings. Design of parking areas shall comply with all applicable County and State stormwater regulations.*

Response: The Project includes adequate parking and safe pedestrian pathways and crossings. Stormwater will be managed with low-impact development (bioswales) similar to existing stormwater management which includes only infiltration within the site.

- G. *All permanent, substantial recreational structures and facilities shall be located outside officially mapped floodways. Minor accessory uses (including, but not limited to, picnic tables and playground equipment) may be allowed in the floodway when it can be demonstrated by the applicant that there will be no net loss of ecological functions as set forth in Section 6.1, and all flood hazard criteria of this Program and the County's flood protection code (Chapter 16.25 CCC, Floodplain Management) are met.*

Response: The Project has been designed to avoid development within the floodplain entirely.

- H. *New non-motorized trails and paths for recreational use shall comply with the provisions of subsection 7.2.13.B, Non-Motorized Facilities.*

Response: See Section 5.2.4.4 below.

- I. *New overwater structures for recreation use shall be allowed only when:*
 1. *They accommodate water-dependent recreation use or facilities; or*
 2. *They provide access for the public to enjoy the shorelines of the state; and*
 3. *No net loss of ecological functions will be achieved as set forth in Section 6.1, No Net Loss of Ecological Function.*



Response: Not applicable. The Project does not include a proposal for new over-water structures.

- J. Recreational facilities shall provide adequate facilities for potable water supply, sewage disposal, and/or garbage collection where feasible.*

Response: The Project includes restroom facilities with water supply and sewage connections to municipal wastewater infrastructure. The restroom facilities would be located within the City's jurisdiction but would be developed as part of the overall Project that crosses jurisdictional boundaries.

5.2.4.4. Transportation and Parking (SMP Section 7.2.13)

A. Roads, Railroads and Bridges

1. *New or expanded surface transportation facilities not related to and necessary for the support of existing or planned authorized uses in shoreline jurisdiction shall be located outside of the shoreline jurisdiction unless infeasible. Where location outside of the shoreline jurisdiction is not possible, facilities (except for bridge components) shall comply with the buffers identified in Table 7-2, be set back from the OHWM a distance sufficient to make shoreline stabilization unnecessary, and shall demonstrate the need for the facility within the shoreline.*

Response: The Project includes an expanded rail yard that will directly support the TEMCO Terminal and has a functional necessity for being located adjacent to the terminal. Location of the rail infrastructure is constrained by existing site conditions (Hendrickson Drive and the BNSF mainline to the east and the Columbia River to the west). All Project components are located outside of the shoreline buffers as established in Table 7-2 including rail and roadway infrastructure.

2. *The applicant shall demonstrate that new or expanded facilities are designed to:*
 - a. *Minimize impacts to critical areas and associated buffers and to minimize alterations to the natural or existing topography to the extent feasible;*
 - b. *Avoid or minimize the need for shoreline stabilization; and*
 - c. *Follow the mitigation sequence of this Program to achieve no net loss of ecological functions as set forth in Section 6.1, No Net Loss of Ecological Functions.*

Response: The Project has been designed to avoid and minimize impacts to natural resources to the maximum extent feasible. See Appendix A for additional information.

3. *New transportation crossings over streams shall be avoided, but where necessary shall utilize bridges rather than culverts to the extent feasible.*
4. *Requirements for bridge and culvert installation crossing all streams shall be consistent with flow-, debris- and/or fish-passage requirements in Washington Department of Fish and Wildlife's site-specific Hydraulic Project Approval.*

Response: Not applicable. The proposed Project does not include stream crossings, bridges, and/or culverts.

5. *All excavation materials and soils exposed to erosion by all phases of road, railroad, bridge, and culvert work shall be stabilized and protected by seeding, mulching, or other effective means, both during and after construction.*

Response: A temporary erosion and sediment control plan will be developed and implemented during Project construction to prevent soil erosion. Soils exposed after construction will be managed similarly until vegetation has been established and the risk of erosion is mitigated.



6. *Private access roads or driveways providing ingress and egress for individual single-family residences or lots shall be limited to the minimum width allowed by the fire code.*

Response: Not applicable. The Project does not include access roads or driveways for single family residences.

7. *Bridges shall provide the maximum length of clear spans feasible with pier supports to produce the minimum amount of deflection feasible.*

Response: Not applicable. The Project does not include bridges.

B. Non-Motorized Facilities

1. *Non-motorized facilities, such as trails, shall comply with provisions for public access that are part of this Program.*

Response: See Section 5.2.3.5 for compliance with public access provisions.

2. *New or expanded non-motorized transportation facilities shall be located outside of critical areas and their associated buffers. With demonstration that the trail cannot be located outside of the buffer, the trail may be located in the outer 25 percent of the critical area buffer. The following trail types are exceptions and may be located closer to the ordinary high water mark:*
 - a. *Trails constructed for water access.*
 - b. *Soft-surface trail (mulch, or dirt), not wider than three (3) feet, given the following:*
 - i. *This exception does not apply to critical area buffers for Category I, II, or III wetlands;*
 - ii. *Trail construction and maintenance shall minimize removal of vegetation (trees, shrubs, etc.), avoid important wildlife habitat, and shall not result in a net loss of ecological functions;*
 - iii. *This exception does not apply to trail parking, shelters, bathrooms, and any similar related structures; and*
 - iv. *All provisions of the Critical Areas Regulations incorporated herein, are met.*

Response: Project elements would not be located within critical areas and/or their associated buffers. See Appendix A for additional information.

3. *Elevated walkways shall be utilized where feasible to cross wetlands and streams if a trail is not feasible outside of the critical area and associated buffer.*

Response: Not applicable. Public access trails would not be located where stream or wetland crossings would be necessary.

4. *Non-motorized facilities constructed for water enjoyment and water access are encouraged; any impacts to ecological functions shall be avoided, minimized, and mitigated.*

Response: The Project includes public access trails for recreation and public shoreline enjoyment. The Project has been designed to avoid and minimize impacts to the shoreline environment (including critical areas) to the maximum extent feasible. See Appendix A for additional information.



- C. *Parking. Parking facilities are not a preferred use and shall be allowed only where necessary to support an authorized use. Parking facilities accessory to a permitted use shall be:*
1. *Set back as far as possible from the OHWM and outside shoreline jurisdiction unless limited by lot size, topography, critical areas, or some other similar circumstances;*
 2. *Parking facilities shall be located on the landward side of the primary structure unless demonstrated to be infeasible.*

Response: Parking is proposed to support shoreline public access and recreation and would not be the primary use. The location of Project elements (including parking) is constrained by existing conditions of the Project site which is bound to the west by the Columbia River and to the east by Hendrickson Drive. Parking elements have been located as far from the shoreline as feasible and would be separated from the shoreline by the public access pathway.

- D. *Facility lighting shall be designed and operated to avoid illuminating nearby properties or public areas; prevent glare on adjacent properties, public areas, or roadways to avoid infringing on the use and enjoyment of such areas; and to prevent hazards. Methods of controlling spillover light include, but are not limited to, limits on height of structure, limits on light levels of fixtures, light shields, setbacks, buffer areas, and screening. Lighting must be directed away from critical areas and adjacent waterbodies, unless necessary for public health and safety.*

Response: Lighting will be provided for the safety of public users. Facility lighting will be designed and implemented in such a way so as to avoid impacts on adjacent properties and uses and to avoid hazards.

5.2.4.5. Shoreline Modification Regulations (SMP Section 7.3)

SMP Chapter 7.3 includes shoreline modification regulations for specific uses. The following uses are not applicable and are not addressed herein: Shoreline Stabilization; Breakwaters, Jetties, Weirs, and Groins; Residential Moorage Facilities (Docks, Buoys, and Marine Railways); and Dredging and Dredge Material Disposal.

5.2.4.5.1. General Regulations (SMP Section 7.3.1)

The following provisions shall apply to all shoreline modifications:

- A. *Structural modifications may be permitted only where they are demonstrated to be necessary to support or protect an allowed primary structure or a legally existing shoreline use that is in danger of loss or substantial damage, or for reconfiguration of the shoreline for mitigation or enhancement purposes.*

Response: The rail yard expansion is necessary to support operations at the existing water-dependent TEMCO Terminal.

- B. *Preference shall be given to shoreline modifications that have a lesser impact on ecological functions.*

Response: The proposed Project would be located within existing industrial parcels that do not provide substantial shoreline functions and/or habitat. Redevelopment of the existing industrial parcels would not require encroachment into shoreline areas within natural features or shoreline functions. There will be no permanent loss of habitat functions. See Appendix A for more information.

- C. *Modifications shall be designed to incorporate all feasible measures to protect ecological shoreline functions and ecosystem-wide processes.*

Response: The Project has been designed to avoid and minimize impacts to shoreline ecological functions to the maximum extent feasible. There will be no net loss of ecological functions and values as a result of



the proposed Project design, location, and because BMPs would be implemented to prevent inadvertent adverse impacts. See Appendix A for more information.

- D. Shoreline modifications shall be limited in number and extent and only allowed when appropriate to the specific type of shoreline and environmental conditions for which they are proposed.*

Response: The proposed Project will take place within a previously disturbed industrialized area, and the Project is a water-related use within the High-Intensity SED.

5.2.4.5.2. Fill and Excavation (SMP Section 7.3.5)

This section addresses the shoreline modification regulations for fill and excavation within the shoreline jurisdiction. Responses may address multiple provisions where applicable.

- A. Fill may be placed in flood hazard areas only when otherwise allowed by the frequently flooded areas regulations in this Program (the Critical Areas Regulations incorporated herein, Chapter 4), and where it is demonstrated in a hydraulics analysis prepared by a qualified professional that adverse impacts to hydrogeologic processes will be avoided.*
- B. Fill below or waterward of the OHWM for any use except ecological restoration requires a Shoreline Conditional Use Permit. Fill may be placed below the OHWM only when it is demonstrated that the fill is necessary to:*
- 1. Accomplish an aquatic habitat restoration plan;*
 - 2. Support a mitigation action, environmental restoration, beach nourishment or other enhancement project;*
 - 3. Correct the adverse results of past shoreline modification that have disrupted natural stream geomorphic conditions and adversely affected aquatic or terrestrial habitat;*
 - 4. Support a water-dependent use;*
 - 5. Serve as part of a public access proposal;*
 - 6. Support cleanup of contaminated sediments as part of an interagency environmental clean-up plan, or permitted under MTCA or CERCLA; or*
 - 7. Expand or alter transportation facilities of statewide significance currently located on the shoreline only when demonstrated that alternatives to fill are not feasible.*
- C. Consultation with DNR is required for any filling and excavation projects on State-owned aquatic lands.*
- D. Fill is restricted in wetlands or fish and wildlife habitat conservation areas in accordance with the critical areas standards in this Program, the Critical Areas Regulations incorporated herein, Chapters 2 and 3.*
- E. Disposal of dredge materials is not considered fill and shall be regulated under Subsection 7.3.6, Dredging and Dredge Material Disposal.*

Response: Not applicable. The proposed Project does not include a fill and/or excavation within the floodplain, below the OHWM, on state-owned aquatic lands, or within wetlands or fish and wildlife habitat conservation areas, and/or the disposal of dredged material.

- F. Excavation of previously deposited dredge materials above the OHWM may be permitted if the spoils site is part of a dredge materials management plan and the spoils were not originally placed as part of a beach nourishment or other shoreline restoration project.*



G. Excavation below the OHWM is considered dredging and is subject to provisions in Subsection 7.3.6.

Response: Excavation above the OHWM will be required for Project development including a portion of the Port's Southport placement site. Excavated material was not placed as part of a beach nourishment or shoreline restoration project. Excavation below the OHWM is not proposed.



6. CONCLUSION

As demonstrated throughout this narrative and in the attached materials, the Project is consistent with the goals, policies, and regulations of the SMA and the County's SMP.

The Port requests that the County issue a shoreline substantial development permit in compliance with WAC 173-27 and the County's SMP.



Disclaimer

Moffatt & Nichol devoted effort consistent with (i) the level of diligence ordinarily exercised by competent professionals practicing in the area under the same or similar circumstances, and (ii) the time and budget available for its work, to ensure that the data contained in this report is accurate as of the date of its preparation. This study is based on estimates, assumptions and other information developed by Moffatt & Nichol from its independent research effort, general knowledge of the industry, and information provided by and consultations with the client and the client's representatives. No responsibility is assumed for inaccuracies in reporting by the Client, the Client's agents and representatives, or any third-party data source used in preparing or presenting this study. Moffatt & Nichol assumes no duty to update the information contained herein unless it is separately retained to do so pursuant to a written agreement signed by Moffatt & Nichol and the Client.

Moffatt & Nichol's findings represent its professional judgment. Neither Moffatt & Nichol nor its respective affiliates, makes any warranty, expressed or implied, with respect to any information or methods disclosed in this document. Any recipient of this document other than the Client, by their acceptance or use of this document, releases Moffatt & Nichol and its affiliates from any liability for direct, indirect, consequential or special loss or damage whether arising in contract, warranty (express or implied), tort or otherwise, and irrespective of fault, negligence and strict liability.

This report may not to be used in conjunction with any public or private offering of securities, debt, equity, or other similar purpose where it may be relied upon to any degree by any person other than the Client. This study may not be used for purposes other than those for which it was prepared or for which prior written consent has been obtained from Moffatt & Nichol.

Possession of this study does not carry with it the right of publication or the right to use the name of "Moffatt & Nichol" in any manner without the prior written consent of Moffatt & Nichol. No party may abstract, excerpt or summarize this report without the prior written consent of Moffatt & Nichol. Moffatt & Nichol has served solely in the capacity of consultant and has not rendered any expert opinions in connection with the subject matter hereof. Any changes made to the study, or any use of the study not specifically identified in the agreement between the Client and Moffatt & Nichol or otherwise expressly approved in writing by Moffatt & Nichol, shall be at the sole risk of the party making such changes or adopting such use.

This document was prepared solely for the use by the Client. No party may rely on this report except the Client or a party so authorized by Moffatt & Nichol in writing (including, without limitation, in the form of a reliance letter). Any party who is entitled to rely on this document may do so only on the document in its entirety and not on any excerpt or summary. Entitlement to rely upon this document is conditioned upon the entitled party accepting full responsibility and not holding Moffatt & Nichol liable in any way for any impacts on the forecasts or the earnings from the project resulting from changes in "external" factors such as changes in government policy, in the pricing of commodities and materials, price levels generally, competitive alternatives to the project, the behavior of consumers or competitors and changes in the owners' policies affecting the operation of their projects.

This document may include "forward-looking statements". These statements relate to Moffatt & Nichol's expectations, beliefs, intentions or strategies regarding the future. These statements may be identified by the use of words like "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "project," "will," "should," "seek," and similar expressions. The forward-looking statements reflect Moffatt & Nichol's views and assumptions with respect to future events as of the date of this study and are subject to future economic conditions, and other risks and uncertainties. Actual and future results and trends could differ materially from those set forth in such statements due to various factors, including, without limitation, those discussed in this study. These factors are beyond Moffatt & Nichol's ability to control or predict. Accordingly, Moffatt & Nichol makes no warranty or representation that any of the projected values or results contained in this study will actually be achieved.

This study is qualified in its entirety by, and should be considered in light of, these limitations, conditions and considerations.





GENERAL LOCATION: Port of Kalama

PORT OF KALAMA RAIL EXPANSION PROJECT

VICINITY MAP

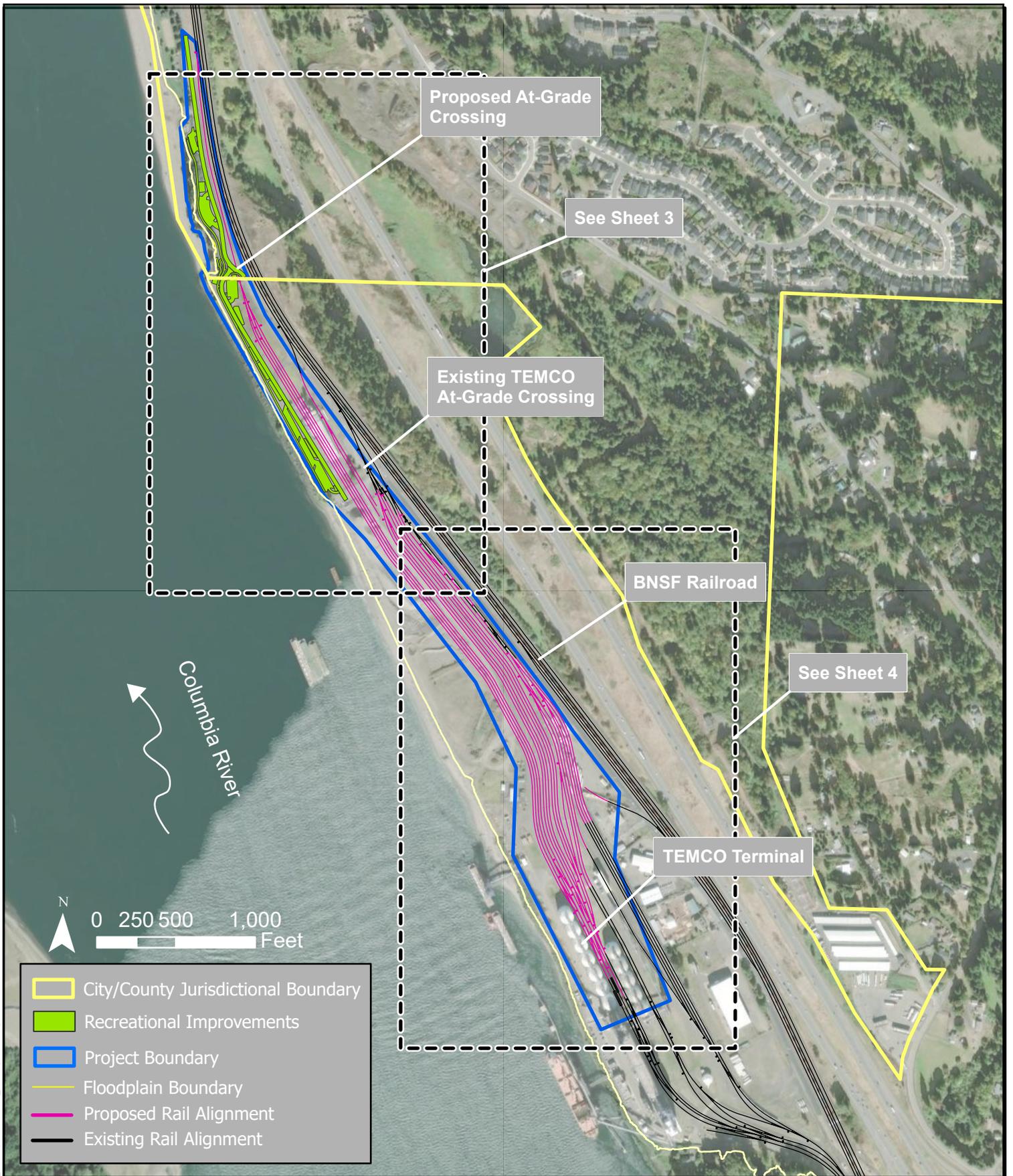
CITY: KALAMA

COUNTY: COWLITZ

STATE: WA

FIGURE 1 OF 7

DATE: 12/02/2025



- City/County Jurisdictional Boundary
- Recreational Improvements
- Project Boundary
- Floodplain Boundary
- Proposed Rail Alignment
- Existing Rail Alignment

