

PORT OF ASTORIA WATERFRONT MASTER PLAN

MARCH, 2022

PORT OF ASTORIA & CITY OF ASTORIA



WALKER | MACY



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EXECUTIVE SUMMARY

PURPOSE AND CONTEXT

The Port of Astoria's Central Industrial Waterfront is a rare mix of working waterfront businesses coupled with travel and recreation destinations. People come from across the region and beyond to work at its industrial facilities, moor boats in the West Mooring Basin, fish the Columbia River, enjoy the Riverwalk Trail, and visit the area's hotels and restaurants. Few other places in Oregon blend these activities in such close proximity. This area has great potential to increase its benefits as a destination for business, Astorians, and visitors.

The Port of Astoria Waterfront Master Plan provides a framework for key investments to infrastructure, streets, and public access, along with opportunities for attracting new industrial and commercial development to the District. Its purpose is to establish a clear, enduring, flexible plan for the Port's holdings that fosters long-term financial prosperity while creating a welcoming place for the community to enjoy. It aims also to build champions in the Astoria community and local and state governments, who will advocate for the long-term vision and support the decisions and steps to achieve it.

The Port of Astoria, Astoria Development Commission, and City of Astoria will adopt this Master Plan and are committed to implementing it through ongoing partnership and collaboration.

Project Partners

This effort represents a collaboration among several agencies, private businesses, private property owners, and the community. Key members of the Partnership are as follows:

Port of Astoria. The Mission of the Port of Astoria is "to generate economic growth and prosperity in a safe and environmentally responsible manner for

its citizens through creation of family wage jobs and prudent management of its assets." As noted in its recently completed Strategic Plan, in the coming years the Port will be focusing on restoring financial sustainability, addressing the rehabilitation needs of its aging infrastructure and fostering public trust. In particular, the Port is interested in exploring ways to better capitalize on the West Mooring Basin marina, the cruise ship terminal, and other existing developments. The Port takes a long view of the area and even of its mission as an important component of the region's economy.

Astoria Development Commission. The Astoria Development Commission oversees urban renewal efforts in Astoria, using tax increment financing to fund new investments which stimulate revitalization in the City's two Urban Renewal Areas. The District in its entirety falls within the boundaries of the 205-acre Astor-West Urban Renewal Area. The Urban Renewal Plan was established in 2002, with a maximum indebtedness of about \$9.1M.

The City of Astoria. The City of Astoria oversees the zoning regulations that steer new development in the City, including the District. Unique to this effort, the City has directly partnered with the Port to collaborate on the future of this part of the waterfront. It also bears ultimate responsibility for infrastructure investment, even when those investments are funded by other entities such as the Commission, the Port, or outside authorities.

Study Area (District)

The planning study area is an industrial waterfront site along the Columbia River, a mile and a half west of downtown Astoria, just west of the Astoria-Megler Bridge. Of the study area's 64.6 acres, approximately 25 acres are on land, above the top of riverbank. The remainder is open water or over-water structures, including buildings, piers, and docks.

For the purposes of this document, the study area is referred to as the District.

The District is comprised of Pier 1, the West Mooring Basin (marina), and several building lots connected by a series of paved streets and parking lots. The Riverwalk Trail, a public multi-use trail, and the Astoria Riverfront Trolley, an active streetcar line, utilize a 50-foot wide right of way administered by Astoria Parks and Recreation, at the southern edge of the District. Three municipal streets, Portway Street, Basin Street, and Bay Street, enter the District from the south; Industry Street enters from the west, along with Gateway Avenue, which is owned by the Port.

Process

The Port of Astoria Waterfront Master Plan was developed over a six-month period in 2021, following a process outlined by the Port and City.

A **Project Advisory Committee (PAC)**, comprised of City and Port staff, stakeholders, and members of the public appointed by the Mayor, provided guidance at key points in the process, offering both broader perspectives and deeper knowledge of the District, economic and technical factors influencing the Master Plan, and the interests of the community. The PAC participated in three meetings which consisted of planning team presentations and discussion and provided input and recommendations as well as detailed review of the final Port of Astoria Master Plan and Implementation Strategy. PAC meetings were held virtually (online), hosted by the City, and open to the public.

Community engagement included three means of communication and input. Project updates were provided on the City of Astoria's project web page. These included notifications of upcoming meetings, Project Advisory Committee (PAC) meeting presentations and summaries, and a summary report of stakeholder interviews. Additionally, the City and Port hosted two Public Forum events, virtual (online) presentations with opportunities for participants to ask questions and provide feedback about the study's progress and preliminary and preferred master plan alternatives.

The Port of Astoria Waterfront Master Plan is the product of four primary tasks led by the planning team during the study: Review of Background and Existing Conditions; Plan Alternative Concepts; Preferred Alternative Refinement; Final Plan and Implementation Strategy.

This Port of Astoria Waterfront Master Plan document is submitted for approval and adoption by the City Council of Astoria and Port of Astoria.

Master Plan Goals

Established early in the project, these goals guide the planning work and provide criteria for successful implementation of the framework plan.

Strengthen Astoria's working waterfront with a mix of uses and ongoing private investment.

Make a place for Astorians. Establish long-term community support.

Contribute to the financial stability and prosperity of the Port, City and region.

Support living wage jobs.

Establish an enduring framework plan that is flexible to new opportunities and resilient to changing economic conditions.

Core Values

The following core values outline a bold yet pragmatic vision for the District.

Working Waterfront. A place where the work gets done.

Real Astoria. A connection between the city's heritage and its future.

Public Access. Everyone is welcome.

Adaptability. A place that can adapt over time while maintaining its identity.

MASTER PLAN

The Port of Astoria Waterfront Master Plan is composed of a Framework Plan, Demonstration Plan, description of Plan Elements, Zoning Considerations, Other Recommendations, and an Implementation Strategy.

Framework Plan

The Master Plan's foundation is a framework for overall circulation, building sites, and open space. The Framework Plan establishes a permanent strategy for developing the District to accomplish the Master Plan's goals and realize the vision for the Port's waterfront. It provides a baseline of certainty while retaining flexibility for future engagement with private sector partners and resiliency amidst changing economic conditions.

The Port of Astoria Waterfront Master Plan framework is comprised of the following structural elements:

- 1 Pier 1 west of Portway Street is designated for maritime industrial uses.
- 2 The West Mooring Basin is designated for marina use.
- 3 The northeast section of Pier 1 is designated for mixed uses that support the Port's working waterfront, specifically Pier 1 maritime industry, the West Mooring Basin, and cruise ship operations.
- 4 The southeast section of Pier 1 is designated for a hotel and public market oriented to the West Mooring Basin.
- 5 The area surrounding the south end of the West Mooring Basin is designated as a "fishing village," a public waterfront open space with support services for sport fishing and the marina, and visitor amenities.
- 6 Three parcels east of the fishing village are designated for mixed uses that support the Port's working waterfront.

7 The land and pier extending into the river continue to be designated for the Cannery Pier Hotel (no change to existing use).

8 A network of public streets provides interconnected circulation and access to destinations inside and outside the District.

9 A pedestrian network provides safe, intuitive, and pleasing connections and prioritizes public access and views to the river.

Demonstration Plan

The Demonstration Plan indicates how the framework could be expressed and envisioned; it provides a depiction of one possible scenario, brought to fruition. New circulation, buildings, and open spaces are represented realistically so that the plan serves as a useful reference to assist subsequent planning, development, and design efforts. It also provides a visual index for the Plan Elements, in a successful arrangement.

Core elements of the Demonstration Plan are:

- A system of waterfront pedestrian circulation consisting of the Pier 1 Walk, Footbridge, and West Mooring Basin Boardwalk
- A new hotel replacing the existing Astoria Riverwalk Hotel, built on land and oriented to minimize obstruction of public view corridors to the river.
- A Market Hall that offers fresh fish "right off the boat," produce and goods from local vendors, food and drink, flexible community space, and covered outdoor areas. The Market Hall is the social and commercial hub of the district, a melting pot of locals, waterfront workers, and visitors.
- The Fishing Village, a collection of small buildings and public amenities that are an extension of the West Mooring Basin, establishing a destination that brings people together by the water.