GENERAL LOCATION: Port of Kalama

PORT OF KALAMA RAIL EXPANSION PROJECT

RAIL EXPANSION OVERVIEW

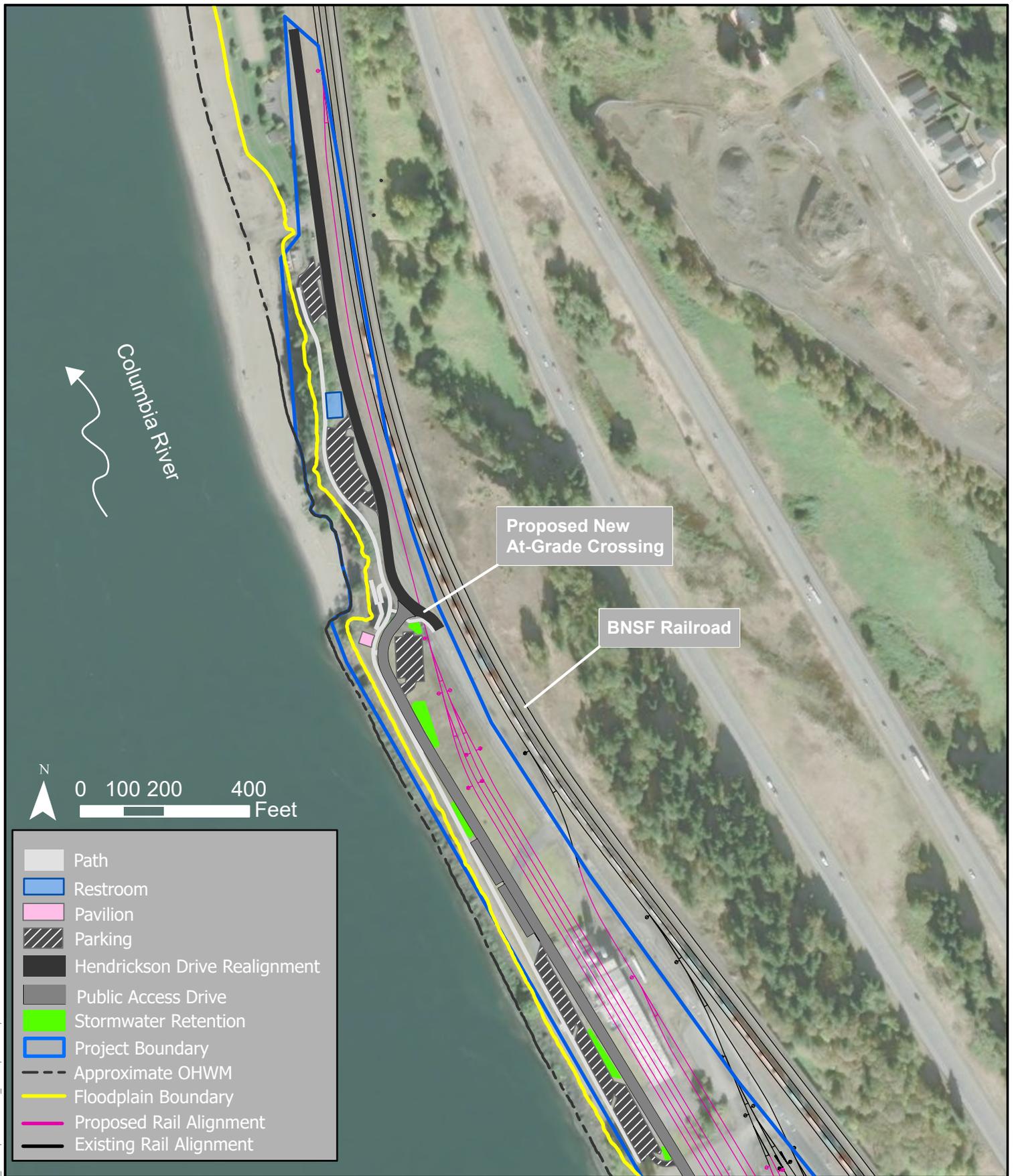
CITY: KALAMA

COUNTY: COWLITZ

STATE: WA

FIGURE 2 OF 7

DATE: 12/01/2025



GENERAL LOCATION: Port of Kalama

PORT OF KALAMA RAIL EXPANSION PROJECT

RAIL EXPANSION OVERVIEW

CITY: KALAMA

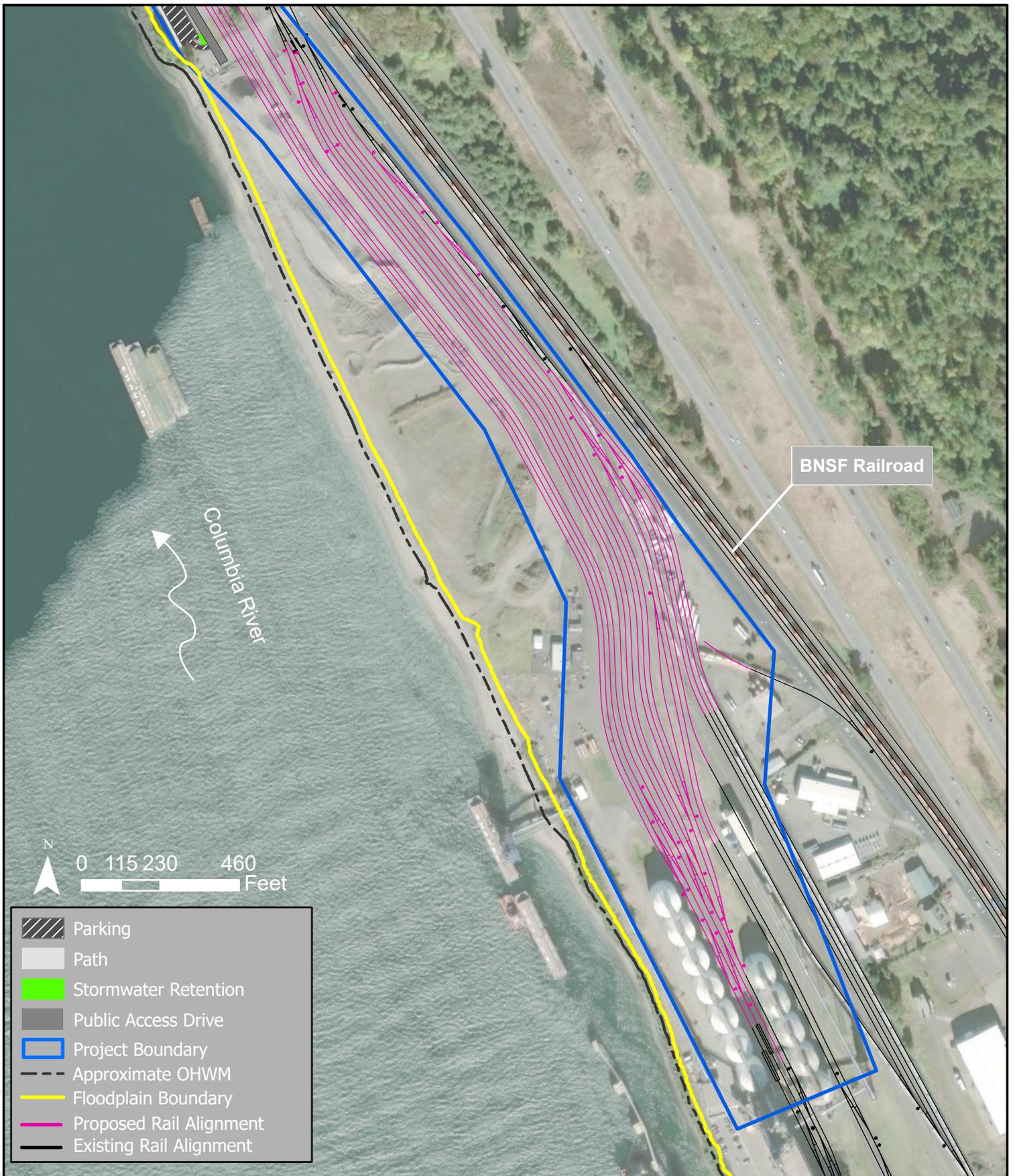
COUNTY: COWLITZ

STATE: WA

FIGURE 3 OF 7

DATE: 12/02/2025

Q:\SEA\1222897-03121_GIS\mxd\POK_RailExpansion\POK_RailExpansion.aprx



GENERAL LOCATION: Port of Kalama

PORT OF KALAMA RAIL EXPANSION PROJECT

RAIL EXPANSION OVERVIEW

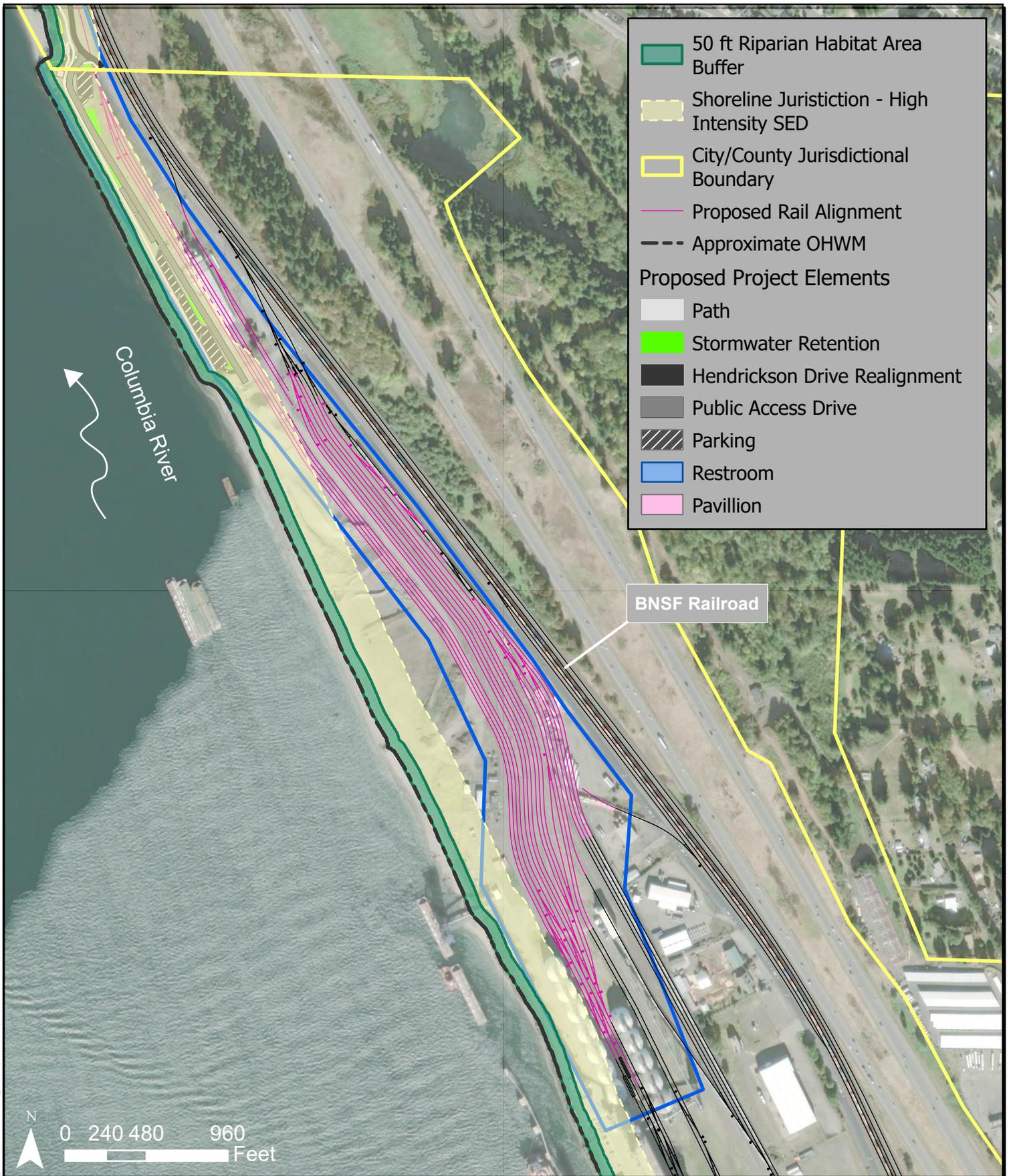
CITY: KALAMA

COUNTY: COWLITZ

STATE: WA

FIGURE 4 OF 7

DATE: 12/01/2025



GENERAL LOCATION: Port of Kalama

**PORT OF KALAMA
RAIL EXPANSION PROJECT**

**COWLITZ COUNTY SHORELINE
BUFFERS**

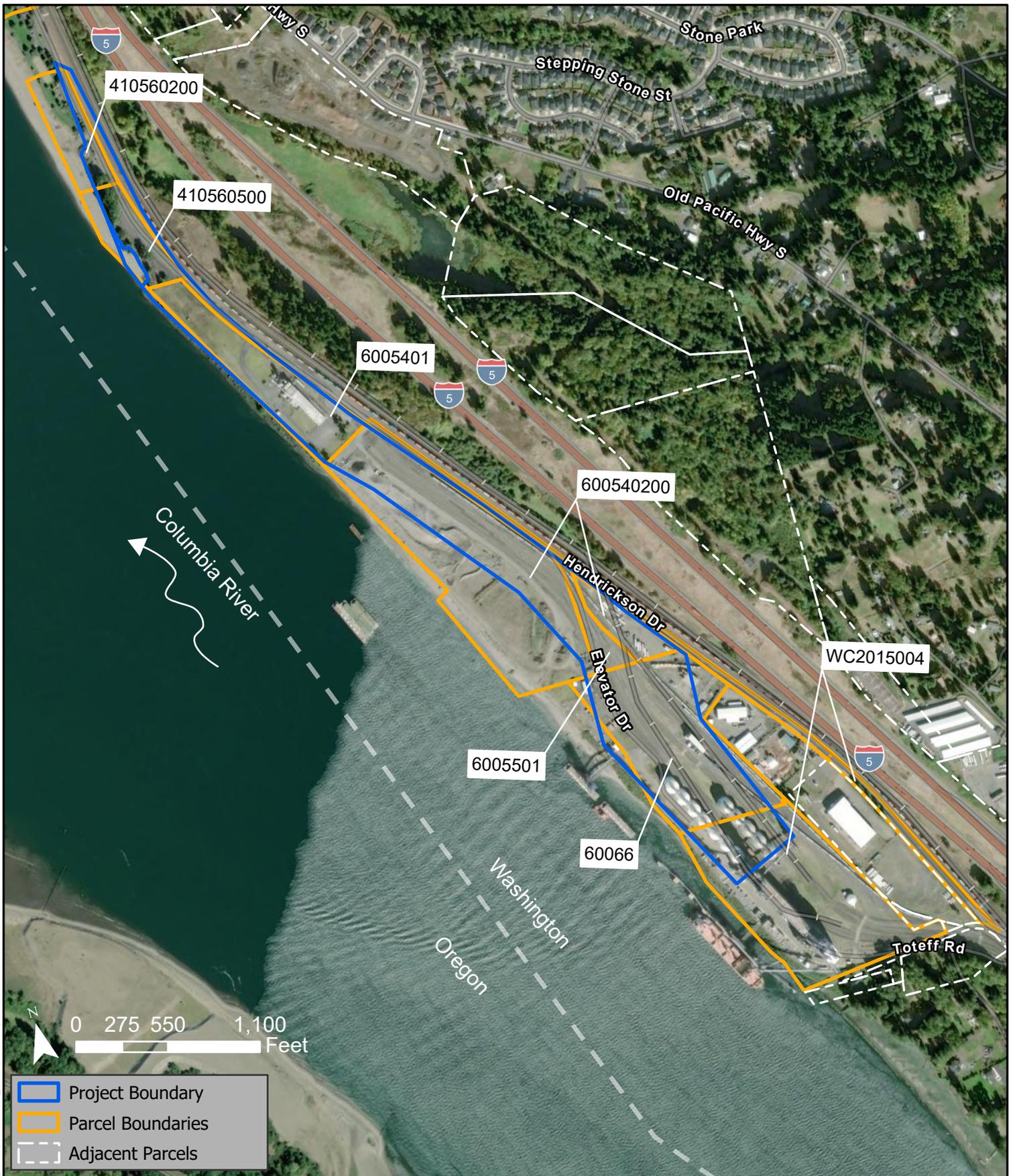
CITY: KALAMA

COUNTY: COWLITZ

FIGURE 5 OF 7

STATE: WA

DATE: 12/01/2025



GENERAL LOCATION: Port of Kalama

PORT OF KALAMA RAIL EXPANSION PROJECT

PARCEL MAP

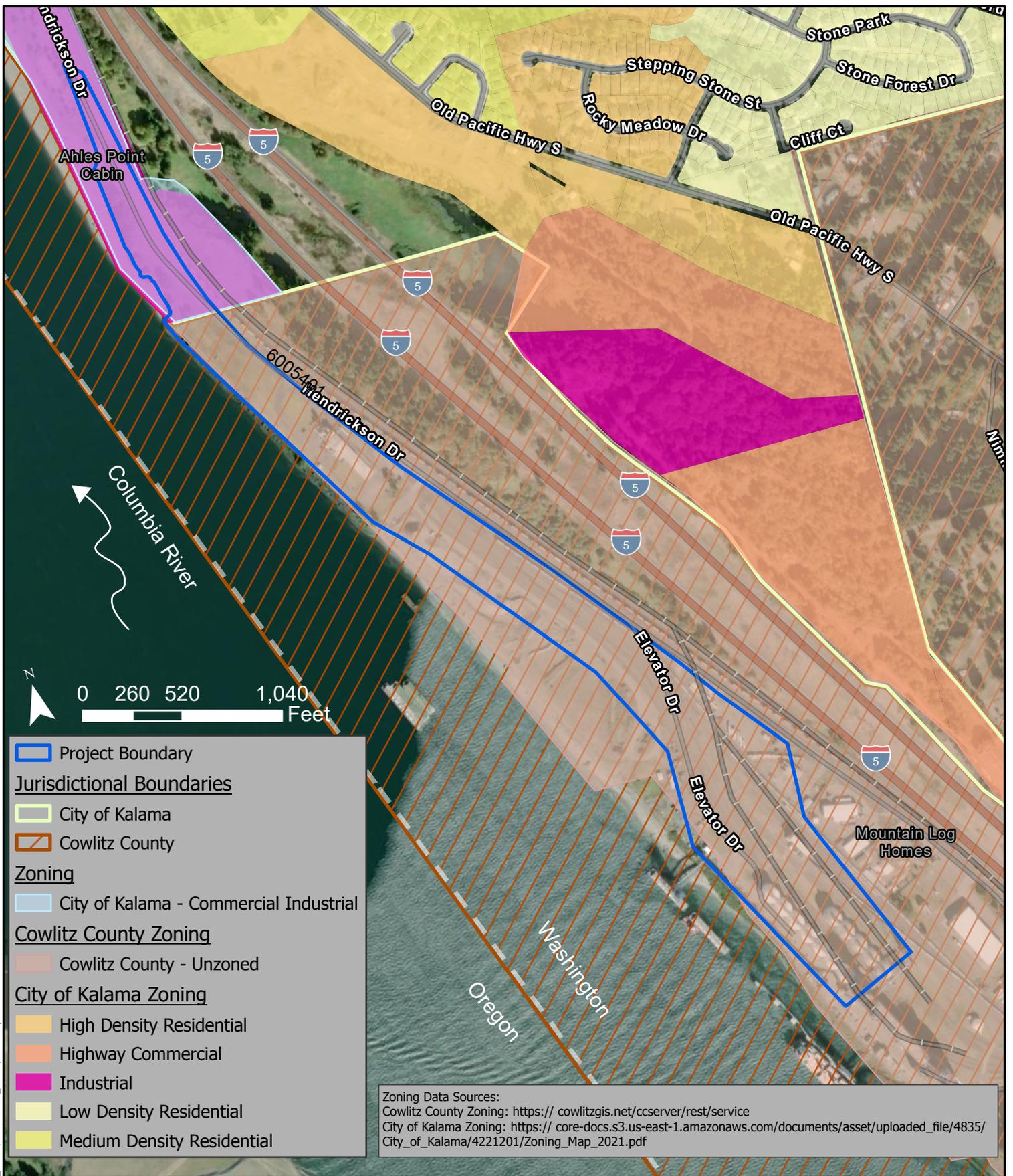
CITY: KALAMA

COUNTY: COWLITZ

FIGURE 6 OF 7

STATE: WA

DATE: 10/03/2025



GENERAL LOCATION: Port of Kalama

**PORT OF KALAMA
RAIL EXPANSION PROJECT**

**ZONING AND
JURISDICTIONAL BOUNDARIES**

CITY: KALAMA

COUNTY: COWLITZ

STATE: WA

FIGURE 7 OF 7

DATE: 12/01/2025

APPENDIX A: CRITICAL AREAS EVALUATION





APPENDIX A

To: File

From: Allison Kinney – Moffatt & Nichol Environmental Scientist; Grace Dymoke – Moffatt & Nichol Environmental Scientist; Tabitha Reeder – Port of Kalama Director of Environmental Services

Date: November 2025

Subject: Port of Kalama Rail Expansion Project – Cowlitz County Shoreline Substantial Development Permit Project Narrative – Appendix A Critical Areas Evaluation

M&N Job No.: 222897-03

1. INTRODUCTION

The Port of Kalama (Port) is located on the eastern shoreline of the Columbia River and owns approximately 1,200 acres in Cowlitz County (County), including 7 miles of shoreline (see Figure 1). The Port's in-water facilities include three terminals (Tacoma Export Marketing Co [TEMCO], North Port, and Kalama Export) and a public marina located between River Miles (RM) 72 and 77. The Port's industrial area is riverfront property located adjacent to the 43-foot deep-draft navigation channel of the Columbia River. The Burlington Northern Santa Fe (BNSF) Railway and Union Pacific (UP) Railroad serve the Port.