FRAMEWORK PLAN

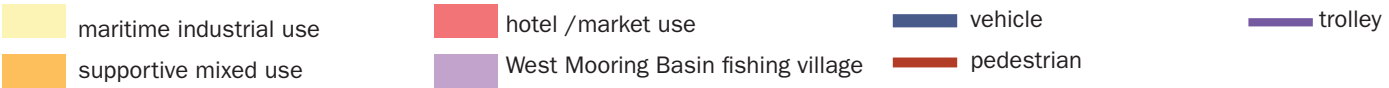
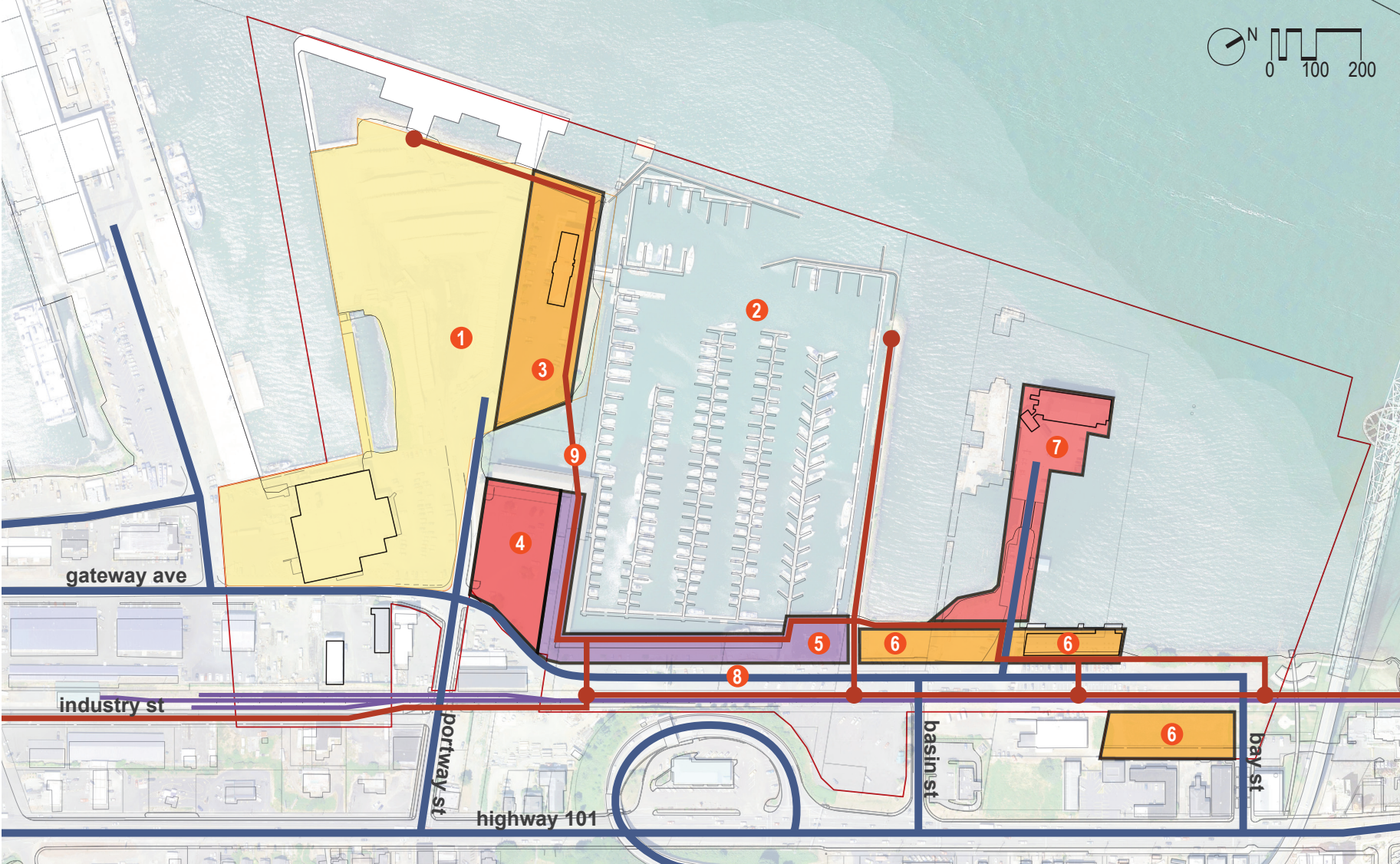


Figure 1: Framework Plan

DEMONSTRATION PLAN



Figure 2: Demonstration Plan

- Industry Street, a new street connecting Portway Street, Basin Street, and Bay Street. Designed as a two-way “parking street” with perpendicular parking on both sides.
- Improved Riverwalk Trail, with lighting, wayfinding signage, and safe connections to the waterfront destinations.
- Two new mixed-use buildings that provide space for businesses that support the Port’s working waterfront commerce and character. These could include light manufacturing and incubator space, maritime professional offices, food and drink, and small retail spaces.

Other plan elements include:

- A new observation tower
- Cruise passenger transportation improvements
- Street connections and upgrades to Portway, Basin, and Bay Streets
- District signage program

In addition, the Master Plan includes recommendations for developing Port identity, other transportation improvements, and utility infrastructure considerations.

Zoning Considerations

A set of code amendments is required to make implementation possible. While the Master Plan does not prescribe specific changes to the City’s Development Code, it outlines potential differences between the Plan Elements and what current zoning allows.

The existing zoning framework imposes significant challenges to new development within the District.

The District encompasses five base zones from the City Development Code, which establishes allowable and conditional uses and basic standards for development with each zone.

This Master Plan recommends that the City of Astoria adopt a simplified framework of development standards to enable progress toward the waterfront vision and goals established in this document, through its approval and affiliated zoning amendments.

Implementation Strategy

Implementing the Master Plan will take the concerted effort of multiple parties in writing grants, securing capital funding, convening stakeholders, and attracting site users. The purpose of this Implementation Strategy is to outline the steps to be taken to realize the vision of the Master Plan

The framework for implementation of the Plan is composed of three components:

- **Set the Table** (Zoning Changes and Horizontal Development of public infrastructure—streets, sidewalks, utilities—that will support the desired uses on the site)
- **Attract Commercial Development** (hotel, mixed-use, and commercial facilities)
- **Attract Industrial Development** (maritime-related industrial facilities)

The plan recommends that the Port construct horizontal development first, followed by the commercial and industrial tracks that can be executed entrepreneurially dependent on the market and opportunities.

Each component follows three steps: 1. Identify funding sources and define and engage stakeholders; 2. Fund-raise and plan; 3. Construct improvements.

To pay for planning and capital costs of development, funding sources and programs administered through federal, state, and local governments are available. The Master Plan provides guidance on matching funding opportunities to various steps of the horizontal, commercial, and industrial development tracks.

Early Wins

The transformation of the waterfront envisioned in the Master Plan will take the concerted efforts of multiple entities over time. To draw attention to Port’s vision, demonstrate commitment, and instigate progress, it is prudent to initiate this process with some “early wins” that are relatively simple to accomplish and begin the momentum of change that helps to build excitement. The following steps offer tangible benefits to the Port and community that will signify improvement and help attract private investment to the waterfront:

Replace the Chinook Building with interim uses such as food stands, picnic tables, and fish cleaning stations.

Implement Riverwalk Trail lighting and wayfinding.

Promote the Port’s identity through a branding program with pilot installations of signage around the West Mooring Basin.

Improve seasonal cruise facilities to encourage passengers to enjoy Astoria, including wayfinding signage, transportation options, and seasonal market facilities.

Improve access, availability, and amenities within the West Mooring Basin.



1 INTRODUCTION

Background

Partners

Study Area

Process

Master Plan Goals

Waterfront Vision

BACKGROUND

Astoria is the oldest American settlement west of the Rocky Mountains, dating to 1811 when John Jacob Astor established an outpost for the fur trade. Prior to this, the land was first home to the Clatsop people, Chinookan-speaking Indigenous Americans who lived in several villages along the southern bank of the Columbia River. The Corps of Discovery led by Meriwether Lewis and William Clark concluded its momentous exploration of the west in Astoria.

From earliest days, Astoria's economy and culture have been centered on the Columbia River. The Astoria waterfront was the home of canneries and fish-processing related businesses, providing good paying jobs to generations of Astorians. But over the years, this industry has transitioned. The Port of Astoria continues to be the home of several large fish processors which have become more mechanized while continuing to provide hundreds of jobs and playing a vital role in the County's economy. In recent decades, Astoria has experienced considerable economic success, including new development along and near the waterfront. The establishment of the Cruise Ship terminal which welcomes thousands of visitors annually to Astoria, is one example of this success as is the boat repair facility on Pier 3. Many of the properties within the District represent an opportunity to build on other positive developments nearby. The Port and Commission conceived of the Port of Astoria Waterfront Master Plan as an important step in the emergence of a new economic dynamism for the Port of Astoria and the community, with the Port's waterfront recapturing a pivotal role in that dynamism.

Astoria retains its physical authenticity and its extraordinary position near the mouth of the Columbia River. Astorians pride themselves on their heritage and are careful to preserve that identity as the City and its economy evolve. While proud of the rich architectural legacy of the 19th and early 20th centuries, Astorians insist that their city is "pretty and gritty." That is to say, Astoria's heritage is as much about the hard work, the canneries, the mills, and wharves, as it is about the treasured Victorian mansions in the hills above Downtown. And, while welcoming visitors and

newcomers to their city, Astorians are proud of their community slogan "Astoria for Astorians." New plans and new investments are intended to benefit Astorians, whether longtime residents or newcomers, rather than only serve the interests of outside investors and visitors.

No place in Astoria better captures these distinct traits of the community and its people than the waterfront. While the economic base of Astoria has changed over time, the waterfront remains a vital center of the City's economic and cultural life. From the waterfront, one can enjoy breathtaking views of the mouth of the Columbia River, the dramatic Astoria-Megler Bridge connecting Oregon and Washington, the hills of Pacific County to the north, and the broad river channel to the east. In closer view, there are the old wharves and piers, the marina with its diverse mix of fishing boats, and the vernacular architecture from generations past.

As important as the waterfront is to Astoria's history and identity, much of the District is available for revitalization, characterized by as-yet unfulfilled opportunity. Much of the 64.6-acre District is open or under-developed (of the total acreage, 27.8 acres are land or over-water buildings; the remainder is open water). There is tremendous potential in this area for new industrial and supportive development knit together by attractive water-related open spaces and trail connections to other parts of the City, development which will also serve to support and improve the Port's fiscal position over the long term.

This part of the Port of Astoria's industrial waterfront has untapped potential and myriad opportunities for significant new investment. It currently falls far short of its potential and the current conditions make it difficult to capitalize on the opportunities. The Port, Commission, and City all recognize these realities and they are committed to the strong partnership that supported the planning effort and will help to ensure the success of this area's revitalization. This Master Plan represents a unique opportunity to promote not just the immediate vicinity of the industrial waterfront, but truly the entire region's economic vibrancy.

PARTNERS

This effort represents a collaboration among several agencies, private businesses, private property owners, and the community key members of the Partnership are as follows:

The Port of Astoria

All of the District falls within the jurisdiction of the Port of Astoria. The Port was established in 1910 and is administered as a Special District under Oregon Revised Statute 777. The Port provides a spectrum of transportation services and related lines of business, including marine, marina, industrial, and aviation facilities (the latter is located in nearby Warrenton). Within or near the District, the Port offers services to commercial and recreational boaters at its two marinas and boatyard, and to commercial and cargo vessels; an emergency pier for passing ships; and piers for fish processing, cruise ships and research vessels. The Port has industrial and commercial leasing opportunities on its properties at the Airport, Skipanon Peninsula, and waterfront locations.

The Mission of the Port of Astoria is “to generate economic growth and prosperity in a safe and environmentally responsible manner for its citizens through creation of family wage jobs and prudent management of its assets.” As noted in its recently completed Strategic Plan, for the next 2 to 4 years the Port will be focusing on restoring financial sustainability, addressing the rehabilitation needs of its aging infrastructure and fostering public trust.

The Port is seeking support in its long-term financial stability through the District’s revitalization. The Port is interested in exploring ways to better capitalize on the West Mooring Basin marina, the cruise ship terminal, and other existing developments. The Port takes a long view of the area and even of its mission as an important component of the region’s economy.

The Port’s primary representative for the Plan are its Executive Director Will Isom and Deputy Director Matt McGrath.

Astoria Development Commission

The Commission oversees urban renewal efforts in Astoria, using tax increment financing to fund new investments which stimulate revitalization in the City’s two Urban Renewal Areas. The District in its entirety falls within the boundaries of the 205-acre Astor-West Urban Renewal Area. The Urban Renewal Plan was established in 2002, with a maximum indebtedness of about \$9.1M.

The Commission’s primary representative for the Plan is its Executive Director Brett Estes. The Commission has also retained the services of two consultants to assist Mr. Estes: John Southgate, a redevelopment consultant who served as the Project Coordinator for the Plan; and Elaine Howard, an Urban Renewal consultant who provided advice to the partners and the Master Plan team.

City of Astoria

Amongst other responsibilities, the City of Astoria oversees the zoning regulations that steer new development in the City, including the District. Unique to this effort, the City has directly partnered with the Port to collaborate on the future of this part of the waterfront. It also bears ultimate responsibility for infrastructure investment, even when those investments are funded by other entities such as the Commission, the Port, or outside authorities. The City was represented by City Manager Brett Estes and Community Development Director Meg Leatherman.

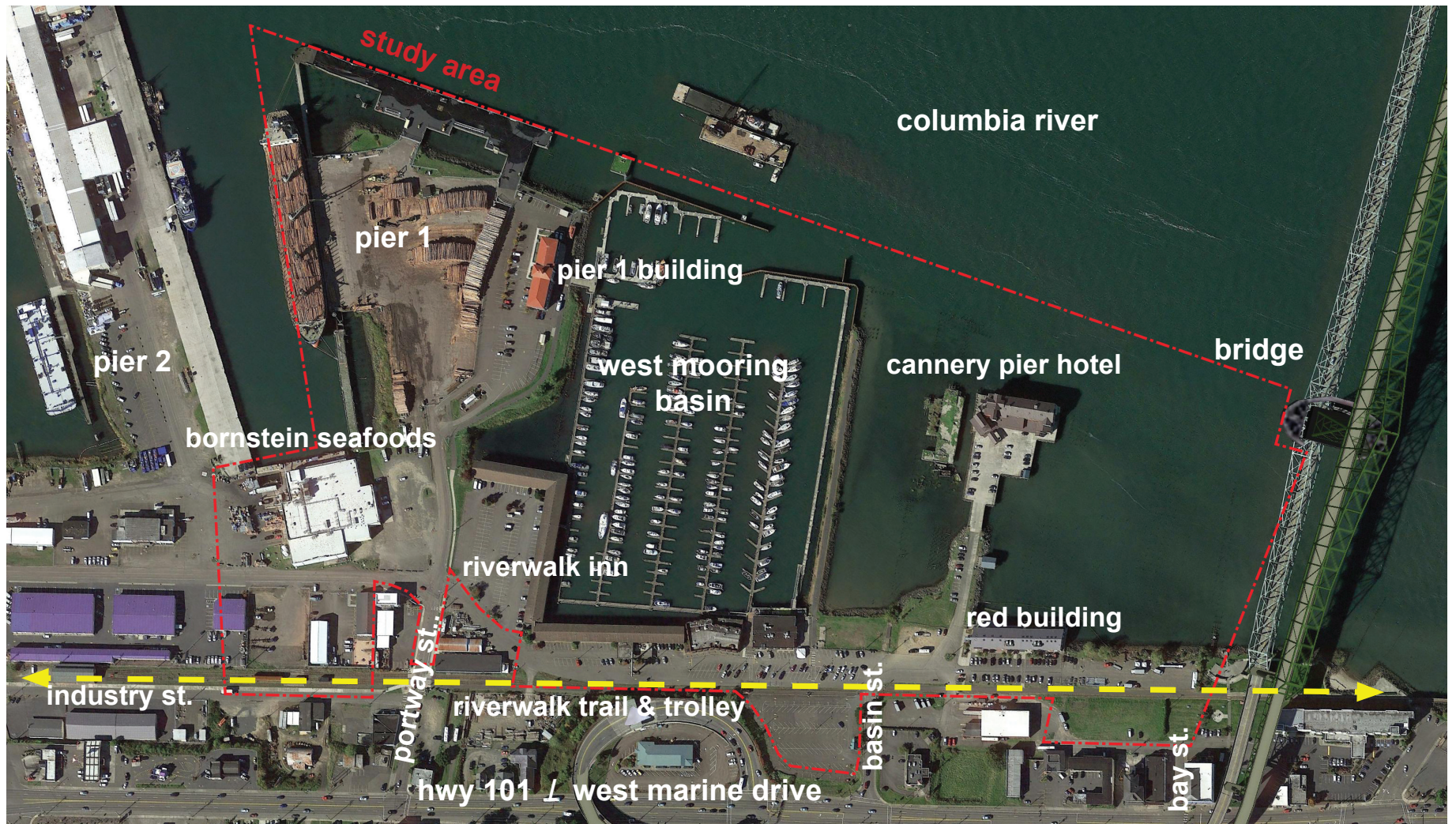


Figure 3: Study area (District)

STUDY AREA

The study area (District) is an industrial waterfront site along the Columbia River, a mile and a half west of downtown Astoria, just west of the Astoria-Megler Bridge. Of the District's 64.6 acres, approximately 25 acres are on land, above the top of bank. The remaining site is open water or over-water structures, including buildings, piers, and docks.

The District is comprised of Pier 1, the West Mooring Basin (marina), and several building lots connected by a series of paved streets and parking lots. The Riverwalk Trail, a public multi-use trail, and the Astoria Riverfront Trolley, an active streetcar line, utilize a 50-foot wide right of way administered by Astoria Parks and Recreation, at the southern edge of the District. Three municipal streets, Portway Street, Basin Street, and Bay Street, enter the District from the south. Industry Street and Gateway Avenue, Port streets, enter from the west.

The study considered factors beyond the project boundary, including urban context, transportation, and local and regional economic conditions and opportunities.



Figure 4: Study area in context

PROCESS

The Port of Astoria Waterfront Master Plan was developed over a six-month period in 2021, following a process outlined by the Port and City.

Throughout the study and development of the Port of Astoria Waterfront Master Plan the consultant team reviewed their progress with the Project Management Team (PMT), at biweekly meetings.

A Project Advisory Committee (PAC), comprised of City and Port staff, stakeholders, and members of the public appointed by the Mayor, provided guidance at key points in the process, offering both broader perspectives and deeper knowledge of the District, economic and technical factors influencing the Port of Astoria Waterfront Master Plan, and the interests of the community. The PAC participated in three meetings which consisted of planning team presentations and discussion and provided input and recommendations as well as detailed review of the final Port of Astoria Master Plan and Implementation Strategy. PAC meetings were held virtually (online), hosted by the City and open to the public.

See the title page for the membership lists of both the PMT and PAC.

Community Engagement

Community engagement included three means of communication and input. Project updates were provided on the City of Astoria's project web page. These included notifications of upcoming meetings, Project Advisory Committee (PAC) meeting presentations and summaries, and a summary report of stakeholder interviews. Additionally, the City hosted two Public Forum events, virtual (online) presentations with opportunities for participants to ask questions and provide feedback about the study's progress and preliminary and preferred alternatives. Recordings of the Public Forums were also posted on the project web page, with opportunities for the public to post written comments and questions about the material. Public feedback was recorded and considered in subsequent planning work and is summarized in this document. Complete public comments are

provided in the Appendix.

The Port of Astoria Waterfront Master Plan is the product of four primary tasks led by the planning team during the study, summarized below.

Review of Background and Existing Conditions

Following the Project Kickoff and site walk with Port and City staff, the team reviewed relevant background documents, analyzed existing site conditions, economic considerations, code and policy framework, existing buildings, and utility infrastructure.

The planning team conducted Stakeholder Interviews with individuals having special knowledge about the Port's waterfront and interest in its future, selected by the City and Port. The planning team hosted a series of stakeholder meetings with individuals and groups to discuss the project, solicit feedback, and build a better understanding of the site and its context.

The purpose of this task was to provide a characterization of the area in the context of current assets, opportunities, liabilities, and challenges, to inform subsequent planning work and identify development opportunities and constraints.

Chapter 2 summarizes the key findings from this task.