The Port is proposing a Rail Expansion Project (herein referred to as "the Project") that will improve the existing rail system and the freight mobility for its tenant TEMCO (a marine grain export loading facility).

The Port is proposing to expand its rail network at the TEMCO grain export terminal to improve rail service and shipping capacity at the terminal (see Figures 2 through 4). Operations at TEMCO are currently constrained by bottlenecks associated with limited track space and capacity. The proposed Project would alleviate these bottlenecks and improve operational efficiency at the terminal.

The overall proposed Project will include the following elements (see Section 3 of the Shoreline Narrative for the complete Project description):

- Removal of approximately 16,000 Track Feet (TF) of existing track.
- Construction of four new arrival tracks (14,700 TF) and six new departure tracks (15,300 TF), with connections to the BNSF-owned lead tracks and the BNSF mainline.
- Installation of a new security fence around expanded areas of the Project site to separate the TEMCO Terminal operations from adjacent publicly accessible areas.
- One new at-grade crossing of Hendrickson Drive (including new signage and lighting). Existing rail crossings will be maintained.
- Realignment of a portion of Hendrickson Drive to reduce the length of the new at-grade rail crossing and for the purposes of traffic calming and public safety.
- Construction of a new 13-foot-wide access drive within the expanded rail yard.
- Stormwater infrastructure improvements including a new infiltration system within the rail yard and bioretention facilities/infrastructure outside of the expanded rail yard.



- Improvements and/or extension of existing utility infrastructure, and/or relocation of existing infrastructure (including waterlines, electrical utilities, lighting, and sanitary sewer). Utility work varies by the type of utility and location. A new fire hydrant will also be installed at the proposed Hendrickson Drive rail crossing to improve safety and emergency response accessibility to waterlines.

The Project also includes recreational components along the shoreline of the Columbia River. The proposed recreational improvements include walking paths, a public restroom, picnic areas, stairway/ramp access to the shore, and parking areas that will be situated adjacent to and north of the expanded rail yard.

The proposed Project occurs within the jurisdictions of both the County and the City of Kalama (City) (see Figure 2). The portion of the project that is within the County is located within the County's shoreline jurisdiction which includes lands extending two hundred (200) feet in all directions from the ordinary high water mark (OHWM) as well as floodways and contiguous floodplain areas landward two hundred (200) feet from such floodways and associated wetlands, river deltas associated with the streams, and lakes and tidal waters (See Figure 5). The portions of the Project that would occur in the County include recreational improvements (new shoreline access pathway and accessory uses such as parking) and expansion of the TEMCO rail yard. The portions of the Project that would occur in the City include recreational improvements and accessory uses such as parking, a new cross-over between the BNSF mainline, and realignment of Hendrickson Drive to accommodate new rail and recreation infrastructure.

The portion of the Project that is within the County is located within the County's shoreline jurisdiction (see Figure 2), and the Port is requesting a shoreline substantial development permit and critical areas permit to allow for development of the proposed rail expansion. The Project is subject to the County Shoreline Master Program (SMP) and critical areas regulations of the Cowlitz County Code (CCC). The Project site contains critical areas that are regulated under Chapter 6.3 – Critical Areas Protection¹ of the SMP and CCC Chapter 19.15.

The purpose of this memorandum is to document how the Project is consistent with the applicable provisions of the County SMP and Critical Areas Code. This memorandum addresses existing conditions, critical areas, and proposed Project elements within the County's jurisdiction; critical areas and Project elements that would occur within the City's jurisdiction have been evaluated independently and will be reviewed by the City for compliance with City codes and regulations.

1.1. Existing Conditions

The proposed Project footprint is bounded by the Columbia River to the west, an informal beach access area to the north, Hendrickson Drive, BNSF Railway and Interstate 5 (I-5) to the east, and the TEMCO grain facility to the south.

The proposed Project footprint traverses seven parcels owned by the Port as shown on Figure 6. Five of the parcels are currently used for industrial purposes and are all located within the County's jurisdiction (Parcel Nos. 6005501, 60066, WC2015004, 600540200, and 6005401). The remaining two parcels are currently used for informal recreational/beach access and are located within the City's jurisdiction (Parcel Nos. 410560200 and 410560500).

The industrial parcels are occupied by the existing TEMCO Terminal and associated rail yard, the Port's Southport upland dredged material placement site (herein referred to as "Southport"), and the former Chemtrade Performance Chemicals U.S. LLC property (herein referred to as "Chemtrade") which has

¹ SMP Section 6.3.2 states that critical areas and critical area buffers that are within the shoreline jurisdiction are regulated by the critical areas regulations of the CCC Chapter 19.15, with the exception of clarifications and modifications as provided in the SMP.



been vacant since 2017. All of the industrial sites are previously disturbed and/or made up of entirely built-environment conditions. Vegetation and habitat within these areas are extremely limited. The TEMCO site is devoid of vegetation. The Southport site is actively managed with heavy equipment preventing the establishment of vegetation within the site. Vegetation within the former Chemtrade site is limited to short-statured grasses and scattered shrubs in areas that are not currently paved/developed.

The parcels associated with the proposed recreational improvements include undeveloped parcels within the City's jurisdiction and portions of the abovementioned industrial parcels (see Figures 3, 4, and 6). The undeveloped parcels are characterized by an unvegetated sandy beach immediately adjacent to the river and a reinforced, vegetated slope farther inland adjacent to Hendrickson Drive. The industrial parcels include a portion of the Chemtrade and Southport sites adjacent to the Columbia River.

The Columbia River is a Type S shoreline of the state. The river supports a diverse variety of species including fish, marine mammals, and birds (including migratory and resident species, raptors, and shore birds), among other species. It should be noted that all of the proposed Project elements will occur landward of the Ordinary High-Water Mark (OHWM) of the Columbia River and within the developed shoreline, as shown in Figure 5. Therefore, the proposed Project will not impact the Columbia River.

2. REGULATED CRITICAL AREAS

There are five types of critical areas regulated under the SMP and CCC Title 19.15: Wetlands (CCC 19.15.120), Fish and Wildlife Habitat Conservation Areas (FWHCA) (CCC 19.15.130), Frequently Flooded Areas (CCC 19.15.140, and Chapter 16.25), Geologically Hazardous Areas (CCC 19.15.150), and Critical Aquifer Recharge Areas (CARA) (CCC 19.15.160).

Table 1 summarizes the definitions of regulated critical areas, resources reviewed, and discussion of the presence or absence of critical areas within the Project area. In addition to the desktop resources reviewed, Moffatt & Nichol completed reconnaissance of the site in September 2023.



TABLE 1: REGULATED CRITICAL AREAS

Critical Areas	Definition	Resources Reviewed	Presence
Wetlands (CCC 19.15.120)	Wetlands are areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.	<ul style="list-style-type: none"> U.S Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Mapper (USFWS 2025a) 	<p>Review of the USFWS NWI Wetlands Mapper shows mapped wetlands in the vicinity of the Project area include the Columbia River situated to the west and identified as “R1UB” (Riverine), an area to the east of the site (and separated from the site by the railroad and Hendrickson Drive) identified as “PFO” (Freshwater Forested/Shrub Wetland), and a mapped stream within the Southport site identified as “R4SBC” (Riverine) (USFWS 2025).</p> <p>Neither the Columbia River nor the wetlands east of the Project site would be impacted by the proposed Project. The wetland/stream feature mapped within the Southport site was investigated during the September 2023 reconnaissance site visit and was determined not present. Wetlands and wetland buffers are not present within the Project area, would not be impacted as a result of the proposed Project, and are not discussed further.</p>
Fish and Wildlife Habitat Conservation Areas (CCC 19.15.130)	<p>Those areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements, including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness. Fish and wildlife habitat conservation areas in Cowlitz County are designated in Table 19.15.130-A.</p> <p>Fish and Wildlife Habitat Conservation Areas (FWHCA) include:</p> <ul style="list-style-type: none"> Areas within which federal or state designated endangered, threatened, or sensitive species have a primary association. 	<ul style="list-style-type: none"> USFWS Information for Planning and Consultation (IPaC) database (USFWS 2025b) National Marine Fisheries Service (NMFS) West Coast Region protected species website and Protected Resources App database (NMFS 2025a) Washington Department of Fish and Wildlife (WDFW) Priority Habitat and Species (PHS) database (2022a) WDFW SalmonScape database (2022b) Washington State Department of Transportation (WSDOT) Fish Passage Barriers (WSDOT 2025) Washington State Department of Natural Resources (DNR) Natural Resources 	<p>Review of pertinent resources indicates Fish and Wildlife Habitat Conservation Areas do or may occur within or near the Project area including threatened and endangered species and waters of the state². Section 2.1 includes discussion regarding presence or absence, potential impacts, and applicable development standards for these FWHCA.</p> <p>Review of pertinent resources indicates that the proposed Project site does not include state priority habitat and areas associated with state priority species³, species and habitats of local importance, naturally occurring ponds, state natural area preserves or natural resource conservation areas, areas of rare plant species, high-quality ecosystems, or unintentionally created ponds. These critical areas are not present, would not be impacted as a result of the proposed Project, and are not discussed further.</p>

² The proposed Project does not include any proposed in-water or over-water work that could impact the Columbia River or waters of the state, however the SMP and CCC 19.15.130 include provisions for protective riparian habitat buffers that are addressed in Section 2.1.

³ Review of the WDFW PHS database indicates that priority species and habitats occur within the Columbia River; however, the proposed Project does not include in-water or over-water work or any Project activities that would result in impacts to these critical habitats.



Critical Areas	Definition	Resources Reviewed	Presence
	<ul style="list-style-type: none"> State priority habitat and areas associated with state priority species. Species and habitats of local importance. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat. Waters of the state. State natural area preserves and natural resource conservation areas. Areas of rare plant species and high-quality ecosystems. Unintentionally created ponds. 	Conservation Areas and State Natural Areas Preserves websites (DNR 2025)	
Frequently Flooded Areas (CCC 19.15.140, and Chapter 16.25)	All lands identified in the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), as amended, and approved by the County as within the 100-year floodplain are designated as frequently flooded areas (CCC 19.15.140). Since the Columbia River is classified as a Type S water, the Shoreline Management Act applies (RCW 90.58). FEMA regulates the 100-year floodplain along the Columbia River.	<ul style="list-style-type: none"> FEMA National Flood Hazard Layer (NFHL) (FEMA 2015) 	The Project would not occur within the floodplain as shown in Figures 2 and 3. Frequently flooded areas do not occur within the Project area and are not discussed further.
Geologically Hazardous Areas (CCC 19.15.150)	Geologically hazardous areas include areas susceptible to erosion, sliding, earthquakes, or other geological events. Geological hazards pose a threat to people's health and safety when incompatible development is sited in areas of significant hazard. Geologic hazard areas include: <ul style="list-style-type: none"> Seismic hazards; Mine hazards; Volcanic hazards; Erosion hazards; and Landslide hazards. 	<ul style="list-style-type: none"> Seismic Risk Map of the United States adopted by the Washington State Legislature and defined in the International Residential Code (IRC) Cowlitz County-adapted map of the Mount St. Helens Flowage-Hazard Zones Map U.S Department of Agriculture (USDA)- Natural Resources Conservation Service (NRCS) Web Soil Survey Geologic Hazard Map of Cowlitz County Washington DNR Geologic Hazards Maps 	<p>Review of pertinent resources indicates that the Project does or may occur within a Geologically Hazardous Area. Section 2.2 includes discussion regarding presence or absence, potential impacts, and applicable development standards for these geological hazardous areas.</p> <p>The proposed Project site does not include Landslide Hazards⁴, Mine Hazards, and/or Volcanic Hazards. These critical areas are not present, would not be impacted as a result of the proposed Project, and are not discussed further.</p>
Critical Aquifer Recharge Areas (CCC 19.15.160)	Critical Aquifer Recharge Areas (CARAs) are those areas with a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2). CARAs have prevailing geologic conditions that create potential for contamination of groundwater resources.	<ul style="list-style-type: none"> Cowlitz County EPIC database 	Review of the Cowlitz County Online Planning Clearance (EPIC) database indicates that the proposed Project would not occur within CARA. These critical areas are not present, would not be impacted as a result of the proposed Project, and are not discussed further.

⁴ Review of the Cowlitz County EPIC database indicates that the Project site within the County includes slopes up to 30 percent which are areas included in the landslide hazard areas as defined in KMC 15.02.150.D.1. The areas identified are along the Columbia River shoreline which is riprap reinforced and engineered to prevent erosion and slope failure. These areas are not susceptible to landslide hazards.



2.1. Fish and Habitat Conservation Areas

Fish and wildlife habitat conservation areas perform many important physical and biological functions. They may include but are not limited to providing opportunities for food, cover, nesting, breeding, and movement for fish and wildlife; maintaining and promoting diversity of species and habitat; helping to maintain air and water quality; and controlling erosion. Fish and wildlife habitat conservation areas are also areas for recreation, education, and scientific study, and aesthetic appreciation, and in addition provide neighborhood separation and visual diversity within urban areas, sustain ESA-listed species, and support recreational and commercial fisheries.

This section includes discussion FWHCA mapped as having the potential to occur within or near the Project site and applicable development standards for these critical areas.

2.1.1. Federal and State Designated Endangered, Threatened, or Sensitive Species

Areas that are primarily associated with state or federally designated endangered, threatened, candidate, or sensitive species are considered critical, as significant alteration may reduce the species' potential for long-term reproduction. The following sections provide a review of the potential for federally and state threatened, endangered, and priority species to occur within the Project area.

2.1.1.1. Federally Protected Species

Information for an evaluation of ESA-listed species was obtained from the USFWS Information for Planning and Consultation (IPaC) website (USFWS 2025) and the NMFS West Coast Region protected species website and Protected Resources App database (NMFS 2025a and NMFS 2025b) on 29 September 2025. Additional information came from WDFW's database, SalmonScape (WDFW 2022a). Table 2 identifies the species listed under the ESA that do or may occur in the vicinity of the Project area based on review of these databases. It should be noted that Table 2 also identifies whether critical habitat has been designated for each of the species evaluated; however, the Project site is not a designated or proposed critical habitat for any listed species.

TABLE 2. SPECIES LISTED OR PROPOSED FOR LISTING UNDER THE ESA THAT DO OR MAY OCCUR IN THE PROJECT AREA

Common Name	Scientific Name	ESU/DPS*	ESA Listing Status	Critical Habitat
NMFS				
Chinook Salmon	<i>Oncorhynchus tshawytscha</i>	Lower Columbia River (LCR) ESU	Threatened	Designated
		Snake River (SR) fall-run ESU	Threatened	
		SR spring/summer-run ESU	Threatened	
		Upper Columbia River (UCR) spring-run ESU	Endangered	
		Upper Willamette River (UWR) ESU	Threatened	
Chum Salmon	<i>O. keta</i>	Columbia River (CR) ESU	Threatened	Designated
Coho Salmon	<i>O. kisutch</i>	LCR ESU	Threatened	Designated
Sockeye Salmon	<i>O. nerka</i>	SR ESU	Endangered	Designated
Steelhead	<i>O. Mykiss</i>	LCR DPS	Threatened	Designated
		Middle Columbia River (MCR) DPS		
		Snake River Basin DPS		
		UCR DPS		
		UWR DPS		
North American Green Sturgeon	<i>Acipenser medirostris</i>	Southern DPS	Threatened	Designated
Pacific Eulachon	<i>Thaleichthys pacificus</i>	Southern DPS	Threatened	Designated



Common Name	Scientific Name	ESU/DPS*	ESA Listing Status	Critical Habitat
USFWS				
Bull Trout	<i>Coccyzus americanus</i>	N/A	Threatened	Designated
Northwestern Pond Turtle	<i>Salvelinus confluentus</i>	N/A	Proposed Threatened	Not Designated
Monarch Butterfly	<i>Danaus plexippus</i>	N/A	Threatened	Designated
Suckley's Cuckoo Bumble Bee	<i>Bombus suckleyi</i>	N/A	Proposed Threatened	Proposed
Yellow-billed Cuckoo	<i>Actinemys marmorata</i>	Western DPS	Threatened	Designated
Streaked Horned Lark	<i>Eremophila alpestris strigata</i>	N/A	Threatened	Designated
Columbia White Tailed Deer	<i>Odocoileus virginianus leucurus</i>	Columbia River DPS	Threatened	Not Designated

DPS = Distinct Population Segment
ESU = Evolutionary Segment Unit

Moffatt & Nichol completed an evaluation of ESA-listed species that do or may occur in the vicinity of the Project area and potential impacts to ESA-listed species as a result of the proposed Project (*Endangered Species Act – No Effect Letter for the Port of Kalama Rail Expansion Project* M&N 2025). The evaluation concluded that the proposed Project would have no effect on ESA-listed species or critical habitat. The following sections provide a summary of the rationale for this finding for each species.