Plan Alternative Concepts

The planning team studied a range of preliminary plan concepts and developed two schemes for the District. Reflecting insights from site assessments, stakeholder interviews, and the first Project Advisory Committee (PAC) meeting, the concepts presented options for public access and amenities, improved connections through the District, new

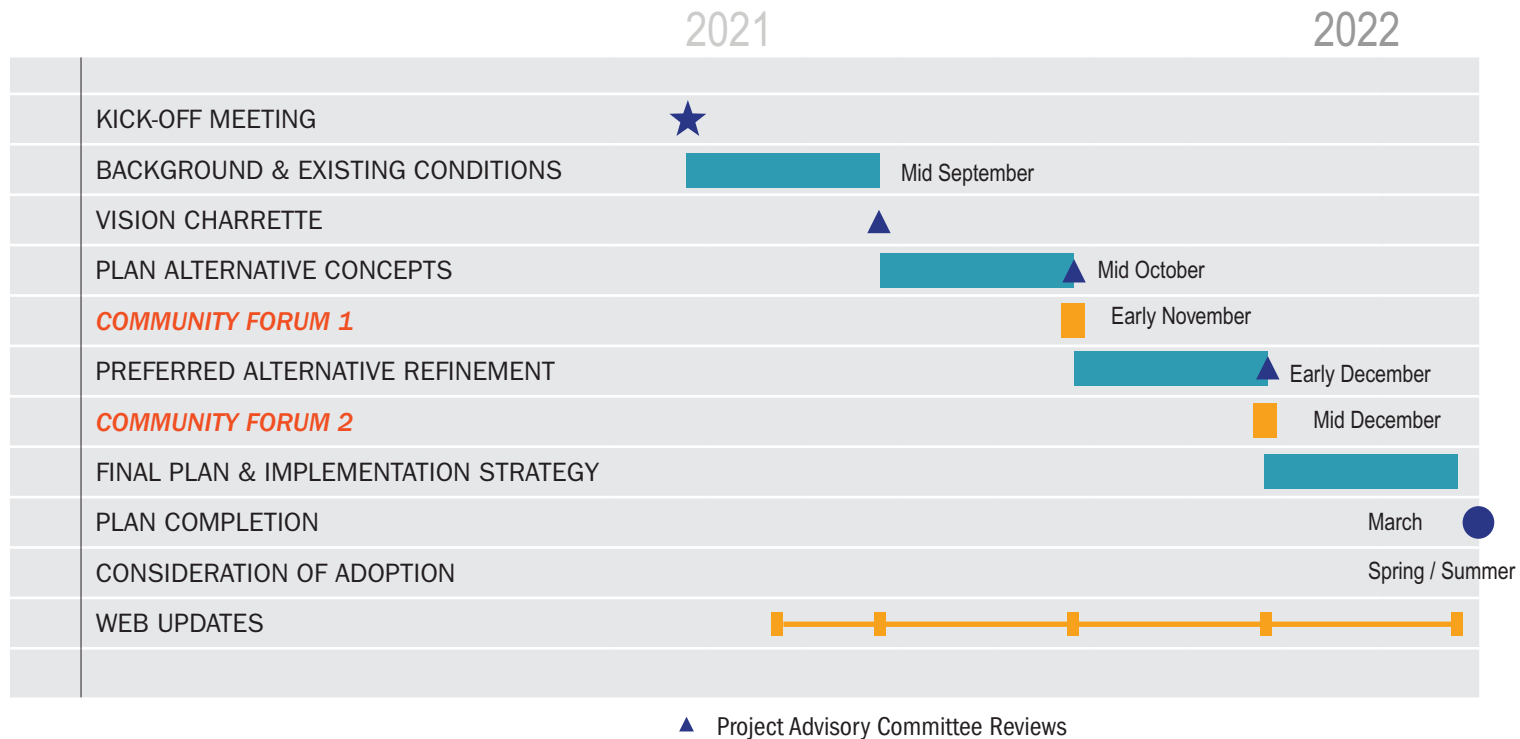


Figure 5: Process

buildings, and increased maritime industrial uses.

The purpose of this effort was to explore multiple ways to address development potential and demonstrate alternative future scenarios to solicit input from the Project Advisory Committee (PAC Meeting #2) and the public (Public Forum #1) to steer the Master Plan toward the best solution.

Chapter 4 summarizes the results of this task.

Preferred Alternative Refinement

Assimilating feedback on the Plan Alternative Concepts from the Project Advisory Committee and the public, the team prepared a Preferred Alternative concept plan for the District, which incorporated aspects

of both preliminary concepts, accommodations for new information, and depicted the recommendations in greater resolution. In this task, the team also developed a preliminary implementation strategy which recommended changes to the existing zoning code, defined development tracks with sequential steps for each, identified potential funding sources, and suggested “early win” opportunities to lead off the implementation process. The Preferred Alternative was presented to Project Advisory Committee (PAC Meeting #3) and the public (Public Forum #2) for feedback, to inform the final task.

Final Plan and Implementation Strategy

The process resulted in the Port of Astoria Waterfront Master Plan

MASTER PLAN GOALS

Master Plan Goals were established early in the project, to guide the planning work and provide criteria for a successful final product. The team developed the following goals in collaboration with the Port, City, and Project Advisory Committee.

1. Strengthen Astoria's working waterfront with a mix of uses and ongoing private investment.
2. Make a place for Astorians. Establish long-term community support.
3. Contribute to the financial stability and prosperity of the Port, City and region.
4. Support living wage jobs.
5. Establish an enduring framework plan that is flexible to new opportunities and resilient to changing economic conditions.



WATERFRONT VISION

Prior to work on spatial planning concepts, the team established four Core Values to support a bold yet pragmatic vision for the District. These values were embraced by the Port, City, and Project Advisory Committee and utilized throughout the process, to focus the planning recommendations.

Working Waterfront. A place where the work gets done.

Real Astoria. A connection between the city's heritage and its future.

Public Access. Everyone is welcome.

Adaptability. A place that can adapt over time while maintaining its identity.



2 EXISTING CONDITIONS AND ASSESSMENTS

Overview

Economic Considerations

Existing Buildings

Existing Zoning Framework

Circulation

Parking

Utility Infrastructure

Tsunami Flood Risk and Sea Level Rise

Development Opportunity

OVERVIEW

As a basis for the planning study, the team reviewed and assessed economic conditions and trends and the physical characteristics, conditions, and functions of the District and its surroundings. This chapter summarizes key findings, along with a description of the City's zoning framework as it relates to development potential of the Port's waterfront. These findings informed subsequent development of the planning recommendations within this document.

The District is comprised of three general areas corresponding to use.

The first is a large industrial zone occupying the majority of Pier 1, the easternmost industrial pier of the Port's Central Waterfront. Pier 1 is home to the Port's Pier 1 Building and Bornstein Seafoods.

On the east side of Pier 1 is the West Mooring Basin marina, which provides moorage and fuel for recreational boats, fishing boats, guide boats, and commercial vessels. The West Mooring Basin currently has 335 slips with capacity for over 400 by utilizing side-tie and lineal-tie, as well as a transient slip on a first-come, first-served basis.

Surrounding the West Mooring Basin is a border of mixed uses, namely two hotels (the Cannery Pier Hotel and Astoria Riverwalk Inn), the Red Building, and some smaller

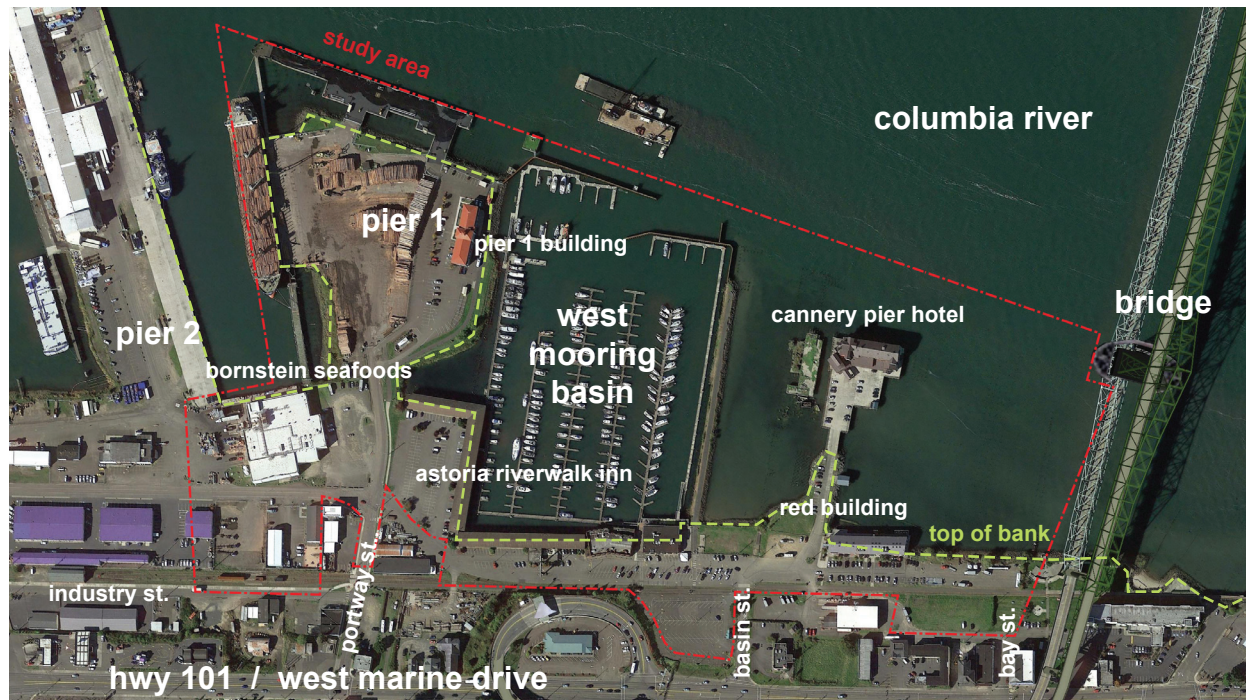


Figure 6: Study area

buildings and parking areas. The West Mooring Basin is the center of this district, closely connected to Pier 1 and the focal point for the buildings that surround it, in terms of their uses and identity.

The Port of Astoria is a port of call for large cruise ships traveling the Pacific Coast. Up to 40 times a year from April to November, thousands of passengers disembark onto Pier 1 each time a ship lands—an intensive use of this side of the District would benefit from a more welcoming setting and better circulation than exist today.

In summary, the District encompasses a variety of existing uses, buildings, and businesses within three primary areas that represent the extent of its current organization.



Figure 7: Study area in context; Piers 1, 2, and 3



Figure 8: Cruise ship docked at Pier 1 (West Mooring Basin in foreground)



ECONOMIC CONSIDERATIONS

Based on evaluations of existing economic studies, the following is a summary of trends, issues, and constraints related to demographic changes, tourism development, economic barriers, and small business needs in Astoria, organized around strategic questions to consider throughout the planning process for the Port of Astoria Waterfront Master Plan.

How might demographic changes impact thinking about development trends in the District?

- New development should consider the needs of an aging population. Clatsop County is attracting retirees, and the fastest growing age group has been in the 65 years and older age group. Walkability and aging in place are important factors that Baby Boomers consider when thinking about a place to live.
- To attract younger workers, Astoria should focus on how it provides urban amenities, like a vibrant waterfront and housing that is affordable to workers entering the workforce. Since 2000, the number of residents 24 and younger has declined. Most members of Generation Y are interested in living in a place with urban amenities. If the area is unable to attract enough young workers, the region's economic resiliency is in jeopardy. Additionally, retirements will affect workforce development and training needs in the coming years. ¹
- Incomes are lower than in other areas. Therefore, to be viable, new offerings on the waterfront may need to serve both visitors and locals. Additionally, higher wage jobs may be an important priority.
- Resident incomes have fallen and are stagnating at 80% of the median income in Oregon. As the region's economy experiences growth in certain industries, the regional median income (\$47,337) has fallen below Oregon's median income (\$50,521).” ²

The following documents were evaluated:

- *Port Strategic Business Plan, 2019*
- *Advance Astoria Economic Development Strategy, 2017*
- *Advance Astoria Economic Opportunities Analysis (EOA), 2017*
- *NW Oregon Comprehensive Economic Development Strategy, 2018-2023*
- *North Coast Economic Recovery Strategy, 2020*
- *Civic Dossier – Civilis Consultants*

“Lack of workers is already limiting expansion and development of North Coast fish processors and staffing restaurants and retail in the visitor industry. Trucking and the construction trades, two vital industries to NW Oregon’s economic sustainability are losing workers to retirement.”

- NW Oregon 2018—2023 Comprehensive Economic Development Strategy (CEDS)



There are 139 identified entrepreneurial establishments in Astoria. They report average revenues of about \$70,000 annually for a total of more than \$9.5M in 2015, and on average they occupy less than 1,800 square feet of space to operate, which means that the entire sector leases nearly 250,000 square feet of space within the City.

- The area continues to attract new residents and is forecast to grow. In Astoria, nearly 12% of all residents lived outside Clatsop County or outside the State of Oregon 12-months prior. These new residents will be a source of demand for housing and retail uses. ³
- The waterfront could contribute to local workforce training efforts as employment is forecast to continue growing. Employment in Astoria will grow by about 1% annually, adding about 1,400 net new jobs by 2040, with the largest number of new jobs in health care and social assistance. ⁴
- Educational attainment is lower in NW Oregon than statewide, but community colleges help fill in workforce skills gaps. ⁵ Development at the waterfront could build on Clatsop Community College and Small Business Development Center efforts to coordinate apprenticeship programs with local employers and high school youth. ⁶

Based on studies to date, how can the District best serve Astoria's small business community?

- The Waterfront district can help fill the gap on needed affordable commercial space. As businesses scale up, local economic development plans to date have concluded that it is extremely difficult to find available and affordable commercial space. Small businesses occupying less than 1,800 square feet can help activate the waterfront district. ⁷
- Centralized business resources, such as a maker space, resource center or incubator may help develop a supportive entrepreneurial ecosystem. The Advance Astoria Plan cites turnover and high failure rates among small businesses downtown, and indicated that “a testing ground (e.g., a maker space), programs or city-sponsored or supported business training could improve the prospects for entrepreneurs.” ⁸

- Provide flexibility in zoning regulations to bolster Astoria’s existing business base, which provides a strong foundation to promote local industries. The waterfront could provide spaces to showcase the City’s existing makers and producers, combined with the existing service delivery system in NW Oregon. ⁹ However, many of these uses span both retail and industry, which is not always compatible with current zoning.
- Specific physical improvements can help to activate business districts, including better active transportation connections from Uniontown to downtown and a greater focus on Astoria’s gateways into town. ¹⁰
- Build on the energy from the proposed food hub in downtown Astoria. The Astoria Food Hub is seeking to redevelop the former Sears Hometown Store as a food hub that would serve as a retail, processing, storage and distribution hub for local food producers. ¹¹ There could be an opportunity for a complementary use on the waterfront, with a focus on seafood.

What are key tourism trends that this Master Plan should account for?

Continued increase on tourism, with tight labor markets:

- Tourism and service industries already account for a third of the region’s employment and are likely to continue to be key industries. ¹²
- Labor shortages have been creating tighter markets, even with annual job growth approaching three percent. ¹³

Focus on experiential travel:

- With new trends in visitors seeking interpretive and educational experiences, the waterfront plan should incorporate these elements into developments in the district. This site could serve as an anchor for these experiences, alongside other key north-coast sites like the Columbia River Maritime Museum, Tillamook Forestry Center, Tillamook Creamery, and a planned Estuary Discovery Center in Garibaldi. ¹⁴



“First, focus on encouraging growth in local companies over recruitment. And second, create new opportunities that add value to current industries.”

- Civic Dossier, Civilis Consultants



“The growth of craft brewing in NW Oregon is also benefiting the region’s tourism industry, providing an attractive amenity for visitors to the area.”

- North Coast Economic Recovery Strategy

- Craft brewing, distilling, and other specialty manufacturing can offer unique opportunities to leverage existing industries and opportunities that attract visitors, take advantage of the traded sector and provide employment opportunities for residents. There are nearly a dozen breweries operating in the region that are exporting products all over the Pacific Northwest.

A changing cruise industry:

Astoria is an effective port-of-call for the Pacific Northwest cruise lines. An additional competitive advantage is having an accessible and supportive local/regional tourism sector to greet passengers.

- The Port has seen a continued rise in the number of cruise ships docking in Astoria over the last 10 years, which was temporarily halted by the COVID-19 pandemic. In 2019, the Port welcomed 19 cruise ships. (Prior to the COVID-19 pandemic, the Port was expecting 31 cruise ships for 2020, carrying close to 100,000 passengers and crew members.)¹⁵
- While the number of ships is not expected to increase over the next decade, the number of passengers is expected to double, and the size of ships is expected to increase. The Port also expects an increase in riverboat cruises. The Alaska to Pacific Northwest cruises were the second most popular route worldwide (after Caribbean destinations), based on 2017 data from the Cruise Line International Association (CLIA).¹⁶

What economic barriers should this Master Plan account for?

- Astoria remains a strategic location for commercial fishing fleets because of proximity and contracts with the local fish processors. However, the seafood processing industry is going through restructuring and its future stability is in question over the long term. Existing

seafood processors are expanding their facilities outside of Astoria due to worker shortages and infrastructure limitations.

- An important challenge for fish processors located at the Port is having a stable workforce. While this work is well-paid, it is seasonal and physically demanding. The industry is trending toward more automation which over time will replace some of the manual labor. In addition, the Economic Opportunities Analysis points to a potential decline in seasonal commercial fishing, with a transition of existing fishery infrastructure to support other industries through post-secondary research opportunities. ¹⁷
- Lack of affordable housing will impede the city's ability to attract and retain its workforce. Already, many of the city's planning efforts have uncovered that the lack of affordable housing for the County's workforce is limiting business expansion and recruitment.
- The ability to manage cruise ship infrastructure demands may impact Astoria's ability to compete for passenger ships. Per the Port's Strategic Business Plan, the Port's existing docking infrastructure cannot accommodate the larger ships that are forecasted. Even if the number of ships remains stable, doubling the number of passengers will require changes in how the city provides transportation and services. ¹⁸
- An aging population and a shortage of labor is limiting industry cluster growth and expansion for North Coast fish processors and the tourism industry. In addition, the Comprehensive Economic Development Strategy (2018-2023) noted that trucking and the construction trades are losing workers to retirement. ¹⁹
- While planning for redevelopment and new industry, the plan needs to consider its resilience to acute and chronic economic supply shocks related to earthquakes, severe winds, and flooding related to climate change. These events have the potential to displace residents, some of whom will not return to the region. ²⁰

“Direct competition from other ports or fish processing facilities is probably less of an issue than the shortage of seafood processing workers and the aging of Port infrastructure.”

- Port of Astoria Strategic Business Plan 2019

“Housing in Astoria is a huge barrier to attracting and maintaining professional caliber talent.”

– Advance Astoria Economic Opportunities

“Manufacturing, one of the better paying occupations in NW Oregon, has the third highest number of jobs. One of NW Oregon’s 2018—2023 strategic areas of emphasis is expansion of the manufacturing sector.”