ESA-Listed Fish Species

The Columbia River is situated adjacent to the Project site to the west, and various Project elements would occur within 200 feet of the river. The Columbia River is known to support the following species:

- Chinook salmon (*Oncorhynchus tshawytscha*),
- Chum salmon (*O. keta*),
- Coho salmon (*O. kisutch*),
- Sockeye salmon (*O. nerka*),
- Steelhead (*O. Mykiss*),
- North American green sturgeon (*Acipenser medirostris*),
- Pacific eulachon (*Thaleichthys pacificus*), and
- Bull Trout (*Salvelinus confluentus*).

The Project does not include in-water or over-water work, and there are no discharges (e.g., stormwater) proposed as part of the Project. All proposed Project elements would occur shoreward of the OHWM. Best Management Practices (BMPs) will be implemented to reduce the potential for inadvertent impacts to waterways including but not limited to temporary erosion and sediment control. The proposed Project will have **No Effect** on the Columbia River, the ESA-listed fish species it supports, or designated critical habitat for those species.

Streaked Horned Lark

Nesting habitat for the streaked horned lark along the Willamette and Columbia Rivers was historically found on sandy beaches and spits (USFWS 2021). Streaked horned larks currently nest in a broad range of habitats, including native prairies, coastal dunes, fallow and active agricultural fields, wetland mudflats, sparsely vegetated edges of grass fields, recently planted Christmas tree farms with extensive bare ground, moderately to heavily grazed pastures, gravel roads or gravel shoulders of lightly traveled roads, airports, and dredge deposition sites, particularly islands in the LCR (USFWS 2021). Wintering streaked horned larks use habitats that are very similar to breeding habitats. Habitats on the Columbia River used



by larks are typically adjacent to and in view of open water, which provides the open landscape context this species needs.

The Project site includes the Port's Southport upland dredged material placement site and active sand removal site. In response to a 2013 Port Maintenance Dredging Biological Evaluation, USFWS required streaked horned lark dredge placement site monitoring and active management to ensure that the site did not develop into lark habitat.

Other portions of the Project site within the County include industrial properties that do not provide any suitable habitat for this species.

The Port's Southport upland dredged material placement site and former Chemtrade site have been evaluated for potential habitat for streaked horned lark (Ecological Land Services 2025). The evaluation includes the following:

- The Chemtrade site has greater than 90 percent cover of vegetation (approximately 50 percent consisting of moss) which is not preferred vegetation for larks.
- Five streaked horned lark occupancy surveys were conducted throughout the 2024 breeding season using WDFW's *Survey Protocols and Strategies for Assessing Streaked Horned Lark Site Occupancy Status, Population Abundance, and Trends* (Pearson et. al. 2016). There were no detections of streaked horned larks during the surveys.
- Streaked horned larks have not been observed nesting or using either the Southport or the former Chemtrade site, and neither site has the preferred habitat used by streaked horned larks based on existing vegetation and protocol surveys.

It is possible that streaked horned larks could occur within the vicinity, but it is unlikely that this species will use these sites for nesting or rearing activities. Any larks in the vicinity are likely only present temporarily for foraging activities, if they are present at all.

Yellow-Billed Cuckoo

The yellow-billed cuckoo (*Coccyzus americanus*) was designated threatened under the ESA in November 2014 (USFWS 2014), with critical habitat proposed 15 August 2014 (USFWS 2014). Just 20 sightings of yellow-billed cuckoos have been documented in Washington since the 1950s, with 19 occurring from 1974 to 2016 at an average rate of one sighting every 2.3 years. Sixteen of the 20 records occurred in eastern Washington. All or nearly all of the birds recorded since the 1950s were very likely non-breeding vagrants or migrants, indicating that cuckoos are now functionally extirpated in the state (WDFW 2022b).

Columbian White-Tailed Deer

The Columbian white-tailed deer is the western-most subspecies of white-tailed deer that occur throughout North America, with historic populations abundant throughout their range from Puget Sound south to the Umpqua River basin. However, the species became endangered throughout its historic range because of farming and logging practices, residential and commercial development, and other habitat modification, as well as over hunting and poaching activities. Habitat conversion and development within riparian areas has limited opportunities for population expansion of this species.

Historical habitat preference of this species included upland prairie edge and deciduous woodland habitat types below the Douglas-fir (*Pseudotsuga menziesii*) zone. Previous and current land use practices have resulted in habitat loss within these environments. Columbia white-tail deer currently inhabits fragmented and suboptimal pockets of lowland and floodplain habitat that is wetter and more flood-prone (WDFW 2022c) than their historical habitat. Deer found on islands in the Columbia River use habitats characterized by densely forested swamps, with tall shrubs and spruce, alder, cottonwood, and willow trees.



Most deer within the Columbia River population are included in one of four subpopulations (Washington mainland, Tenasillahe Island, Puget Island, and the Oregon lowlands). The subpopulations on the Washington mainland and Tenasillahe Island occur within the Julia Butler Hansen National Wildlife Refuge (at approximately RM 35.5). In early 2013 the USFWS began a program to translocate Columbian white-tailed deer from the refuge to other potentially suitable habitats on the lower river, including to Cottonwood Island (near RM 72) and the Ridgefield National Wildlife Refuge (RMs 88 to 91.5, approximately).

In 2010, the Cowlitz Indian Tribe moved 15 deer to Cottonwood Island, an area also listed in the Recovery Plan as a potential relocation site (Cowlitz Tribe of Indians 2010 as cited in WDFW 2013). During this effort the Tribe translocated 15 deer in 2010, while the USFWS subsequently translocated 12 deer in 2013. The WDFW 2023 Periodic Status review for this species estimated that the current total numbers for the Columbia River population were estimated at roughly 1,296 deer with 28 deer in the areas in and surrounding Cottonwood Island last counted in 2021 (WDFW 2023).

The Project site is located approximately 5 miles south of Cottonwood Island. It is possible that the Columbia white-tailed deer could occasionally pass through the Project area; however, they would not be anticipated to occur within the immediate vicinity of the Project activities because of the industrial nature of the Project Area, the Project area is fenced and will remain fenced during operations, there is a lack of suitable wildlife corridor to the site, and there is a lack of foraging habitat.

North American Wolverine

North American wolverines occur in the Cascades Mountains and northeastern Washington (WDFW 2024a). Wolverines reside in alpine and subalpine forests in Washington State (WDFW 2024a). Wolverines are also known to occur in taiga, boreal forest, and tundra ecosystems (WDFW 2024a). The Project site does not include any appropriate or suitable habitat for this species, and it is extremely unlikely that they would occur within the Project area.

Monarch Butterfly

Monarch butterfly (*danaus plexippus*) utilizes a variety of habitat throughout North America during migration and overwintering. Since monarchs cannot survive through cold winters, populations west of the Rocky Mountains migrate south in the fall to the California coast to roost in high elevation trees facing south (MonarchWatch 2025). In the spring and summer, monarchs emerge from overwintering sites and slowly move north, laying eggs on their obligate host plant milkweed (MonarchWatch 2025). Suitable habitat includes native milkweed for laying eggs, roosting tree species for overwintering, and other native nectar producing plant species for fuel during migration (USFWS 2020).

The Project site is located in the northern corner of monarch's migration path. The northern corner of the migration path is used by monarchs in the late spring and summer to lay eggs on milkweed (which does not occur within the Project area). The Project site does not provide suitable habitat to support this species.

Suckley's Cuckoo Bumble Bee

Suckley cuckoo bumble bees are considered parasite bumble bees because they are unable to produce a worker caste or collect wax for nest construction, so they take over existing nests and subdue the queen and the other worker bees (Washington Department of Fish and Wildlife [WDFW] 2025). Host nests that Suckley's cuckoo bumble bees often take over include western bumble bees on the west coast of North America (Canada 2019). Suckley's cuckoo bumble bees utilize below ground nests in stumps, logs, and abandoned rodent nests (WDFW 2025). Suckley's cuckoo bumble bees are general nectar foragers, and they do not collect pollen for their nests. Overwinter habitat is less known but is most likely in mulch, logs, or compost near the previous season's nest and only done by a mating female (Canada 2019).



The Petition to List Suckley's Cuckoo Bumble Bee (*Bombus suckleyi*) Under the Endangered Species Act and Concurrently Designate Critical Habitat indicates that there were zero verified observations of this species in Washington between 2002 and 2019 despite this significant survey effort throughout the core of its historic range (Center for Biological Diversity 2020)

The Project will occur in an area that does not represent suitable habitat for this species (industrial in nature), and the Project has been designed to avoid and minimize impacts to natural areas of the shoreline to the maximum extent feasible. The Project will not adversely affect vegetated areas suitable for nesting, collecting pollen, or overwintering.

Northwestern Pond Turtle

The northwestern pond turtles' range runs from the Canadian border to central California. They are considered semi-aquatic meaning that they utilize both aquatic and terrestrial habitats that are close to each other (typically less than 500 meters) (USFWS 2023). Northwestern pond turtle aquatic habitat is broad and can range from flowing rivers to tidally influenced wetlands. Terrestrial habitat is used for basking (normally near aquatic habitat) and nesting and overwintering which can occur further from a water source. Nesting sites are typically sloped, and sparsely vegetated and overwintering sites are more often vegetated for protection. Nesting sites require soils that are loose enough for excavation but include silt and clay to allow chamber stability (USFWS 2023).

Northwestern pond turtles could occur within the Columbia River and bask along the shoreline but are not expected to occur within the footprint of the Project site which includes upland areas above the OHWM and in previously developed areas to the maximum extent feasible. Soil within the Project site consists of sandy, unconsolidated sand and previously placed dredged material, which is not suitable for nesting. Additionally, the shoreline is steep and unlikely to be suitable for northwestern pond turtles to climb up to access upland areas for nesting or overwintering.

2.1.2. Waters of the State

The Columbia River is a Type S "shoreline of the state" as defined pursuant to Chapter 90.58 RCW. The proposed Project activities will occur upland from the Columbia River, and no impacts to the Columbia River are proposed; however, the County SMP includes provision for the protection of riparian habitat areas adjacent to the shoreline.

CCC 19.15.130.E.3 states that "Riparian Habitat Areas (RHAs) shall be established for habitats that include aquatic and terrestrial ecosystems that mutually benefit each other and that are located adjacent to waters of the state. Unless otherwise allowed in this title, all structures and activities shall be located outside of the RHAs. RHA widths shall be measured outward in each direction, on the horizontal plane, from the ordinary high-water mark, or from the top of bank, if the ordinary high-water mark cannot be identified."

The water-related Project is located within the high-intensity shoreline environmental designation, and a 50-foot shoreline buffer/RHA is required (Shoreline Master Program (SMP) Chapter 7.1, Table 7-2).

Proposed Project activities would not occur within the 50-foot RHA (see Figure 5); however, this section has been developed to meet the requirements of a Level 1 Critical Areas Assessment because the Project is within close proximity to the RHA boundary.

A Level 1 critical areas habitat assessment is required, and no development activities shall occur within the inner 50 percent of the standard RHA width.

CCC 19.15.130.C.3 indicates that a Level 1 critical areas assessment is to include the following:

- a. *Detailed description of vegetation on and adjacent to the project area and its associated buffer;*



Response: See Section 2 of the Shoreline Narrative.

- b. Identification of any priority species, or endangered, threatened, sensitive, or candidate species that have a primary association with habitat on or adjacent to the project area;*

Response: See Section 2.1.1 above.

- c. A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality or to the use of the site by species identified in subsection (C)(3)(b) of this section if any;*

Response: Direct impacts to the RHA would be limited to removal of existing vegetation and development of the rail expansion and recreational/public access improvements. The Project site is situated within an existing industrial site that does not include suitable habitat for protected species.

- d. A discussion of measures, including avoidance or minimization, proposed to preserve existing habitats;*

Response: BMPs and AMMs are discussed in Section 3.3 of the Shoreline Narrative.

- e. A discussion of how the development activities proposal meets development standards for the specific habitats; and*

Response: CCC 19.15.130.E.3 established development standards for riparian habitat areas. The Project will be completed in compliance with the provisions of this section including adherence to RHA widths and use requirements, as well as habitat assessment requirements as documented in this evaluation. The proposed Project is not anticipated to have an adverse impact on RHA because development would occur within an industrial, previously developed site and is not anticipated to result in net loss of ecological functions.

- f. If required, a mitigation plan in conformance with CCC [19.15.170\(C\)](#).*

Response: The Project will include a planting plan that will establish native vegetative species adjacent to the development and improve native species diversity and complexity which is anticipated to offset impacts for minor vegetation removal for Project development. The planting plan includes a variety of native deciduous and evergreen trees, shrubs, and ground cover species that will re-establish vegetation along the shoreline and compensate for removal of vegetation to accommodate construction. Invasive species in the Project area would be removed.

- g. Demonstration that the proposed development activities will not:

 - i. Reduce stream or habitat functions, including those of nonfish habitat;*
 - ii. Degrade the habitat, including habitat for anadromous fish within the inner zone of the riparian habitat area (RHA); and*
 - iii. Be located within another critical area or associated buffer.**

Response: The proposed Project would not result in impacts to stream or habitat functions because the proposed Project is located within a previously developed industrial site and will not result in the loss of stream or habitat functions, degrade habitat for anadromous fish within the inner zone of the RHA, or be located within another critical habitat or associated buffer.

- h. The Director as warranted may require additional studies.*

Response: A directive to the County. Additional studies will be submitted upon request.



2.2. Geologically Hazardous Areas

Geologically hazardous areas are those areas susceptible to erosion, sliding, earthquake, or other geological events that pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard.

CCC 19.15.150.C (Development Standards) establishes general requirements for all geologically hazardous areas as follows:

1. *Alterations of geologically hazardous areas or associated buffers may only occur for activities that:*
 - a. *Will not increase the threat of the geological hazard to adjacent properties beyond predevelopment conditions.*

Response: Project elements will be constructed consistent with established building codes and criteria and will not result in changes of geological hazard threats near or within the site.

- b. *Will not adversely impact other critical areas.*

Response: The proposed Project will not adversely affect critical areas within the County as documented in this memorandum.

- c. *Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than predevelopment conditions; and*

Response: The Project has been designed to eliminate or mitigate all potential hazards to the Project.

- d. *Are recommended by a qualified professional in a signed and stamped geologic hazards assessment or geotechnical engineering report, whichever is required by this chapter.*

Response: A Report of Geotechnical Engineering Services has been completed for this Project, and design and construction recommendations have been incorporated into the Project design.

- e. *Critical Facilities Prohibited. Critical facilities shall not be sited within geologically hazardous areas unless there is no other practical alternative.*

Response: Critical facilities "include, but are not limited to, schools; nursing homes; hospitals; police, fire, and emergency response installations; and installations that produce, use, or store hazardous materials or hazardous waste" (CCC 19.15.050). No critical facilities occur in the Project area.

- f. *Utilities Transmission Facilities. Utility facilities which carry liquid petroleum products, or any other hazardous substances as defined in Chapter 173-303 WAC may be permitted within geologically hazardous areas only when demonstrated by a qualified professional that the design and location of the proposed facility will not cause adverse impacts.*

Response: Not applicable. The proposed Project does not include development of utility facilities which carry liquid petroleum products or any other hazardous substances.

Review of pertinent resources indicates that seismic hazards and erosion hazard areas are or may be present within the Project site. The presence or absence of these hazards and applicable development standards are discussed in the following sections.

2.2.1. Seismic Hazards

CCC 19.15.150.D.1 states:



- a. For the purposes of this classification, a seismic hazard area is any area subject to:
 - i. Underlying deposits indicative of a risk of liquefaction during a seismic event;
 - ii. Areas subject to slope failure, including lateral spreading, during a seismic event;
 - iii. Areas subject to surface faulting during a seismic event;
 - iv. Areas that are at risk of mass wasting due to seismic forces.
- b. Seismic hazard areas are indicated by:
 - i. A Zone D1 or higher rating as defined by the Seismic Risk Map of the United States adopted by the Washington State Legislature and defined in the International Residential Code (IRC).
 - ii. Areas with Site Class D, D to E, E, and F as defined by the Site Class Map of Cowlitz County, by Washington State Department of Natural Resources or the International Building Code (IBC).

Review of the U.S. Seismic Zones map indicates that the Project site is located within Zone 3. Review of the Washington DNR Geologic Information Portal indicates that the Project site is mapped as having a moderate to high liquefaction susceptibility and a National Earthquake Hazards Reduction Program Seismic Site Class D to E.

CCC 19.15.150.D.2 (Development Standards) states all development within areas that meet the designation for seismic hazard areas must comply with the adopted IBC or IRC. No critical area assessment is required.

The proposed Project has been designed to meet provisions of the IBC where applicable. The IRC is specific to residential development and is not applicable. Additionally, the Project has been designed consistent with the American Railway Engineering and Maintenance-of-Way Association (AREMA) Manual for Railway Engineering. The Project has been designed and will be developed consistent with the design standards for development within seismic hazard areas.

As provided in the exemptions and development standards of CCC 19.150, no critical areas assessment of seismic hazard areas is required, and they are not addressed further in this report.

2.2.2. Erosion Hazard

Erosion hazard areas are those areas identified by USDA-NRCS as having a “severe” or “very severe” erosion hazard. They are also the areas impacted by shoreland and/or streambank erosion and areas within a stream’s channel migration zone (CCC 19.15.150.G).

According to the USDA-NRCS Web Soil Survey, the soils at the Project site are classified as greenwater gravelly loamy sand with 0 to 8 percent slopes, Schneider-Rock outcrop complex with 15 to 65 percent slopes, and sauvoia loam with 8 to 15 percent slopes. Review of the Cowlitz County EPIC database indicates that there are potentially erosive soils located within the former Chemtrade site. CCC 19.15.150.G.2 identifies development standards within Erosion Hazard Areas. The development standards include limiting the modification of topography and vegetation, development of an erosion control plan, seasonal restrictions, and development of a drainage plan.

The proposed Project would be developed consistent with the development standards for Erosion Hazard Areas because 1) the Project would not substantially modify topography, and existing vegetation within the Project area is extremely limited; 2) a temporary erosion and sediment control plan will be developed and implemented during construction to prevent erosion; 3) the Project will be completed during the dry season to the extent feasible, with the temporary erosion and sediment control plan to include BMPs



specific to rainy season construction if work outside of the dry season is required; and 4) the Project includes stormwater/drainage management for the completed Project that will include low-impact development and infiltration, and the Project does not include collection or discharge of stormwater that could result in erosion.

2.3. Mitigation Sequencing

CCC 19.15.170.C requires that applicants demonstrate that all reasonable efforts have been made to avoid and minimize impacts to critical areas and to demonstrate that mitigation sequencing has been completed in the following order of preference:

1. Avoiding the impact altogether by not taking a certain action or part of an action;
2. Minimizing the impact by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as Project redesign, relocation, or timing, to avoid or reduce impacts;
3. Rectifying the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, riparian habitat, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the historical conditions or the conditions existing at the time of the initiation of the Project;
4. Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods;
5. Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;
6. Compensating for the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, riparian habitat, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and
7. Monitoring the hazard or other required mitigation and taking remedial action when necessary.

The Project has been designed to avoid and minimize impacts to sensitive resources to the maximum extent feasible. The Project will occur landward of the OHWM, outside of the floodplain, outside of riparian habitat areas, and within existing developed areas to the maximum extent feasible. Vegetation removal will be limited to understory vegetation to the maximum extent feasible. A planting plan has been incorporated into Project design and is anticipated to improve native species diversity and complexity within developed areas and along the shoreline. The planting plan includes a variety of native deciduous and evergreen trees, shrubs, grasses, and ground cover species that will be planted to offset impacts related to removal of existing vegetation. Low-impact development stormwater infrastructure (bio retention cells) will also be planted with native hydrophilic emergent species including sedges and rushes for stormwater management. BMPs, including erosion and sediment control, will also be implemented during construction to minimize the potential for inadvertent adverse impacts.