– North Coast Economic Recovery Strategy

How does the county’s economic recovery planning play into this Master Plan?

- The four overarching clusters identified in the NW Oregon Comprehensive Economic Development Strategy 2018-2023 with immediate opportunity for development are: timber and value-added forest products, fisheries and seafood processing, agriculture and food processing, and tourism. ²¹Because several of these are relevant to opportunities at the waterfront, Astoria should consider the regional opportunities and support for development. Additional emerging clusters may also find support in development at this area.
- Targeted services or recruitment can take advantage of industries already in the area such as the marine sciences or manufacturing.
- Marine infrastructure improvements are critical to the economic recovery of the region, including:
 - Pier-related business activity and the private development at Tongue Point. ²²These activities will include: cold storage, boat construction, repair and maintenance, marine construction and repair, log export shipping and barging, and expanded seafood processing. Water resource constraints in the south may push agricultural production north and lead to increased demands on inland ports.
 - Reliable, high speed internet access to ensure continued growth in target industries, company relocation, or allowing for new workers from large metros to telework. ²³

How might increased cargo capacity on the Lower Columbia impact the District?

On the Lower Columbia, major deepwater port projects may increase marine cargo capacity over the next 20 years, including Columbia Gateway (Port of Vancouver), Barlow Point (Port of Longview), Austin Point (Port of Woodland), and North Port (Port of Kalama). Because of the Lower Columbia system's limited ability to accommodate larger vessels, if demand keeps pace with the capacity increases, Astoria will see increased vessel calls passing through the bar. This will increase the demand for captains, ship assists, limited repair/maintenance operations, supplies, and other services. Pier 1 is the most likely area within the District to connect with this activity, if there are industrial activities that could help to support this increased demand. While these large cargo ships would not dock at this site, there could be demand for office or manufacturing space to serve these needs.

The Port of Portland commissioned a study forecasting marine cargo demand ²⁴ as an input to their Economic Opportunities Analysis in 2020. Assuming that there is infrastructure to support the demand, the baseline forecast estimates that marine cargo volumes on the Lower Columbia River are expected to grow from 39.1 to 54.8 million metric tons from 2020 to 2040, an increase of almost 40% in the base case scenario.

What role should the District play in the broader regional economy?

The Astoria waterfront is at a crossroads of several major industries in Astoria and Clatsop County: tourism, fishing, and seafood processing. The Astoria waterfront is also witnessing transition from being natural resource-based to accommodating more tourism and recreation.

“The breweries and other related businesses can contribute to the City’s brand, and the City should work to strategically support what the brand is; what’s critical is an evolving attitude about the City’s identity, which is no longer fixed to timber and canning.”

– Advance Astoria EOA

This site has the potential to serve as a proving ground for businesses across several key “batches,” identified in the Advance Astoria Economic Development Strategy, including:

Microenterprises

- A key challenge to starting a business is finding the right space that is affordable. The District could provide spaces for businesses at multiple scales, potentially in the form of an incubator facility that may provide subsidized rents for startup and other businesses.

Seafood Processing

- Seafood processing at the Port is expected to remain a core industry sector as commercial fishing remains strong. The Port’s availability of deep-water piers and access to the Columbia River and Pacific Ocean meshes well with the trend toward industry consolidation of both the fishing fleets and fish processing. Fish processing is expected to remain an important industry on Port properties, especially given demand from China, which has increasingly demanded high value foods, including seafood sourced in the U.S. ²⁵
- Building upon the existing presence of Bornstein Seafoods, the District could provide additional seafood processing space, and additional retail spaces to showcase the area’s bounty. The seafood exports industry will likely continue to be an economic driver from the Port. Clustering related business at the District could take strategic advantage of existing uses.

Supporting Area Tourism

- While tourism is important to the economy, consideration should be taken for how this site can meet local residents’ needs, at the city and regional level. Uses that allow for cultural and educational experiences may be an opportunity to leverage and expand existing resources to

“Tourism is essential for retailers, and probably is inevitable as well, but we don’t want to become a monoculture of tourism; we want to be a good place to live that serves residents well.”

– Advance Astoria EOA

“Astoria’s powerful sense of place is one of greatest single assets to economic development and must be maximally leveraged; sensitive cultivation of Astoria’s brand, and linkages with façade and public realm improvements, signage and wayfinding projects, social media outreach and other placemaking efforts are important to future economic development.”

– Advance Astoria EOA

further develop a sense of place and capitalize on new tourism trends, including an expansion of special events. The site could provide a western anchor to the Riverwalk, with other attractions including the Columbia River Maritime Museum in Astoria.²⁶

Visitor Amenities

- Recreational uses factor into the city and region’s economic development toolkit. This site has the potential to provide recreational and service uses that make Astoria a pleasant place to live, including recreational pathways, access to marina infrastructure, gathering spaces, and outdoor eating areas.

Craft Beverage and Fermentation

- Astoria features several renowned breweries, most of which are clustered near downtown and on the waterfront adjacent to downtown. A western anchor brewery or distillery could be a viable option for this site, which could help to draw visitors and develop a further brand identity, sense of place and provide extended shoulder season work for residents. A key challenge to this development type will be the provision of water to the site.

Providing Housing

- Housing is a critical component to ensuring that Astoria remains competitive for new companies and residents. Providing affordable housing for workers within the city will be critical to supporting industry on the waterfront.

¹ North Coast Economic Strategy, 2020

² Port of Astoria Strategic Business Plan, 2019

³ Advance Astoria EOA, 2017

⁴ Advance Astoria Economic Development Strategy 2017

⁵ NW Oregon 2018-2023 CEDS

⁶ NW Oregon 2018-2023 CEDS

⁷ Advance Astoria EOA, 2017

⁸ Advance Astoria EOA, 2017

⁹ North Coast Economic Recovery Strategy, 2020

¹⁰ Civic Dossier, Civilis Consultants

¹¹ https://www.dailystorian.com/news/local/astoria-food-hub-raises-700-000-for-sears-building/article_3d083840-8b5b-11eb-9f49-b7a5d5dba622.html

¹² North Coast Economic Recovery Strategy, 2020

¹³ North Coast Economic Recovery Strategy, 2020

¹⁴ North Coast Economic Recovery Strategy, 2020

¹⁵ Port of Astoria Strategic Business Plan Update, 2019

¹⁶ Port of Astoria Strategic Business Plan Update, 2019

¹⁷ Advance Astoria EOA, 2017

¹⁸ Port of Astoria Strategic Business Plan, 2019

¹⁹ NW Oregon 2018-2023 CEDS

²⁰ NW Oregon 2018-2023 CEDS

²¹ North Coast Economic Recovery Strategy, 2020

²² North Coast Economic Recovery Strategy, 2020

²³ Advance Astoria EOA, 2017

²⁴ Portland Harbor Marine Cargo Forecast. May 2020. BST Associates. <https://popcdn.azureedge.net/pdfs/Portland%20Marine%20Cargo%20Forecast%202020%20FINAL.pdf>

²⁵ Advance Astoria EOA, 2017

²⁶ 2018-2023 NW Oregon CEDS

EXISTING BUILDINGS

The District includes several existing buildings. All are currently occupied, except for the Chinook Building.

- The Pier 1 Building is operated by the Port, who leases offices to several commercial tenants. It is known as a high-quality office environment within Astoria.
- Bornstein Seafoods fish processing facilities are located inside a large industrial building at the southwest base of Pier 1. It is a well-functioning facility which has received on-going upgrades over the years to improve its function. The building's direct connection to a dock for the commercial fishing trawlers provides a critical link between fresh seafood and processing.
- The Cannery Pier Hotel is a modern, luxury boutique hotel built over the water on historic piers where the Union Fisherman's Cooperative Packing Company once stood, between the West Mooring Basin and bridge, it is a well-known entity on the Astoria Waterfront.
- The Red Building is a renovated mixed-use building on piers over the water, housing a restaurant, event venue, and several professional offices.

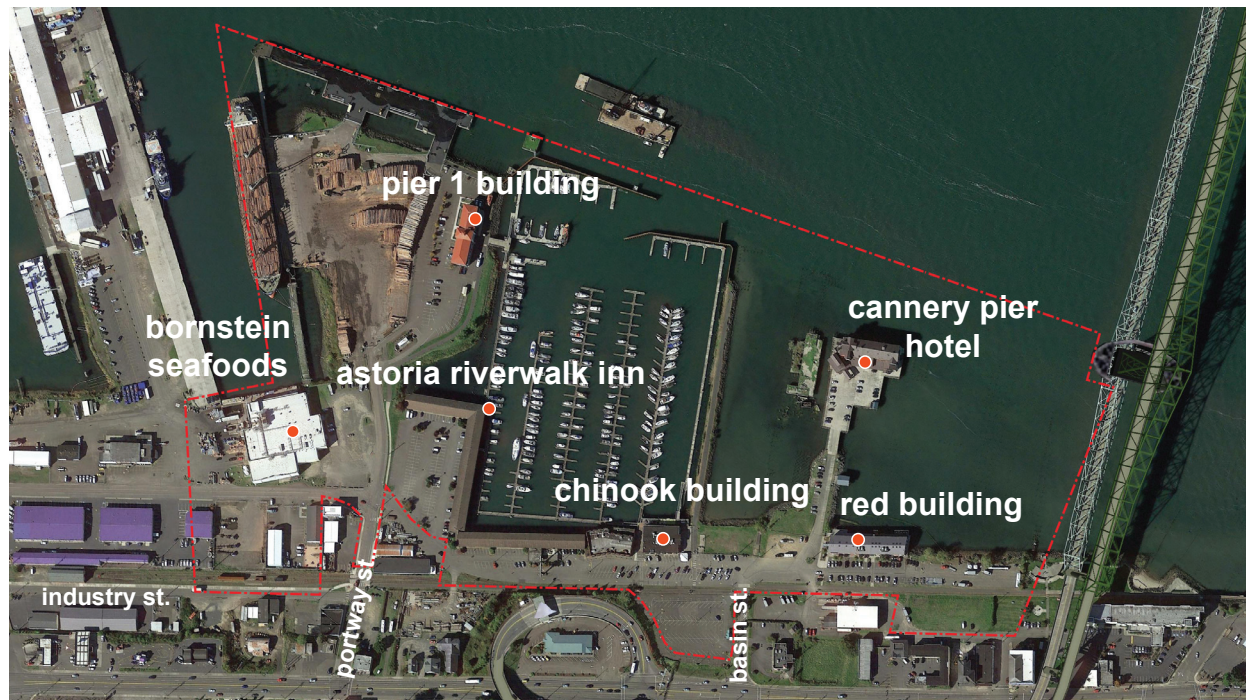


Figure 9: Existing buildings

- The Astoria Riverwalk Inn is an operating motel on piers over the water, overlooking the West Mooring Basin. It has been in operation for years and needs significant repair to remain viable.
- The Chinook Building is a small commercial building that was relocated to its current location on piers over the water at the southwest corner of the West Mooring Basin. The building was vacant at the time of the study, due to its poor condition.