The Project is consistent with mitigation sequencing provisions of the code because 1) impact avoidance was incorporated into design (e.g., all Project elements were located above OHWM and outside of the floodplain); 2) impacts would be minimized to the maximum extent feasible through design and implementation of BMPs; 3) the proposed planting plan would rectify minor impacts to vegetation and is anticipated to improve species diversity and habitat availability; 4) the potential for hazards related to erosion would be reduced or eliminated through soil stabilization and vegetation establishment; and 5) vegetation planted to offset minor impacts resulting from vegetation removal to accommodate construction would be maintained by the Port for health and survival until plants become fully established.



A compensatory mitigation plan is not proposed because mitigation sequencing priorities 1 through 5 will be met and the proposed Project will not result in a net loss of shoreline ecological functions and values without the need for compensatory mitigation.

3. NO NET LOSS

This assessment verifies that the proposed Project has been designed to comply with the prevailing intent of the SMP and Section 19.15 of the County code. The Project will not result in a net loss of ecological functions and values because it been designed to avoid and minimize impacts to the maximum extent feasible; avoidance and minimization measures and BMPs will be implemented during Project construction to avoid the potential for inadvertent adverse impacts; the Project will be designed and constructed consistent with applicable development standards for critical areas; and the Project's planting plan will rectify impacts resulting from minor vegetation removal.



4. BIBLIOGRAPHY

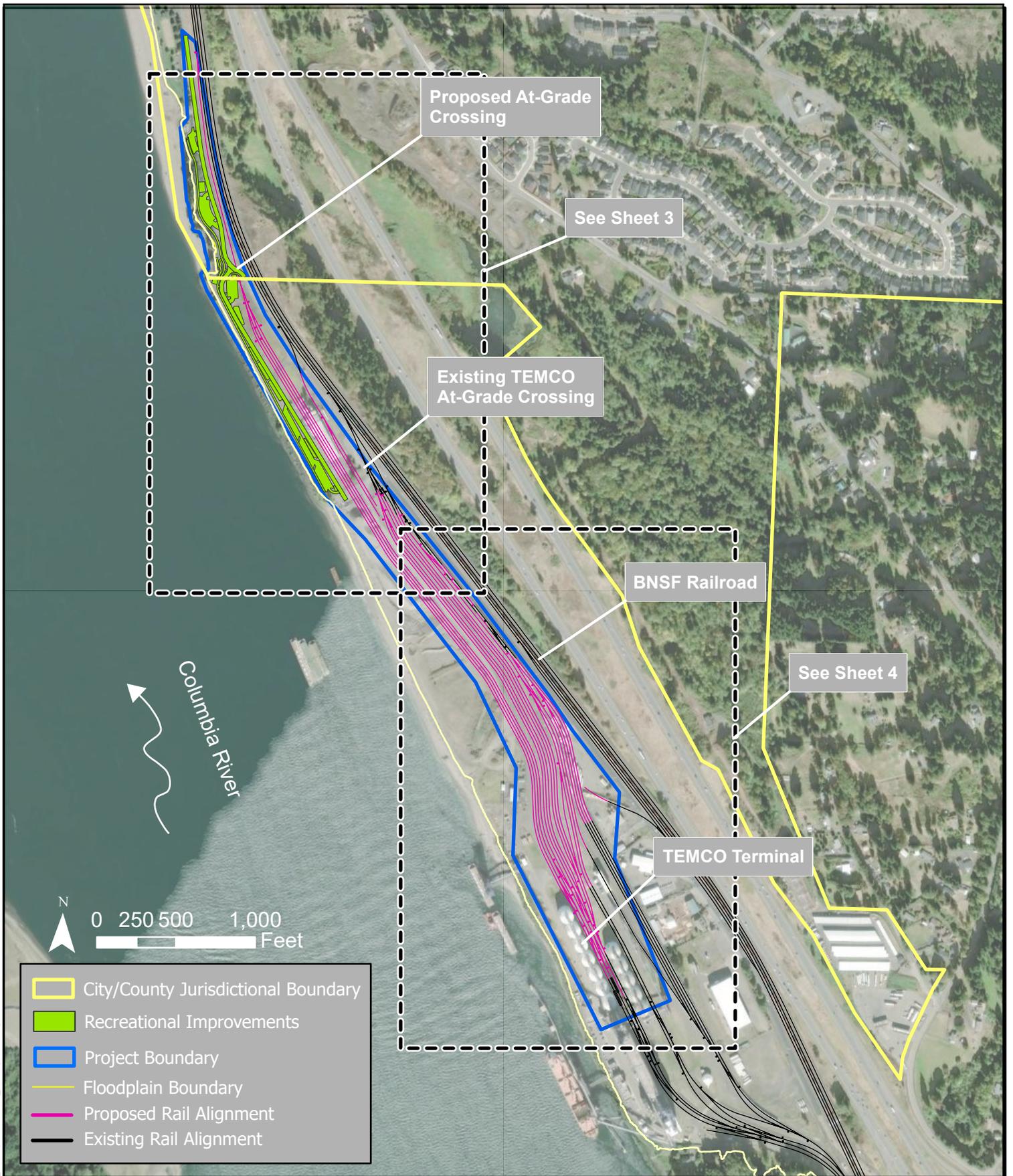
- Canada.ca. 2019. Suckley's Cuckoo Bumble Bee (*Bombus suckleyi*): COSEWIC Assessment and Status Report 2019.
- Center for Biological Diversity. 2020. Petition to List Suckley's Cuckoo Bumble Bee (*Bombus suckleyi*) Under the Endangered Species Act and Concurrently Designate Critical Habitat. 23 April 2020.
- Cowlitz Tribe of Indians. 2010. Columbian White-tailed deer summary report. 7 pp.
- Ecological Land Services. 2025. Memorandum: Streaked horned lark potential habitat discussion for properties at the Port of Kalama, Kalama, Washington. April 2025.
- Federal Emergency Management Administration (FEMA). 2015. National Flood Hazard Layer database. accessed on July 31, 2025 at <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>.
- Knutson, K. L., and V. L. Naef. 1997. Management recommendations for Washington's priority habitats: riparian. Washington Department of Fish and Wildlife, Olympia. 181 pp.
- National Marine Fisheries Service (NMFS). 2025a. Fisheries West Coast Region website at: https://www.fisheries.noaa.gov/species-directory/threatenedendangered?title=&species_category=any&species_status=any®ions=1000001126&items_per_page=25&sort=.
- . 2025b. Protected Resources App. Accessed at <https://www.fisheries.noaa.gov/resource/map/protected-resources-app>.
- Oregon Department of Fish and Wildlife (ODFW). 2024. Provolt Pond Turtle Project.
- Pearson, S. F., M. Linders, I. Keren, H. Anderson, R. Moore, G. Slater, and A. Kreager. 2016. Survey protocols and strategies for assessing streaked horned lark site occupancy status, population abundance, and trends. Wildlife Science Division, Washington Department of Fish and Wildlife, Olympia, Washington.
- U.S. Fish and Wildlife Service (USFWS). 2025a. National Wetlands Inventory (NWI) Wetlands Mapper; accessed on July 31, 2025, at <https://www.fws.gov/wetlands/data/mapper.html>.
- . 2025b. Information for Planning and Consultation (IPaC) database. Accessed at <https://ecos.fws.gov/ipac/location/index>.
- . 2021. Species Status Assessment for the Streaked Horned Lark. Version 1.0.
- . 2014. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Western Distinct Population Segment of the Yellow-billed Cuckoo (*Coccyzus americanus*).
- . 2013. Endangered and Threatened Wildlife and Plants: Designation of Critical Habitat for Taylor's Checkerspot Butterfly and Streaked Horned Lark. Final Rule. October 3, 2103. Fed. Reg. 2013-23552.
- . 2012. Endangered and Threatened Wildlife and Plants; Listing Taylor's Checkerspot Butterfly and Streaked Horned Lark and Designation of Critical Habitat: Proposed Rule. Federal Register/Vol. 77, No. 197 (Thursday, October 11, 2012): 61938-62058.
- . 1983. Revised Columbian white-tailed deer recovery plan. U.S. Fish and Wildlife Service, Portland, Oregon. 86 pp.



- Washington Department of Fish and Wildlife (WDFW). 2025. Suckley's cuckoo bumble bee (*Bombus suckleyi*).
- . 2024a. Wolverine (*Gulo gulo luscus*).
- . 2024. Northwestern Pond Turtle (*Actinemys marmorata*).
- . 2023. Periodic Status Review for the Columbian White-tailed Deer.
- . 2022a. Species in Washington – Columbia White Tail Deer. Accessed at <https://wdfw.wa.gov/species-habitats/species/odocoileus-virginianus-leucurus>.
- . 2022b. Priority Habitat and Species – PHS on the Web database; accessed on July 31, 2025, at <https://geodataservices.wdfw.wa.gov/hp/phs/>.
- . 2022c. SalmonScape; accessed on July 31, 2025, at <https://apps.wdfw.wa.gov/salmonscape/map.html>.
- . 2013. Threatened and Endangered Wildlife in Washington: 2012 Annual Report. Listing and Recovery Section, Wildlife Program, Washington Department of Fish and Wildlife, Olympia. 251 pp.
- Washington Department of Transportation (WSDOT). 2025. Fish Passage maps & data. Accessed on July 31, 2025.
- Washington State Department of Natural Resources (DNR). 2025. Natural Resources Conservation Areas and State Natural Areas.



Q:\SEA\1222897-03121_GIS\mips\POK_RailExpansion\POK_RailExpansion.aprx



GENERAL LOCATION: Port of Kalama

PORT OF KALAMA RAIL EXPANSION PROJECT

RAIL EXPANSION OVERVIEW

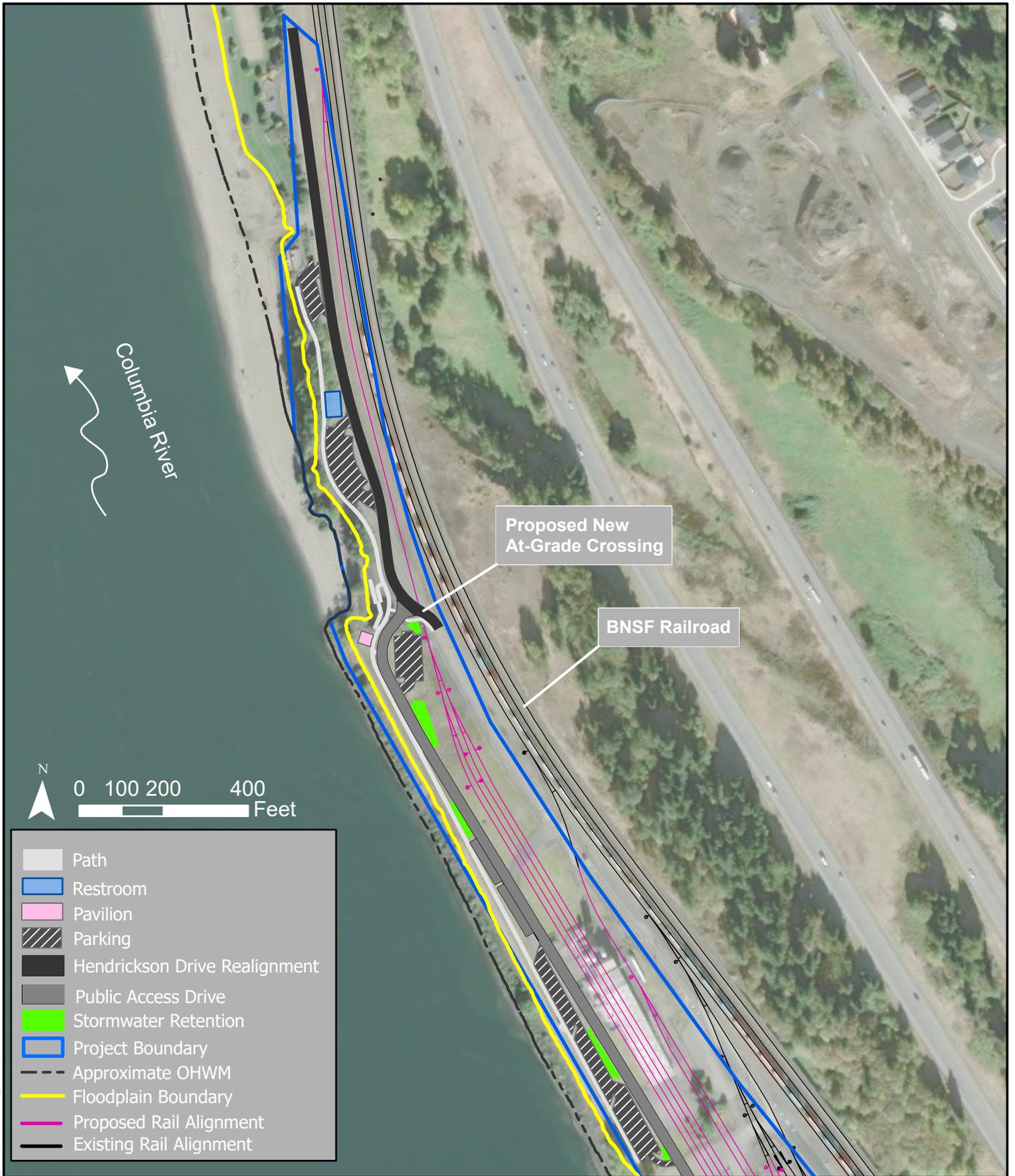
CITY: KALAMA

COUNTY: COWLITZ

STATE: WA

FIGURE 2 OF 6

DATE: 12/01/2025



- Path
- Restroom
- Pavilion
- Parking
- Hendrickson Drive Realignment
- Public Access Drive
- Stormwater Retention
- Project Boundary
- Approximate OHWM
- Floodplain Boundary
- Proposed Rail Alignment
- Existing Rail Alignment