Figure 10: Chinook Building (above) and Astoria Riverwalk Inn (below)

Building Assessments

The study included site observations of the Astoria Riverwalk Inn and Chinook Building and a review of architectural drawings made available to the planning team. Based on this information, the team's structural engineering and architectural consultants toured the buildings and provided opinions about their conditions and their long-term value as assets to the Port.

Observations of the Astoria Riverwalk Inn included numerous health, safety, fire code and accessibility issues. There were also operational concerns with the utilities. Without significant rehabilitation or renovation, the building will soon fall into disrepair.

Similarly, the Chinook Building exhibited extensive challenges that indicate the building will need a full renovation of the envelope, structural assessment, and repair. The mechanical, electrical and plumbing systems require upgrade and there are numerous health, safety, and fire code issues are present. The building no longer meets accessibility requirements.

While a further understanding of the extent and cost of necessary retrofits and repairs would require a detailed evaluation along with detailed inspection of the critical structural and code elements, it was determined that the combined cost of structural work, deferred maintenance, and ongoing maintenance of these over-water structures would exceed the return on investment, given their condition and limited revenue potential. It is likely that it would be less expensive to demolish the buildings and build new than to work around poor existing conditions.

The planning team recommended that further long-term investment in either building was not the best use of the Port's resources. The Astoria Riverwalk Inn is currently leased and could be viable through that period. The Chinook Building is recommended for removal due to its current closure and declining condition.

EXISTING ZONING FRAMEWORK

The District encompasses five base zones from the City Development Code, which establishes allowable and conditional uses and basic standards for development within each zone (see below for an overview of each relevant zone). In addition, several zoning overlays apply (see Figure 11).

The Bridge Vista Overlay (BVO) Zone adds regulations and constraints to emphasize water-dependent and related uses and encourages design that is compatible with the area’s historic and working waterfront character, protecting views and access to the Columbia River (see Astoria Development Code, Article 14).

Within the BVO are two additional overlays: a Non-Limitation Area, which allows for more building height and mass for over-water structures; and a Pedestrian-Oriented District, which establishes a unique set of allowable and prohibited uses.

In addition to these overlays, the Columbia River Estuary and Shoreland Overlay District (CRESO), includes areas in S-1 and S-2 Zones and within 50 feet of the estuary shoreline, which establishes additional requirements in protection of adjacent aquatic areas. These do not regulate building use or height but influence access, parking, and landscape requirements.

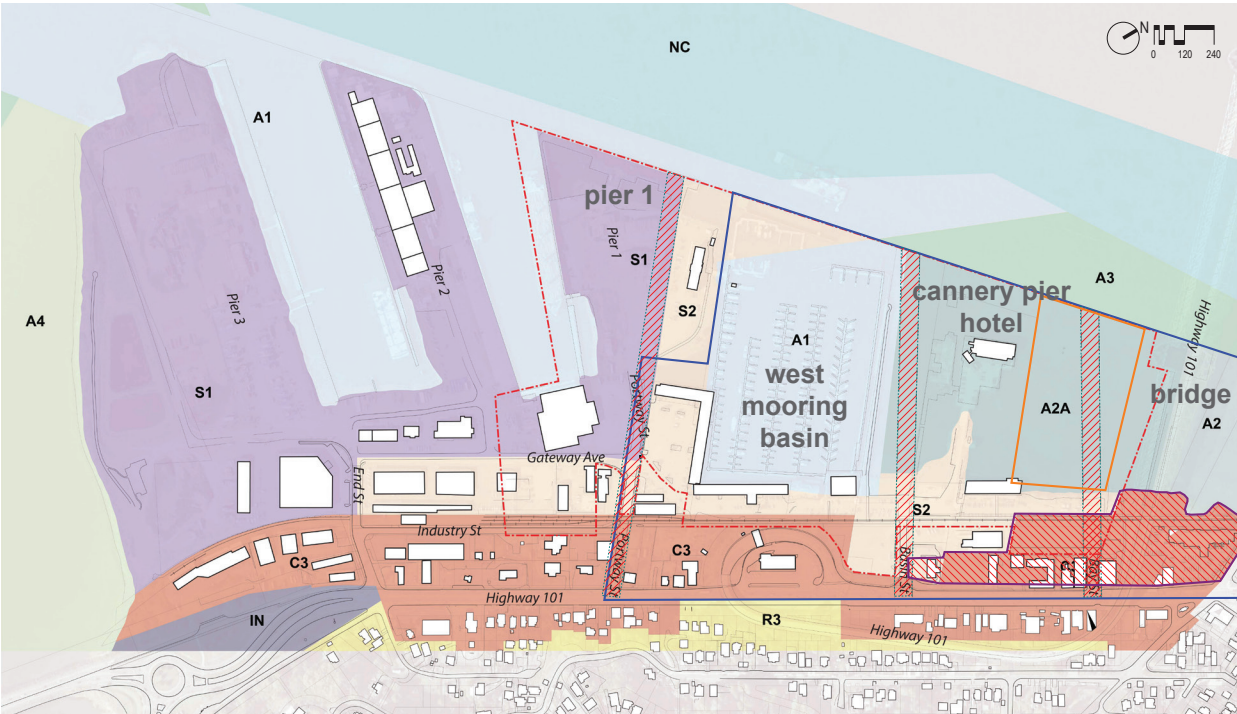


Figure 11: Zones and overlays



Finally, due to its proximity to the Uniontown Alameda National Historic District, parts of the District may be subject to Historic Landmarks Commission review during the permit application process for new construction.

A key implication of the Bridge Vista Overlay (BVO) Zone is the requirement for 70-foot-wide unobstructed view corridors at Basin Street and Bay Street. Both view corridors impact potential development sites, dividing them into reduced footprints.

In summary, the existing zoning framework imposes significant challenges to change within the District. Through the planning process, it has been acknowledged that the current zoning controls regulating the Port's waterfront have accrued incrementally, not as the result of a comprehensive plan for the future, are too restrictive, and should be assessed and amended as need to provide for a better and more integral condition.

The City Development Code establishes a Port of Astoria West Mooring Basin Plan District (see Figure 12), which provides a mechanism for adoption of modified development standards, unique to this subarea, due to special characteristics, as part of an approved master plan for future development.

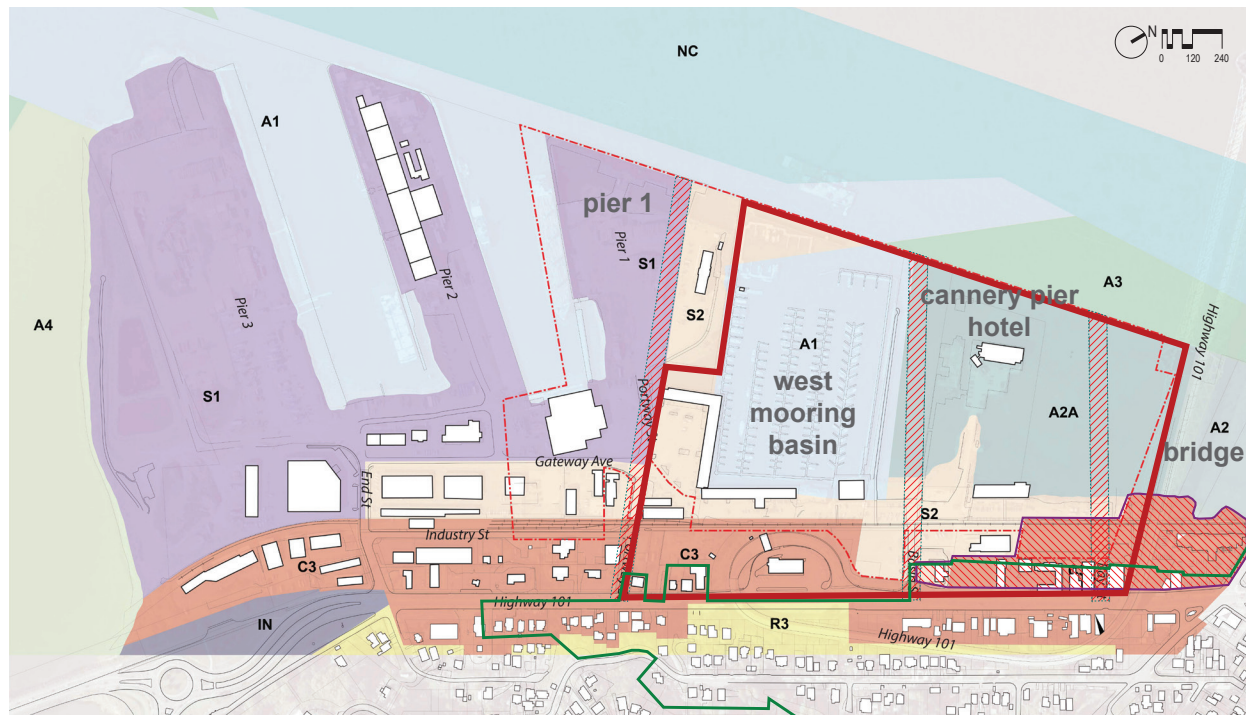


Figure 12: Port of Astoria West Mooring Basin Plan District

- Port of Astoria West Mooring Basin Plan District
- Uniontown Alameda National Historic District
- Pedestrian District
- View Corridor

USE ZONES IN THE DISTRICT

The following is a brief overview of pertinent features of the zoning code for each zone within the District, including elements affected by the Bridge Vista Overlay (BVO).