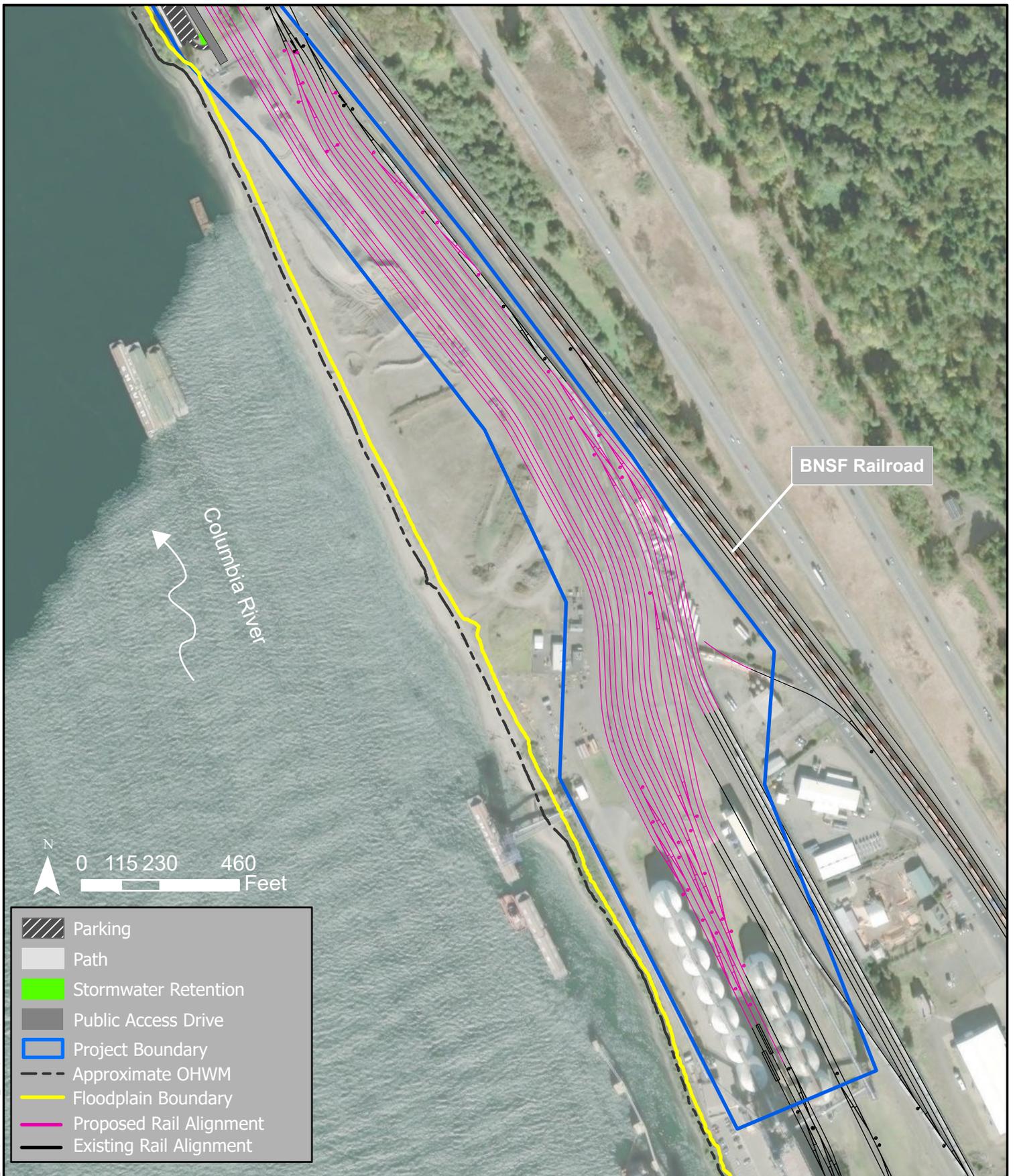
GENERAL LOCATION: Port of Kalama

**PORT OF KALAMA
RAIL EXPANSION PROJECT**

RAIL EXPANSION OVERVIEW

CITY: KALAMA
COUNTY: COWLITZ **STATE:** WA
FIGURE 3 OF 6 **DATE:** 12/02/2025

Q:\SEA\1222897-03121_GIS\mxd\POK_RailExpansion\POK_RailExpansion.aprx



GENERAL LOCATION: Port of Kalama

PORT OF KALAMA RAIL EXPANSION PROJECT

RAIL EXPANSION OVERVIEW

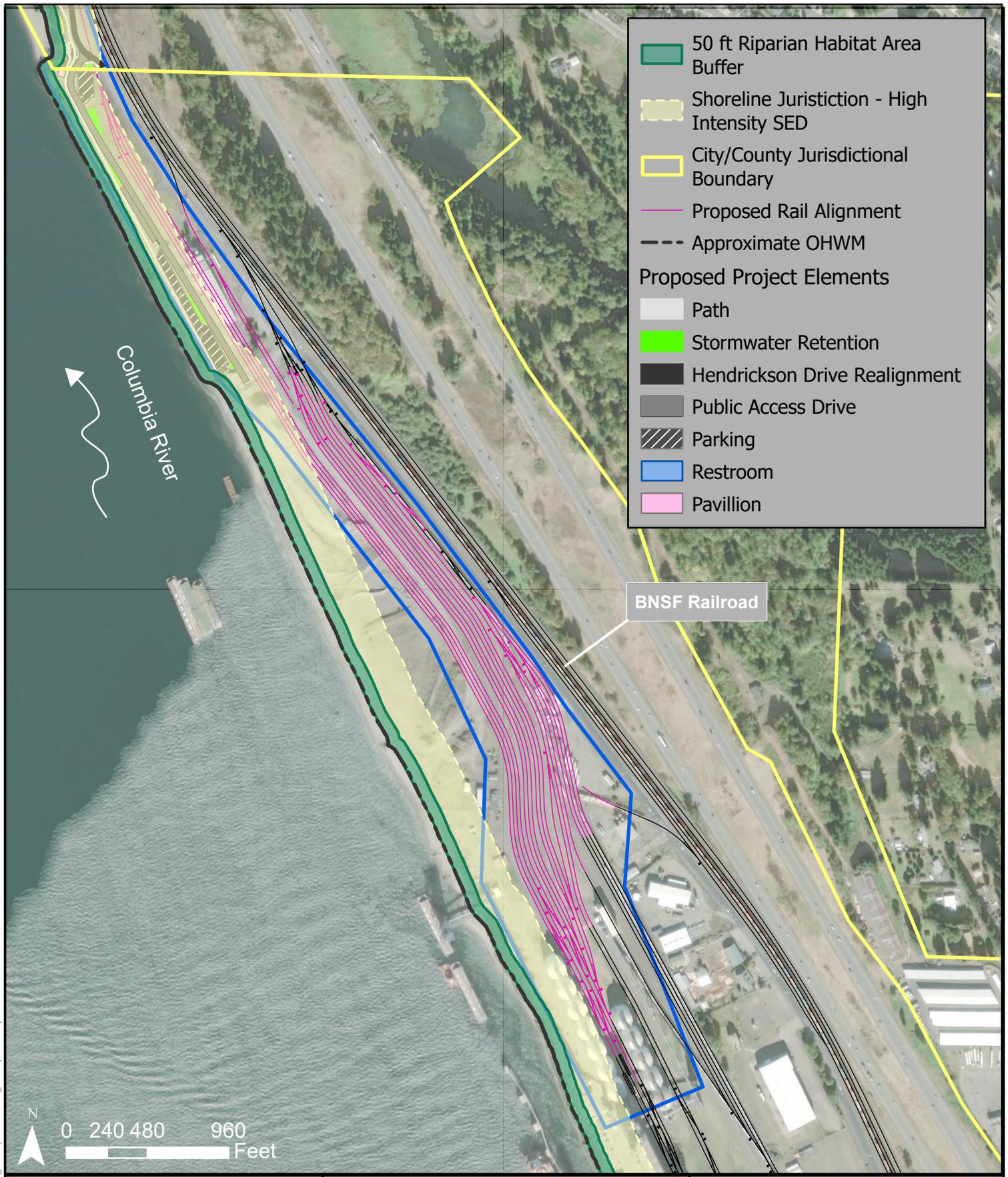
CITY: KALAMA

COUNTY: COWLITZ

STATE: WA

FIGURE 4 OF 6

DATE: 12/01/2025



GENERAL LOCATION: Port of Kalama

**PORT OF KALAMA
RAIL EXPANSION PROJECT**

**COWLITZ COUNTY SHORELINE
BUFFERS**

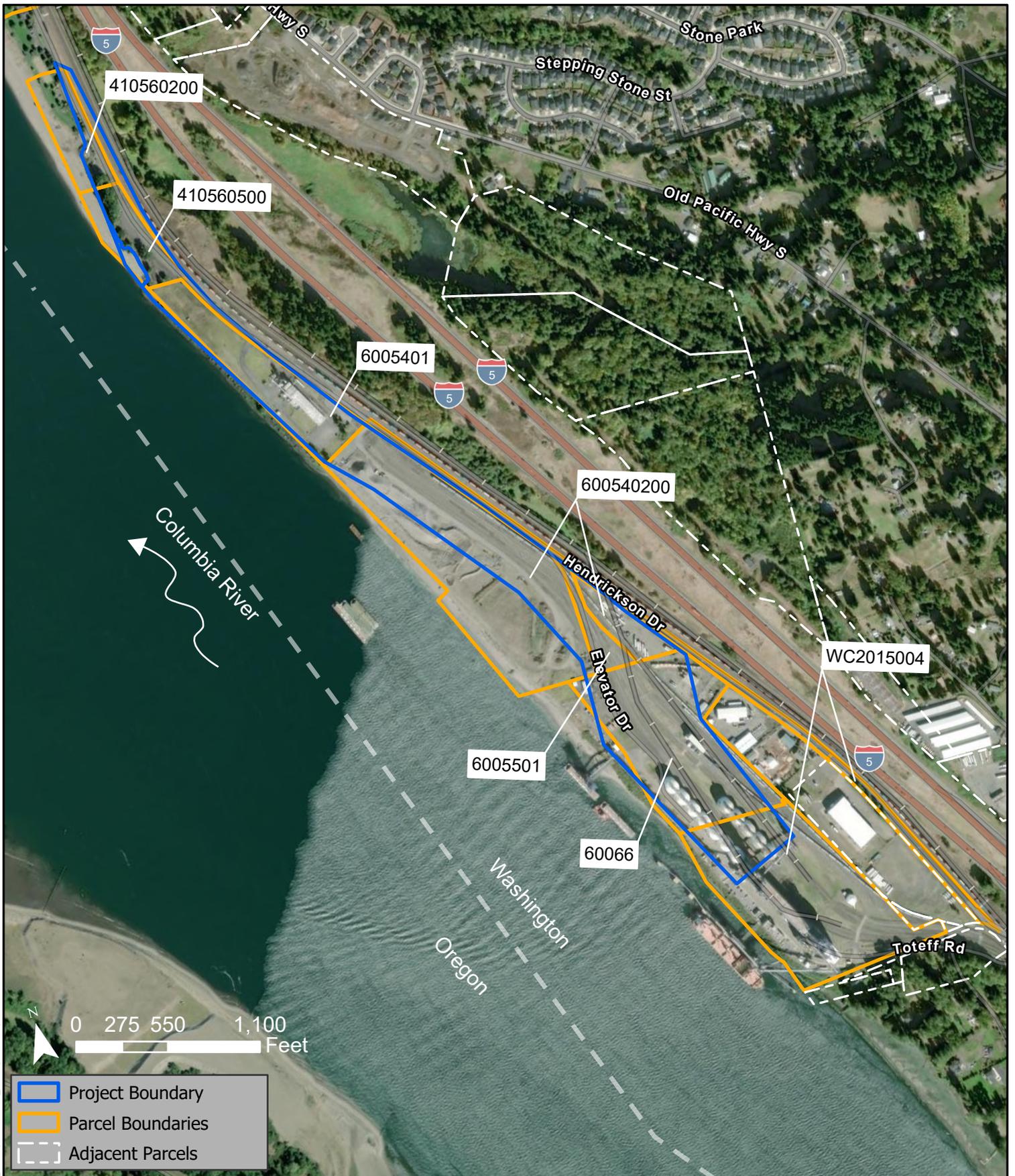
CITY: KALAMA

COUNTY: COWLITZ

FIGURE 5 OF 6

STATE: WA

DATE: 12/01/2025



GENERAL LOCATION: Port of Kalama

PORT OF KALAMA RAIL EXPANSION PROJECT

PARCEL MAP

CITY: KALAMA

COUNTY: COWLITZ

FIGURE 6 OF 6

STATE: WA

DATE: 10/03/2025

Exhibit 3: State of Washington Department of Ecology SEPA Comments



STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

Southwest Region Office
PO Box 47775, Olympia, WA 98504-7775 • 360-407-6300

December 22, 2025

Tabitha Reeder, Director of Environmental Services
Port of Kalama
110 West Marine Drive
Kalama, WA 98625

Dear Tabitha Reeder:

Thank you for the opportunity to comment on the determination of non-significance for the Port of Kalama Rail Expansion Project located at 400 Toteff Road as proposed by Tabitha Reeder. The Department of Ecology (Ecology) reviewed the environmental checklist and has the following comment(s):

SHORELANDS & ENVIRONMENTAL ASSISTANCE: Casey Vaughn, (360) 210-2783

The proposed development must be consistent with the Shoreline Management Act RCW 90.58 and the Kalama Shoreline Master Program (SMP). This includes adhering to required SMP shoreline buffers, and meeting not net loss of shoreline function requirements. For questions or technical assistance, please contact Department of Ecology Wetlands/Shorelands Specialist, Casey Vaughn, at (360)210-2783 or Casey.Vaughn@ecy.wa.gov.

SOLID WASTE MANAGEMENT: Derek Rockett (360) 995-3176

The applicant proposes to remove a structure(s) that may contain treated wood. Please refer to Ecology's publication "Focus on Treated Wood Exclusion," available at: [Focus on Treated Wood](#), for suggested best management practices and disposal requirements for treated wood. All grading and filling of land must utilize only clean fill. All other materials may be considered solid waste and permit approval may be required from your local jurisdictional health department prior to filling. All removed debris and dredged material resulting from this project must be disposed of at an approved site. Contact the local jurisdictional health department for proper management of these materials.

SPILL PREVENTION, PREPAREDNESS, RESPONSE: Angela Deardorff-Zeigenfuse (360) 480-2263

If new oil storage is required during or after the construction of this project, a SPCC plan may be required (40 CFR 112.7) if one has not been written already. Please refer to those regulations for any requirements that need to be met.

Thank you for considering this comment. If you have any questions or would like to respond to the comment, please contact Angela Deardorff-Zeigenfuse, Project Specialist with the Spills Program at (360) 480-2263 or by email at angela.zeigenfuse@ecy.wa.gov.

TOXICS CLEANUP: Katie McNulty (564) 669-4460

Ecology concurs with the identification of Chemtrade Performance Chemicals LLC. as a potential impact of the proposed project. Based on the investigative and remedial efforts conducted since 2003 and the contaminants of concern at the Site as being cadmium and zinc, Ecology concurs with the conclusion that this is a low-risk Site. Soil and groundwater remediation at this Site is ongoing so proper health and safety protocols should be employed by site workers accordingly. Ecology recommends coordinating with the Site manager, Joe Hunt johu461@ecy.wa.gov to discuss requirements. The results of the samples collected should determine how the potentially contaminated soil and groundwater waste is managed. Additionally, the associated risks should be relayed to the workers present on Site, addressed in the HASP, and the proper PPE should be provided to those workers in contact with the potentially contaminated soil and groundwater.

Available electronic documents for all the above-referenced cleanup sites can be found listed on Ecology's cleanup site search page at: <https://apps.ecology.wa.gov/cleanupsearch/>.

If additional contamination is encountered during this activity, please report it to comply with WAC 173-340-120 and -310 by using the online statewide environmental incident reporting (ERTS) form at: <https://ecology.wa.gov/footer-pages/report-an-environmental-issue/statewide-reporting-form-erts>.

Ecology's comments are based upon information provided by the lead agency. As such, they may not constitute an exhaustive list of the various authorizations that must be obtained or legal requirements that must be fulfilled in order to carry out the proposed action.

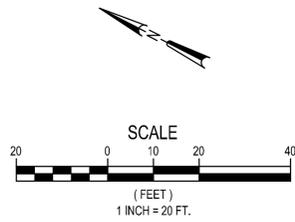
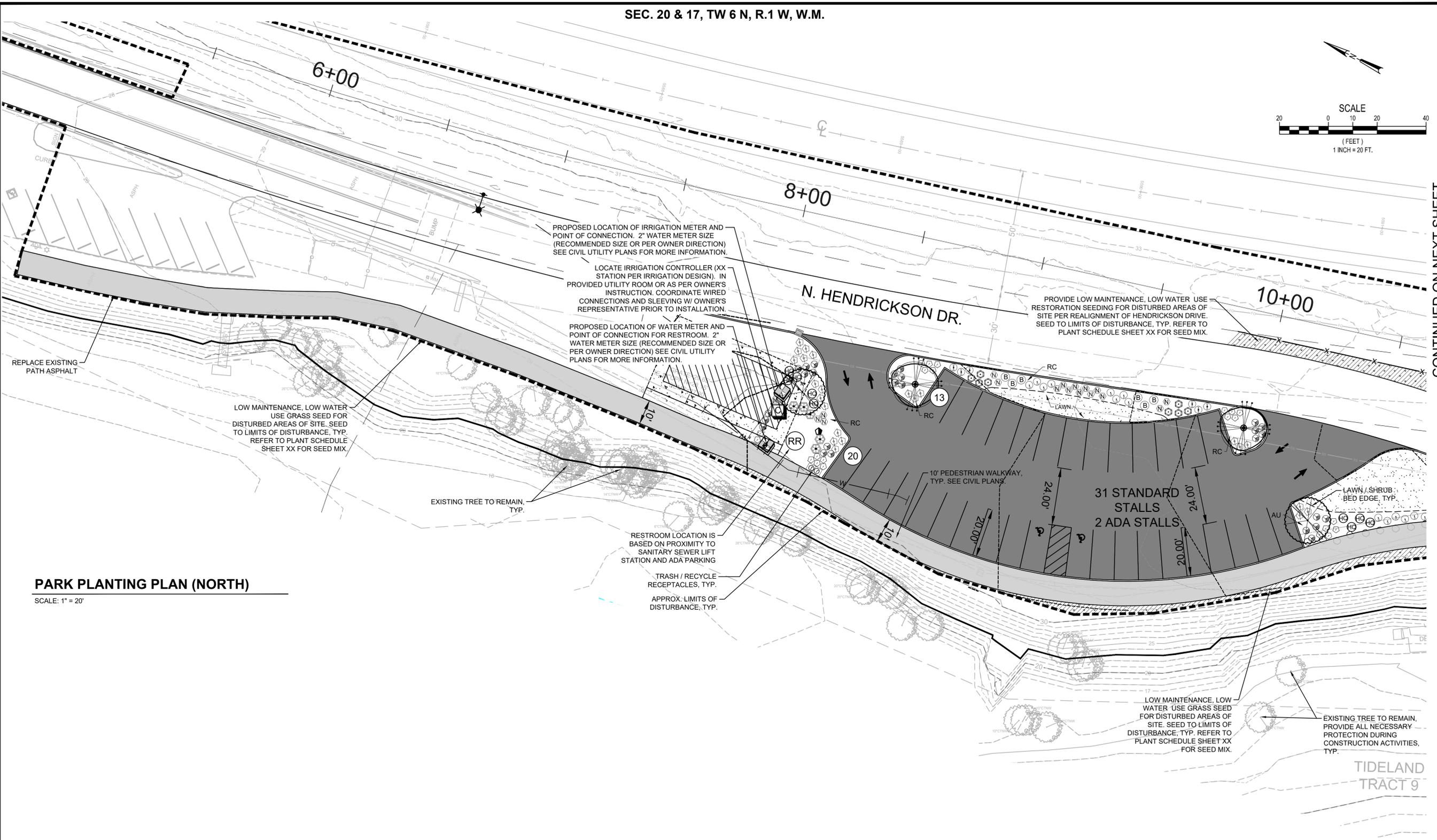
If you have any questions or would like to respond to these comments, please contact the appropriate reviewing staff listed above.

Department of Ecology
Southwest Regional Office

(JKT:202504990)

cc: Casey Vaughn, SEA
Derek Rockett, SWM
Angela Deardorff-Zeigenfuse, SPPR
Katie McNulty, TCP

SEC. 20 & 17, TW 6 N, R.1 W, W.M.



PARK PLANTING PLAN (NORTH)

SCALE: 1" = 20'

DAVID EVANS AND ASSOCIATES INC.
 2106 Pacific Ave
 Suite 400
 Tacoma, WA 98402
 253.922.9780

PORT OF KALAMA - PARK
 CIVIL
 PORT OF KALAMA
PLANTING PLAN
 404 HENDRICKSON DR
 KALAMA, WA 98625

NO.	DATE	REVISION	REVIEW BY	DATE	BY

60% SUBMITTAL

CHECKED BY: RTJ
 DESIGNED BY: GXLE
 DRAWN BY: EXI

FIRST SUBMITTAL DATE: 1/27/26

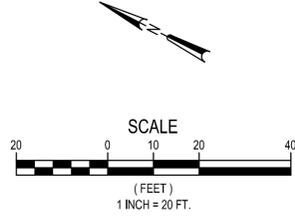
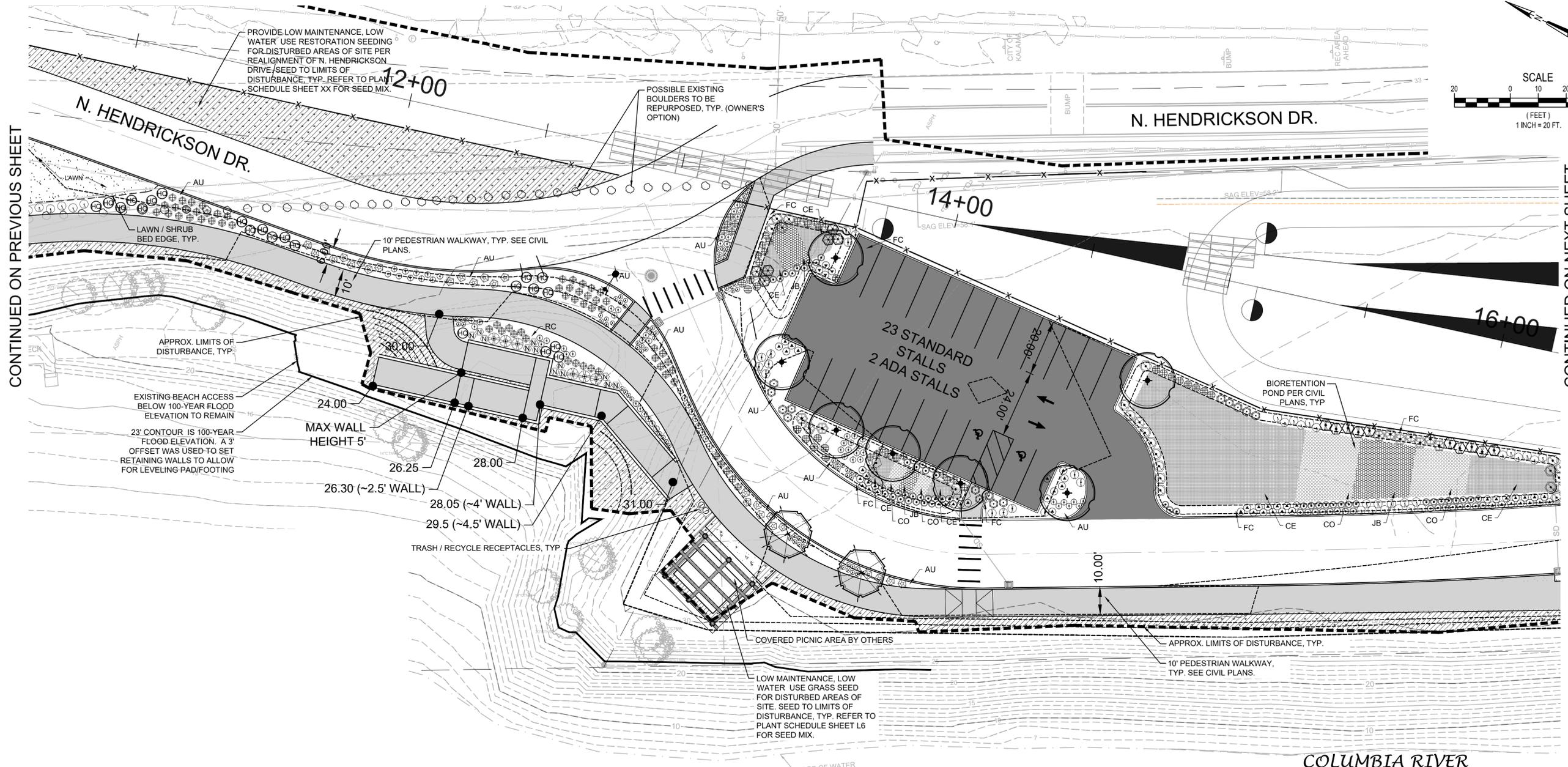
PROJECT NO.
POKL00000020

SHEET NO.

L1

Plot Date: 2/3/2026 3:53 PM
 Save Date: 1/27/2026 3:09 PM
 By: Gabie Lefebvre
 File: P:\POKL00000020\0400\CAD\LA\SHEETS\Park\30%_Submittal\LP-F-POKL0020-Park.dwg

CONTINUED ON NEXT SHEET



CONTINUED ON PREVIOUS SHEET

CONTINUED ON NEXT SHEET

PARK PLANTING PLAN (CENTER NORTH)
 SCALE: 1" = 20'

PORT OF KALAMA - PARK CIVIL

PORT OF KALAMA
PLANTING PLAN
 404 HENDRICKSON DR
 KALAMA, WA 98625

WA

COWLITZ COUNTY

NO.	DATE	REVISION	REVIEWED BY	DATE	BY

60% SUBMITTAL

CHECKED BY: RTJ
 DESIGNED BY: GXLE
 DRAWN BY: EXI

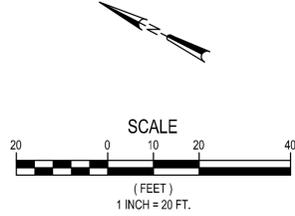
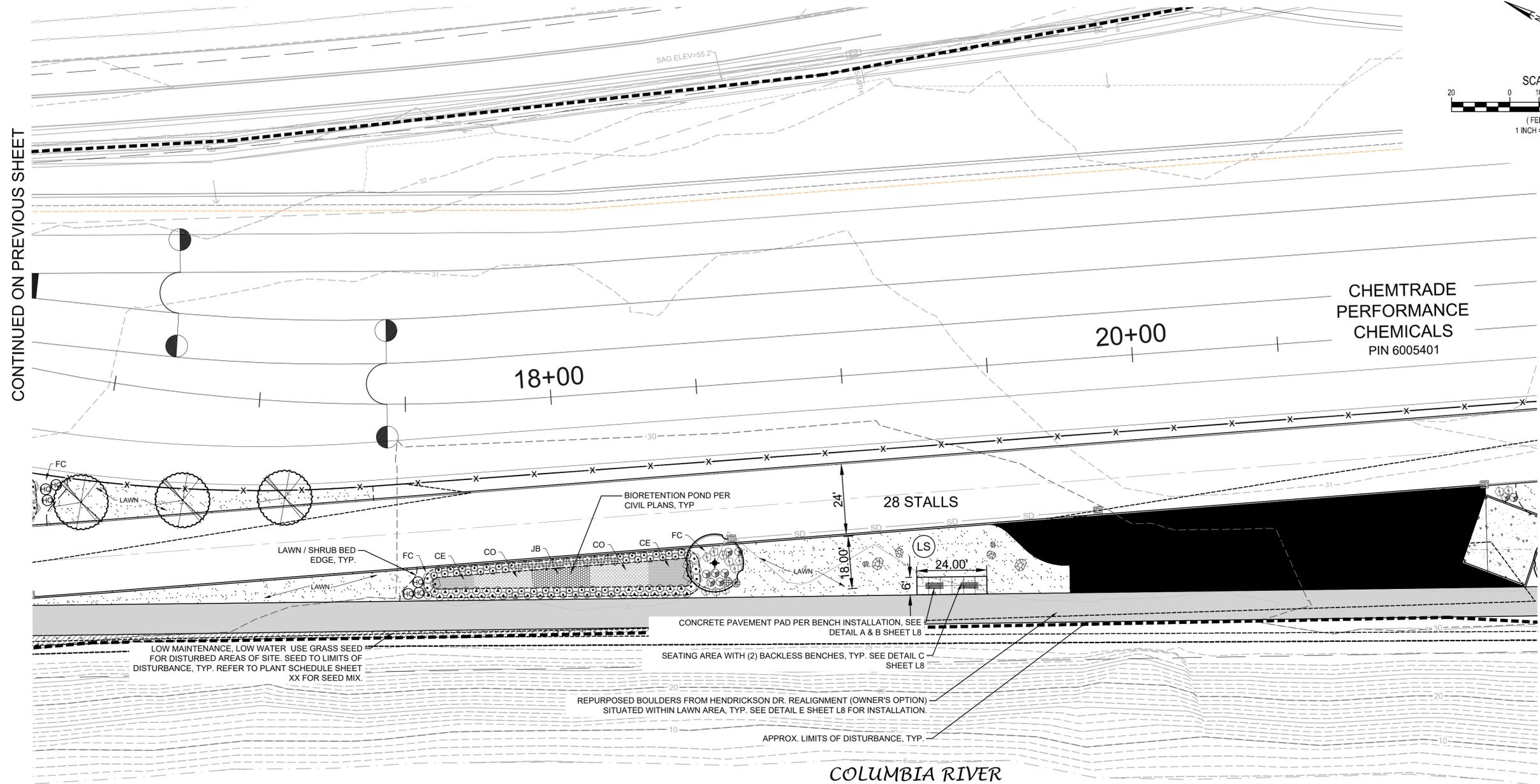
FIRST SUBMITTAL DATE: 1/27/26

PROJECT NO.
POKL00000020

SHEET NO.

L2

Plot Date: 2/3/2026 3:54 PM
 Save Date: 1/27/2026 3:09 PM
 By: Gabie Lefebvre
 File: P:\POKL00000020\404CAD\LA\SHSHEETS\Park\30%_Submittal\LP-F-POKL0020-Park.dwg



CONTINUED ON PREVIOUS SHEET

CONTINUED ON NEXT SHEET

CHEMTRADE
PERFORMANCE
CHEMICALS
PIN 6005401

PARK PLANTING PLAN (CENTER)
SCALE: 1" = 20'

LOW MAINTENANCE, LOW WATER. USE GRASS SEED FOR DISTURBED AREAS OF SITE. SEED TO LIMITS OF DISTURBANCE, TYP. REFER TO PLANT SCHEDULE SHEET XX FOR SEED MIX.

CONCRETE PAVEMENT PAD PER BENCH INSTALLATION. SEE DETAIL A & B SHEET L8

SEATING AREA WITH (2) BACKLESS BENCHES, TYP. SEE DETAIL C SHEET L8

REPURPOSED BOULDERS FROM HENDRICKSON DR. REALIGNMENT (OWNER'S OPTION) SITUATED WITHIN LAWN AREA, TYP. SEE DETAIL E SHEET L8 FOR INSTALLATION.

APPROX. LIMITS OF DISTURBANCE, TYP.

COLUMBIA RIVER

PORT OF KALAMA - PARK
CIVIL

PORT OF KALAMA
PLANTING PLAN
404 HENDRICKSON DR
KALAMA, WA 98625

WA

COWLITZ COUNTY

NO.	DATE	REVISION	BY	CHK

60% SUBMITTAL

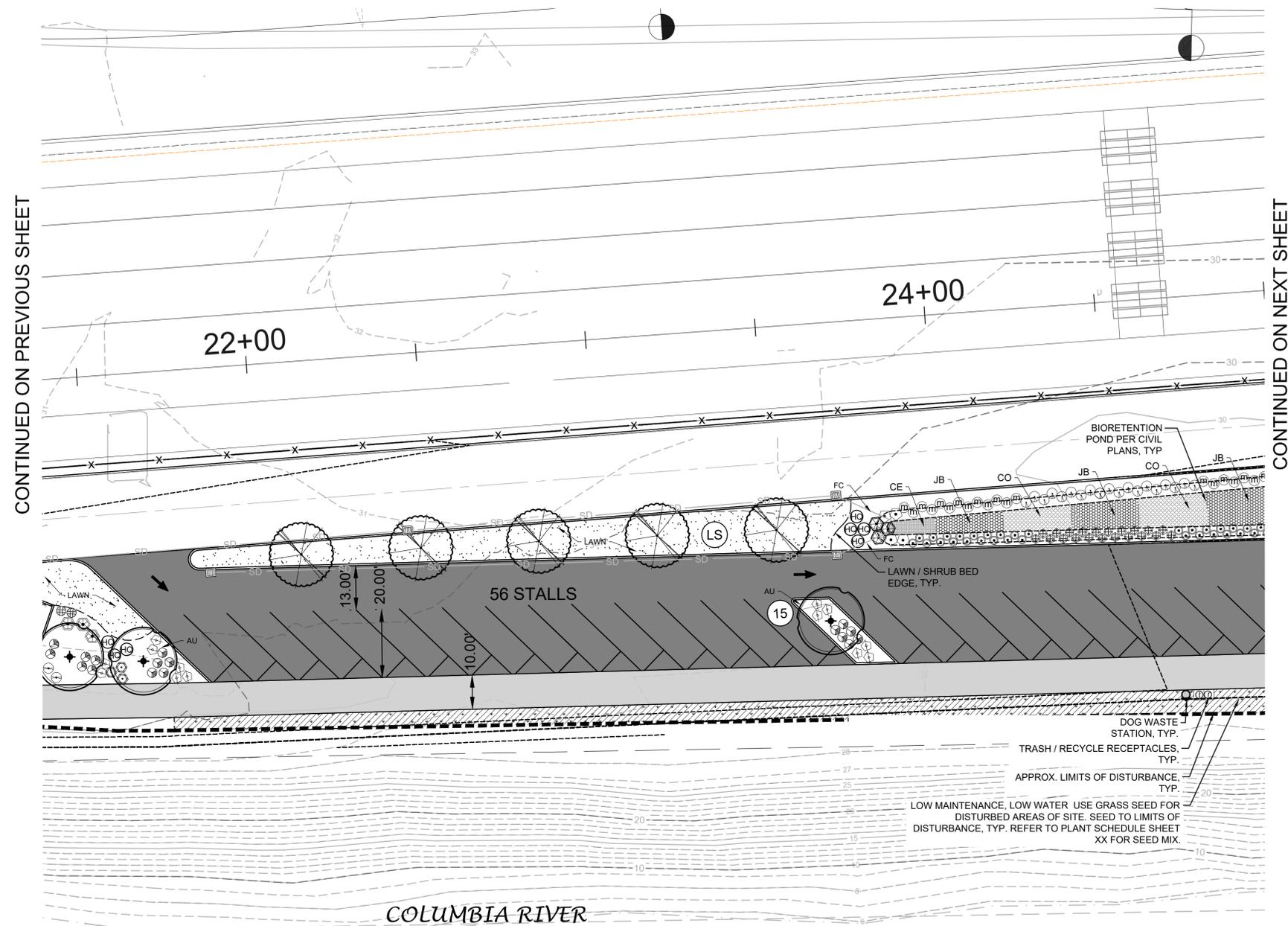
CHECKED BY: RTJ
DESIGNED BY: GXLE
DRAWN BY: EXI

FIRST SUBMITTAL DATE: 1/27/26

PROJECT NO.
POKL0000020

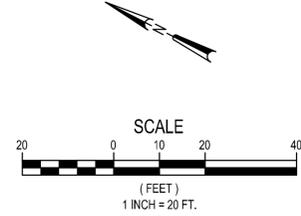
SHEET NO.
L3

Plot Date: 2/3/2026 3:55 PM
Save Date: 1/27/2026 3:09 PM
By: Gabie Lefebvre
File: P:\P\POKL0000020\040CAD\LA\SHEETS\Park\30%_Submittal\LP-F-POKL0020-Park.dwg



CONTINUED ON PREVIOUS SHEET

CONTINUED ON NEXT SHEET



PARK PLANTING PLAN (CENTER SOUTH)

SCALE: 1" = 20'

COLUMBIA RIVER

DOG WASTE STATION, TYP.
 TRASH / RECYCLE RECEPTACLES, TYP.
 APPROX. LIMITS OF DISTURBANCE, TYP.
 LOW MAINTENANCE, LOW WATER USE GRASS SEED FOR DISTURBED AREAS OF SITE. SEED TO LIMITS OF DISTURBANCE, TYP. REFER TO PLANT SCHEDULE SHEET XX FOR SEED MIX.

Plot Date: 2/3/2026 3:55 PM
 Save Date: 1/27/2026 3:09 PM
 By: Gabie Lefebvre
 File: P:\P\POKL0000020\04\0\CAD\LA\SHEETS\Park\30%_Submittal\LP-F-POKL0020-Park.dwg

DAVID EVANS AND ASSOCIATES INC.
 2106 Pacific Ave
 Suite 400
 Tacoma, WA 98402
 253.922.9780

PORT OF KALAMA - PARK CIVIL
 PORT OF KALAMA
PLANTING PLAN
 404 HENDRICKSON DR
 KALAMA, WA 98625
 WA
 COWLITZ COUNTY

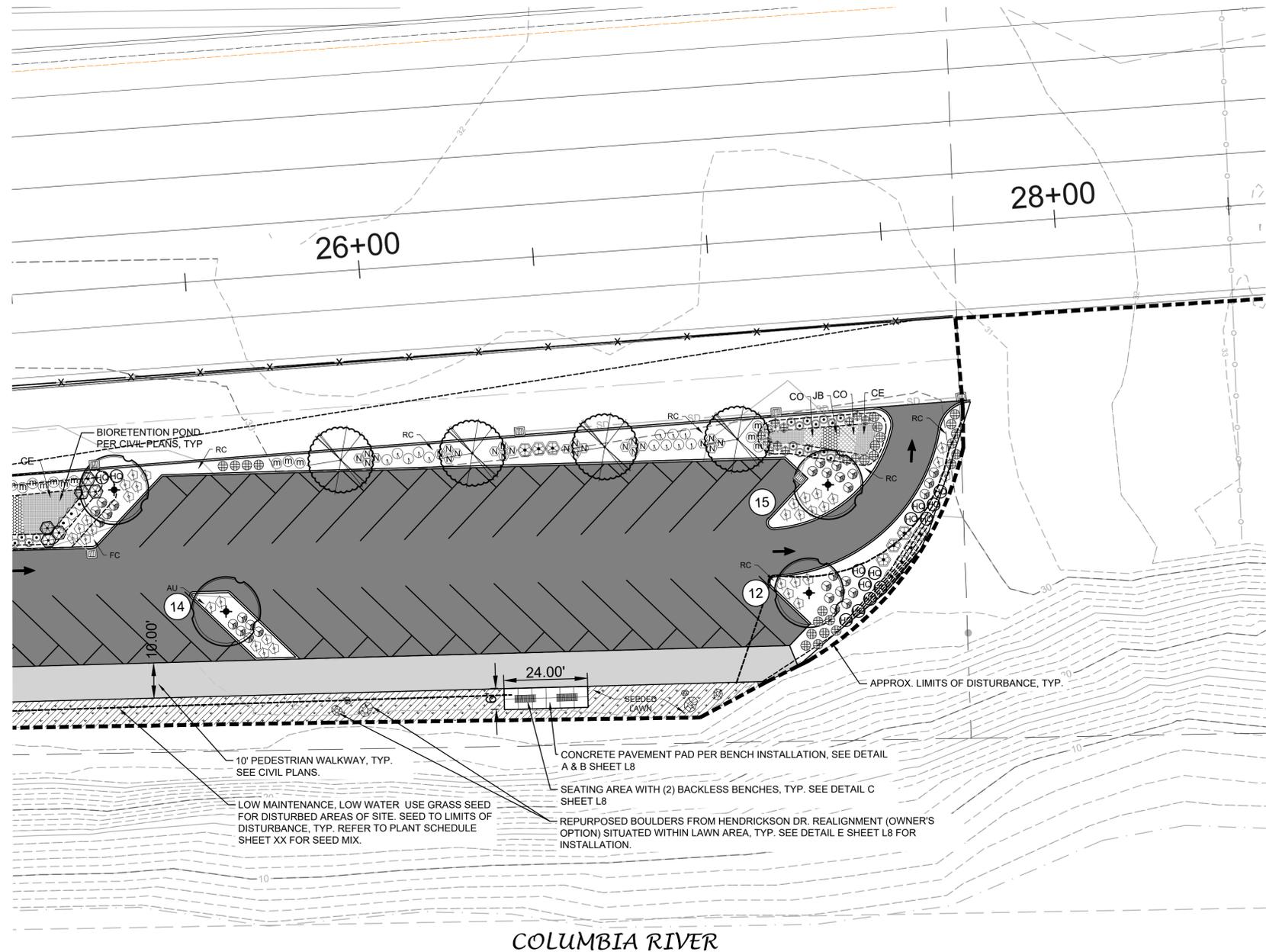
NO.	DATE	REVISION	BY	CK

60% SUBMITTAL

CHECKED BY: RTJ
 DESIGNED BY: GXLE
 DRAWN BY: EXI
 FIRST SUBMITTAL DATE: 1/27/26
 PROJECT NO.
POKL00000020
 SHEET NO.

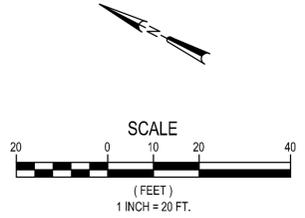
L4

CONTINUED ON PREVIOUS SHEET



PARK PLANTING PLAN (SOUTH)

SCALE: 1" = 20'



DAVID EVANS AND ASSOCIATES INC.
 2106 Pacific Ave
 Suite 400
 Tacoma, WA 98402
 253.922.9780

WA
PORT OF KALAMA - PARK CIVIL
 PORT OF KALAMA
PLANTING PLAN
 404 HENDRICKSON DR
 KALAMA, WA 98625
 COWLITZ COUNTY

NO.	DATE	REVISION	REVIEWED BY	DATE	BY

60% SUBMITTAL

CHECKED BY: RTJ
 DESIGNED BY: GXLE
 DRAWN BY: EXI
 FIRST SUBMITTAL DATE: 1/27/26

PROJECT NO.
POKL00000020

SHEET NO.
L5

Plot Date: 2/3/2026 3:56 PM
 Save Date: 1/27/2026 3:09 PM
 By: Gabie Lefebvre
 File: P:\P\POKL00000020\04\0CAD\LA\SHEETS\Park\30%_Submittal\LP-F-POKL0020-Park.dwg

SEC. 20 & 17, TW 6 N, R.1 W, W.M.

PLANT SCHEDULE for PORT OF KALAMA PARK

* NTV=NATIVE & NAT=NATURALIZED.
 ** PLANTS INDICATED IN THE LOW WATER CATEGORY ARE LOW WATER USE ONCE ESTABLISHED.

SYMBOL	BOTANICAL / COMMON NAME	MIN. SIZE	CONDITION/REMARKS	TOTAL QUANTITY	PAV/NATIVE & NATURALIZED	LOW WATER USE **	STANDARD WATER USE
DECIDUOUS TREES							
4	ACER CIRCINATUM / VINE MAPLE	1/2" CAL. EA. MULTI-STEM & 8' HT.		0	NTV		
	ACER TRUNCATUM 'PACIFIC SUNSET' / PACIFIC SUNSET MAPLE	2" CAL. & 12' HT.	B&B, MATCHED.	2	NAT		
	AMELANCHIER GRANDIFLORA 'AUTUMN BRILLIANCE' / AUTUMN BRILLIANCE SERVICEBERRY	2" CAL. & 8' HT.	B&B, BRANCHED TO 3-4' HT.	0	NAT		
	GLEDITSIA TRIACANTHOS 'SUNBURST' / SUNBURST HONEYLOCUST	2" CAL. & 12' HT.	B&B, MATCHED.	16	NAT		
	PRUNUS SERULATA 'KWANZAN' KWANZAN FLOWERING CHERRY	2" CAL. & 12' HT.	B&B, MATCHED.	2	NAT		
	QUERCUS MACROCARPA 'URBAN PINNACLE' URBAN PINNACLE OAK	2" CAL. & 12' HT.	B&B, MATCHED.	14	NAT		
EVERGREEN TREES							
	CHAMAECYPARIS NOOTKATENSIS / ALASKA YELLOW CEDAR	6' MIN. HT.	B&B, FULL TO BASE, SINGLE STRAIGHT LEADER	0	NTV		
	PSEUDOTSUGA MENZIESII / DOUGLAS FIR	6' HT MIN.	B&B, FULL TO BASE, SINGLE STRAIGHT LEADER	0	NTV		
SHRUBS							
Ⓢ	BERBERIS THUNBERGII 'CRIMSON PYGMY' / CRIMSON PYGMY JAPANESE BARBERRY	2 GAL. CONT.	FULL, WELL BRANCHED	81	NAT		
Ⓢ	BERBERIS THUNBERGII 'BAGATELLE' / BAGATELLE BARBERRY	1 GAL. CONT.	FULL, WELL BRANCHED	69	NAT		
Ⓢ	BERBERIS THUNBERGII 'ROSE GLOW' / ROSE GLOW BARBERRY	2 GAL. CONT.	FULL, WELL BRANCHED	6	NAT		
Ⓢ	CORNUS SERICEA 'BUDD'S YELLOW' / YELLOW TWIG DOGWOOD (C. S. FLAVIRAMEA SUB. OK)	5 GAL. CONT.	FULL, WELL BRANCHED	15	NAT		
Ⓢ	CORNUS SERICEA 'KELSEYI' / MIDWINTER FIRE RED TWIG DOGWOOD	2 GAL. CONT.	FULL, WELL BRANCHED	144	NAT		
Ⓢ	CORNUS SERICEA 'MIDWINTER FIRE' / MIDWINTER FIRE RED TWIG DOGWOOD	2 GAL. CONT.	FULL, WELL BRANCHED	21	NAT		
Ⓢ	HYDRANGEA QUERCIFOLIA 'PEE WEE' / PEE WEE OAK LEAF HYDRANGEA	2 GAL. CONT.	FULL, WELL BRANCHED	61	NAT		
Ⓢ	JUNIPERUS CONFERTA 'BLUE PACIFIC' / BLUE PACIFIC JUNIPER	2 GAL. CONT.	FULL, WELL BRANCHED	26	NAT		
Ⓢ	JUNIPERUS SQUAMATA 'BLUE STAR' / BLUE STAR JUNIPER	2 GAL. CONT.	FULL, WELL BRANCHED	86	NAT		
Ⓢ	LONICERA PILEATA / BOX LEAF HONEYSUCKLE	2 GAL. CONT.	FULL, WELL BRANCHED	74	NAT		
Ⓢ	MAHONIA AQUIFOLIUM / OREGON GRAPE	2 GAL. CONT.	FULL, WELL BRANCHED	0	NTV		
Ⓢ	MAHONIA AQUIFOLIUM 'COMPACTA' / COMPACT OREGON GRAPE	2 GAL. CONT.	FULL, WELL BRANCHED	33	NTV		
Ⓢ	MAHONIA REPENS / CREEPING OREGON GRAPE	2 GAL. CONT.	FULL, WELL BRANCHED	88	NAT		
Ⓢ	MYRICA CALIFORNICA / PACIFIC WAX MYRTLE	2 GAL. CONT.	FULL, WELL BRANCHED	10	NTV		
Ⓢ	NANDINA DOMESTICA 'GULF STREAM' / GULF STREAM HEAVENLY BAMBOO	2 GAL. CONT.	FULL, WELL BRANCHED	54	NAT		
Ⓢ	OSMANTHUS DELAVAYI / OSMANTHUS	2 GAL. CONT.	FULL, WELL BRANCHED	28	NAT		
Ⓢ	PRUNUS LAUROCERASUS 'MT. VERNON' / MT. VERNON LAUREL	2 GAL. CONT.	FULL, WELL BRANCHED	51	NAT		
Ⓢ	RIBES SANGUINEUM 'KING EDWARD VII' / RED FLOWERING CURRANT	2 GAL. CONT.	FULL, WELL BRANCHED	0	NTV		
Ⓢ	SALIX PURPUREA 'NANA' / DWARF ARCTIC WILLOW	2 GAL. CONT.	FULL, WELL BRANCHED	22	NAT		
Ⓢ	SPIRAEA BETULIFOLIA 'TOR' / BIRCH LEAF SPIRAEA	2 GAL. CONT.	FULL, WELL BRANCHED	6	NAT		
Ⓢ	SPIRAEA JAPONICA 'LIMEMOUND' OR SPIRAEA JAPONICA 'CANDLELIGHT' / LIMEMOUND OR CANDLELIGHT SPIRAEA	2 GAL. CONT.	FULL, WELL BRANCHED	22	NAT		
Ⓢ	TAXUS X MEDIA 'DARK GREEN SPREADER' OR TAXUS BACCATA 'REPANDENS' / DARK GREEN SPREADER YEW OR SPREADING ENGLISH YEW	2 GAL. CONT.	FULL, WELL BRANCHED	26	NAT		
Ⓢ	VACCINIUM OVATUM / HUCKLEBERRY	2 GAL. CONT.	FULL, WELL BRANCHED	0	NTV		
Ⓢ	VIBURNUM DAVIDII / DAVIDS VIBURNUM	2 GAL. CONT.	FULL, WELL BRANCHED	123	NAT		

PLANT SCHEDULE FOR PORT OF KALAMA PARK

* NTV=NATIVE & NAT=NATURALIZED.
 ** PLANTS INDICATED IN THE LOW WATER CATEGORY ARE LOW WATER USE ONCE ESTABLISHED.

SYMBOL	BOTANICAL / COMMON NAME	SIZE	CONDITION / REMARKS	TOTAL QUANTITY	PAV/NATIVE & NATURALIZED	LOW WATER USE **	STANDARD WATER USE
ORNAMENTAL GRASSES & GRASS LIKE PLANTS							
⊙	CAREX HACHUJOENSIS 'EVERGOLD' or CAREX OSHIMINENSIS 'EVERILLO' / EVERGOLD CAREX GRASS or EVERILLO JAPANESE SEDGE	1 GAL. CONT.	FULL & VIGOROUS GROWTH	74	NAT		
⊙	HELICTOTRICHON SEMPERVIRENS / BLUE OAT GRASS	1 GAL. CONT.	HOLD CEN. OF GRASS 2' FROM PAVEMENT WHERE GRASS ABUTS WALK/CURB	22	NAT		
GROUNDCOVER							
AU	ARCTOSTAPHYLOS UVA URSI / KINNICKINICK	1 GAL. CONT.	36" O.C.	430	NTV		
FC	FRAGRARIA CHILOENSIS / CREEPING STRAWBERRY	1 GAL. CONT.	36" O.C.	270	NTV		
RC	RUBUS CALYCINOIDES / BRAMBLE	1 GAL. CONT.	36" O.C.	185	NAT		
NTV	NATIVE GROUNDCOVER MIX 40% GAULTHERIA SHALLON/SALAL 20% MAHONIA REPENS/LOW OREGON GRAPE 25% POLYSTICHUM MUNITUM/SWORD FERN 15% SYMPHORICARPOS ALBA/SNOWBERRY	1 GAL. CONT.	36" O.C.	100 50 63 37			
LAWN							
	40% MANHATTAN V PERENNIAL RYEGRASS 30% GEM CHEWINGS FESCUE 30% MARVEL CREEPING RED FESCUE						
LAWN (LOW WATER / LOW GROW SEED MIX)							
FOR USE IN ALL AREAS OF DISTURBANCE NOT OTHERWISE SPECIFIED ELSEWHERE ON PLANS.							
	FOR SUN: 100% THREE WAY TURF TALL FESCUE MIX FOR SHADE: 40% CREEPING RED FESCUE 40% CHEWINGS FESCUE 20% HARD FESCUE						
APPLICATION RATE FOR ALL SEEDING NOTED ABOVE SHALL BE AS RECOMMENDED BY SEED SUPPLIER.							
BIORETENTION CELL EMERGENT PLANTINGS							
CE	CAREX ELATA 'AUREA BOWLES' / BOWLES GOLDEN SEDGE	PLUGS	12" O.C.	1,678	NAT		
CO	CAREX OBNUPTA / SLOUGH SEDGE	PLUGS	12" O.C.	1,234	NAT		
JB	JUNCUS INFLEXUS 'BLUE ARROWS' OR JUNCUS PATENS 'ELK BLUE' / BLUE ARROWS RUSH OR ELK BLUE CALIFORNIA GRAY RUSH	PLUGS	12" O.C.	1,197	NAT		

IRRIGATION

1. NEW PLANTINGS SHALL BE IRRIGATED.
2. IRRIGATION SHALL BE A FULLY AUTOMATIC SYSTEM TO BE DESIGNED AND CONSTRUCTED BY THE CONTRACTOR.

PLANTING NOTES

1. IT IS RECOMMENDED THAT SHRUBS BE ALLOWED TO GROW IN THEIR NATURAL FORM. LIGHT, SPOT PRUNING IS RECOMMENDED, IF NECESSARY TO SHAPE GROWTH. HEAVY PRUNING OR SHEARING IS NOT RECOMMENDED, EXCEPT IF SHRUBS EXCEED THE HEIGHTS LISTED ABOVE FOR SHRUBS WITHIN THE CLEAR SITE ZONES/ SIGHT DISTANCE RESTRICTION AREAS.
2. TREE LAYOUT HAS BEEN DESIGNED TO ALLOW 5' MIN. BETWEEN PROPOSED TREE LOCATION AND UTILITIES AND 15' BETWEEN PROPOSED STREET TREE LOCATION AND STREET LIGHT. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ADJUSTMENTS TO STREET TREES BASED ON FIELD LOCATIONS OF UTILITIES/STREET LIGHTS.

2106 Pacific Ave
Suite 400
Tacoma, WA 98402
253.922.9780

PORT OF KALAMA - PARK
CIVIL

PORT OF KALAMA
PLANT SCHEDULE
404 HENDRICKSON DR
KALAMA, WA 98625

WA

COWLITZ COUNTY

REVIEWED BY:	DATE:	REVISION	DATE:	BY:

60% SUBMITTAL

CHECKED BY: RTJ
DESIGNED BY: GXLE
DRAWN BY: EXI

FIRST SUBMITTAL DATE: 1/27/26

PROJECT NO.
POKL00000020

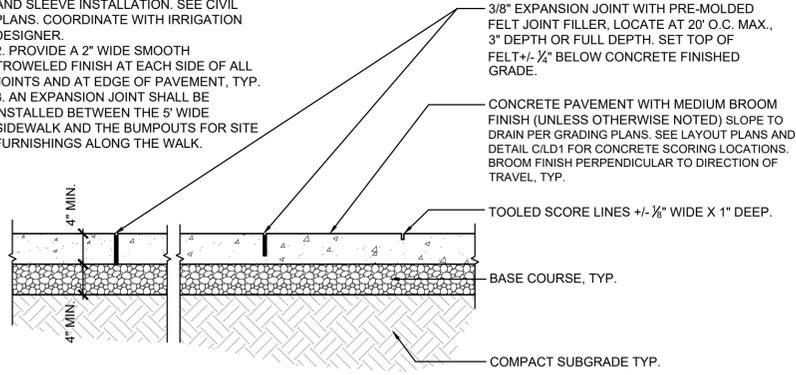
SHEET NO.
L6

Plot Date: 2/3/2026 3:57 PM
Save Date: 1/27/2026 3:09 PM
By: Gabie Lefebvre
File: P:\P\POKL00000020\040CAD\LA\SHEET\Sheet\Park\30%. Submittal\LP-F-POKL0020-Park.dwg

SEC. 20 & 17, TW 6 N, R.1 W, W.M.

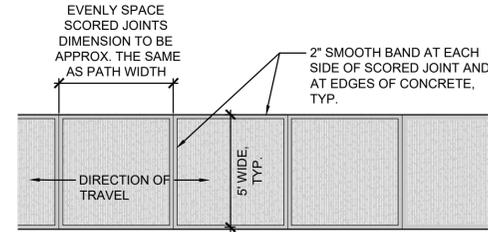
NOTES:

- COORDINATE PAVING WITH UTILITY AND SLEEVE INSTALLATION. SEE CIVIL PLANS. COORDINATE WITH IRRIGATION DESIGNER.
- PROVIDE A 2" WIDE SMOOTH TROWELED FINISH AT EACH SIDE OF ALL JOINTS AND AT EDGE OF PAVEMENT, TYP.
- AN EXPANSION JOINT SHALL BE INSTALLED BETWEEN THE 5' WIDE SIDEWALK AND THE BUMPOUTS FOR SITE FURNISHINGS ALONG THE WALK.



A CONCRETE PAVEMENT

SCALE: 1" = 1'-0"

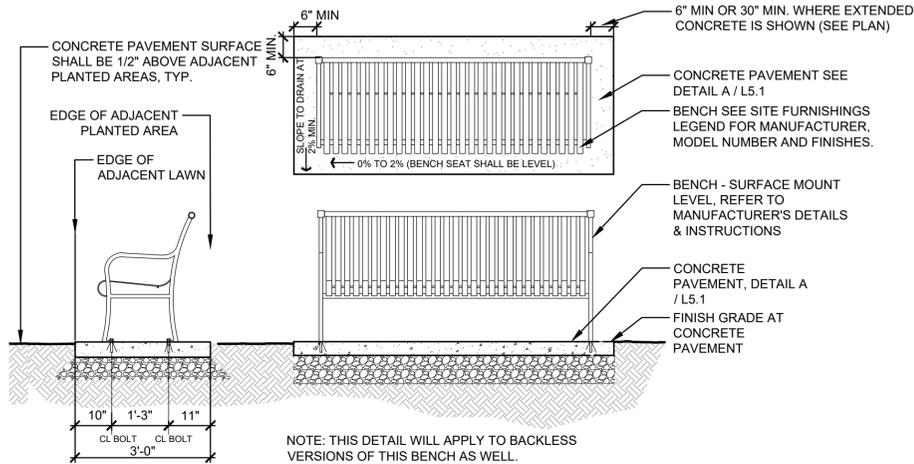


NOTES:

- SEE LAYOUT PLANS FOR ADDITIONAL SCORING PATTERN INFORMATION, INCLUDING SPECIAL SCORING PATTERNS AT NON-PATHWAY AREAS.
- UNLESS OTHERWISE NOTED IN LAYOUT PLANS, BROOM FINISH SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL. IF DIRECTION IS UNCLEAR, CONSULT LANDSCAPE ARCHITECT.
- PROVIDE SAMPLE PANELS WITH CONCRETE SCORING AND FINISH FOR OWNER APPROVAL.

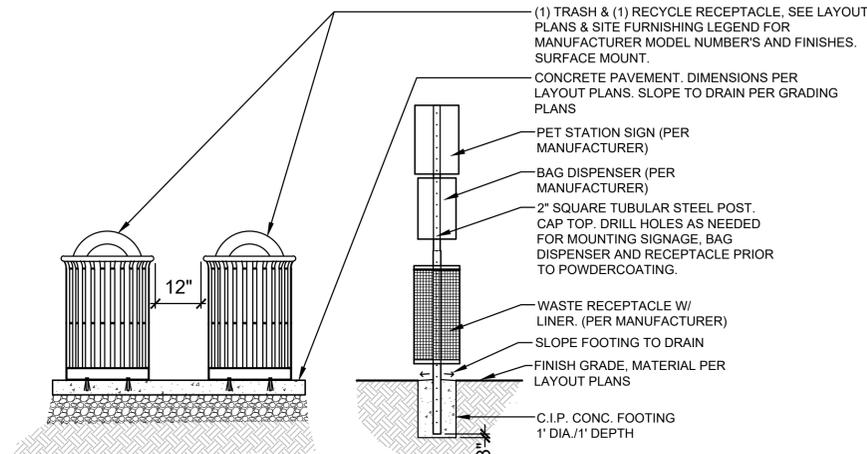
B CONCRETE PAVEMENT SCORING

SCALE: 1/4" = 1'-0"



C BENCH

SCALE: 1/2" = 1'-0"

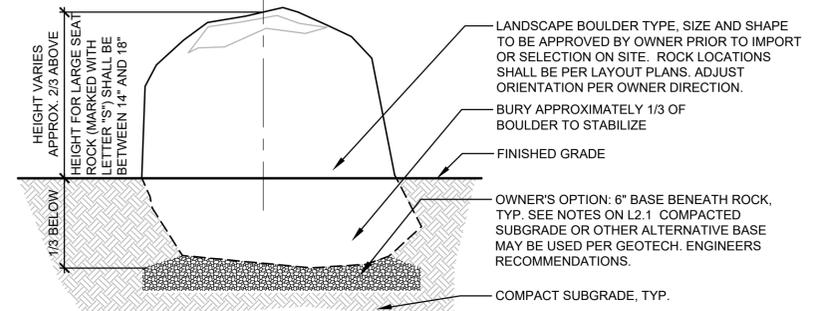


D TRASH / RECYCLE AND DOG WASTE RECEPTACLES

SCALE: 1/2" = 1'-0"

NOTES:

- BOULDER DIMENSIONS/LAYOUT ARE APPROXIMATE. LAYOUT AND BOULDERS TO BE REVIEWED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION
- BOULDERS FOR SEATING ARE MARKED WITH LETTER "S" ON LAYOUT PLANS AND SHOULD BE SET APPROX. 14-18" HIGH. STABILIZE BOULDER TO BE USED AS SEATING SO THAT SEAT SURFACE AREA IS AS LEVEL AS POSSIBLE. CHOOSE STONES WITH SMOOTH SURFACE SUITABLE FOR SEATING. PLACE WITH BEST SIDE FOR SEATING FACING UP.
- BOULDER SIZES TO BE 2 TO 4+ MAN SIZE (APPROXIMATELY BETWEEN 2'-4" TO 3' WIDE).



E LANDSCAPE BOULDER (IN LANDSCAPE AREAS)

SCALE: 1/2" = 1'-0"

Plot Date: 2/28/2025 4:00 PM
 Save Date: 2/28/2025 3:36 PM
 By: Gabie Lefebvre
 File: P:\P\POKL00000020\040CAD\LA\SHEET\Park\30%_Submittal\LS-DT-F-POKL0020-Park.dwg

DAVID EVANS AND ASSOCIATES INC.
 2106 Pacific Ave
 Suite 400
 Tacoma, WA 98402
 253.922.9780

PORT OF KALAMA - PARK
 CIVIL
 PORT OF KALAMA
LANDSCAPE SITE DETAILS
 404 HENDRICKSON DR
 KALAMA, WA 98625

NO.	DATE	REVISION	BY	CHK

60% SUBMITTAL

CHECKED BY: RTJ
 DESIGNED BY: GXLE
 DRAWN BY: EXI

FIRST SUBMITTAL DATE: 1/27/26

PROJECT NO.
POKL00000020

SHEET NO.
L8