A-1 Aquatic One Development

- West Mooring Basin
- NOT allowed within the BVO: Eating and drinking; retail; office; indoor entertainment; new hotel (however, redevelopment of existing hotels is allowed)
- Height limits within the BVO: 28 feet, up to 35 feet (with 60-foot view corridor, public access, and upper-story step-backs)
- Gross floor area within the BVO: 30,000 square feet

“The purpose of the Aquatic One Development Zone (A-1) is to provide for the maintenance, enhancement and expansion of areas, activities and structures needed for navigation and for water-dependent industrial, commercial and recreational uses. Water-related industrial, commercial and recreational uses are also allowed where such uses are consistent with the purpose of this Zone.”

A-2A Aquatic Two A Development

- Overwater areas east of the West Mooring Basin, including the Cannery Pier Hotel site. (Not applicable to development opportunity sites in the District). *“The purpose of the Aquatic Two-A Development Zone is to provide for its redevelopment as a mixed-use area while permitting exclusive office use on piling supported structures. The mix of uses shall provide for public access where feasible.”*



S-1 Marine Industrial Shorelands

- Pier 1
- NOT allowed: Office; indoor entertainment; new hotel (however, redevelopment of existing hotels is allowed); conference; residential
- Height limits: no limit

“The purpose of the Marine Industrial Shorelands Zone is to manage shorelands in urban and urbanizable areas especially suited for water-dependent uses and to protect these shorelands for water-dependent industrial, commercial and recreational use. Uses of Marine Industrial Shorelands shall maintain the integrity of the estuary and coastal waters. Water-dependent uses receive highest priority, followed by water-related uses. Uses which are not water-dependent or water-related are provided for, but only when they do not foreclose options for future higher priority uses and do not limit the potential for more intensive uses of the area.”

S-2 General Development Shorelands

- Pier 1 and areas north of the Riverwalk Trail
- NOT allowed within the BVO: Office; indoor entertainment; new hotel (however, redevelopment of existing hotels is allowed); conference; residential
- Height limits within the BVO: 28 feet, up to 35 feet (with 60-foot view corridor, public access, and upper-story step-backs)
- Gross floor area within the BVO: 30,000 square feet

“The purpose of the S-2 Zone is to provide an area where a mixture of industrial, commercial, residential, public and recreational uses can locate. Uses which are water-dependent or water-related and other uses which would benefit from a water-front location are preferred. The S-2 Zone includes areas less suitable for marine-oriented uses than the S-1 Zone, such as shoreland areas with limited backup land.”

C-3 General Commercial

- Areas south of the Riverwalk Trail
- NOT allowed within the BVO: Light industrial without retail; single family or duplex dwelling.
- Hotel IS allowed.
- Height limits within the BVO: 28 feet, up to 35 feet (with 60-foot view corridor, public access, and upper-story step-backs)
- Gross floor area within the BVO: 30,000 square feet

“This zone is primarily for a wide range of commercial businesses, including most of those allowed in other commercial zones.”

Pedestrian-Oriented District (Any Zone)

- NOT allowed: Parking lot; conference center; light industrial without retail; hospital

CIRCULATION

The District is located along Highway 101 where it transitions to West Marine Drive leading east to downtown Astoria. Direct vehicle access is currently provided at Portway Street and Basin Street. Hamburg Avenue also connects to Gateway Avenue and Industry Street to provide access to the District from the west. Bay Street provides limited access to select destinations within the District. However, both Basin and Bay Streets are disconnected from much of the site; Basin Street terminates at a large parking area and Bay Street terminates at a narrow alley along the back of existing buildings. All streets within the District currently provide two-way vehicular travel.

Sidewalks are intermittent. Existing trails, like the Astoria Riverwalk, provide the best pedestrian connections through the District by creating a direct and wide travel path for pedestrians. Improved wayfinding, lighting and amenities would greatly benefit the use of this portion of the Riverwalk. Portway Street is currently missing sidewalks on both sides, sidewalks are only partially completed on the east side of Basin Street, and sidewalks are missing on the east side of Hamburg Avenue between Industry Street/Astoria Riverwalk Trail and West Marine Drive. Although sidewalks are provided on both sides of Bay Street, there is no direct connection between Bay Street and the

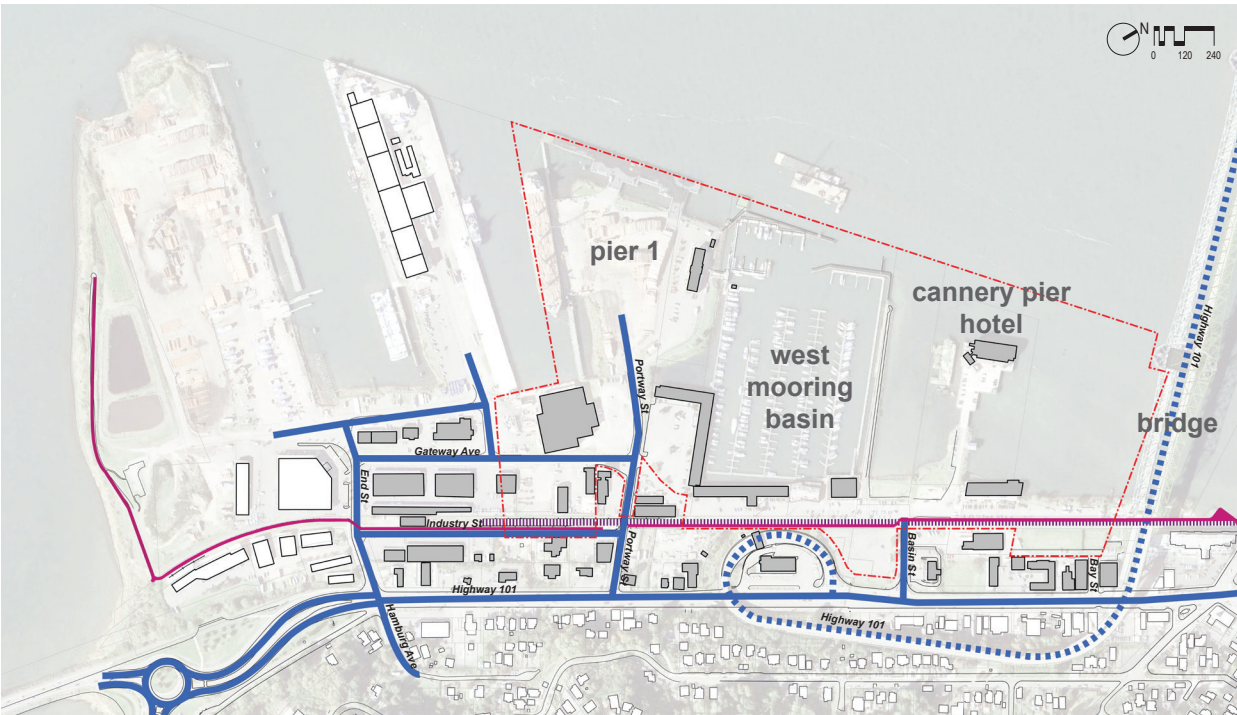


Figure 13: Existing circulation

Astoria Riverwalk Trail that does not require pedestrians to walk through a street/parking lot.

On-street bicycle facilities are limited within the District; today, there is only a northbound bicycle lane on Portway Street to the north of Industry Street. However, streets within the District tend to be low-volume, providing a relatively comfortable shared street environment. The Astoria Riverwalk Trail also accommodates bicyclists for a comfortable and safe, off-street bicycle facility, providing the best access to the District for cyclists. Westbound bicycle lanes do exist on West Marine Drive which could provide an alternative access route for cyclists. However, these lanes are typically narrow and can disappear prior to intersections, so they are not suitable for cyclists of all ages and abilities.



Figure 14: Riverwalk Trail (foreground) and large parking lot

In general, connections to and through the District are poor for motorized vehicles, pedestrians, and cyclists. It lacks a coherent network of streets and walks, which contributes to concerns about safety, wayfinding, visibility, and foot traffic, which are crucial both to attracting investment, business, and the public to the waterfront.

Additionally, both truck routes into the Port, at Hamburg Avenue and Portway Street, require difficult turns off the Highway, due to both intersection geometry and insufficient traffic signalization. While these intersections are outside the District boundary, it is noted that significant improvements are important to the Port's function. Planned modifications to West Marine Drive may also impact the function of the Port's access and should be carefully evaluated prior to implementation.

Therefore, it was recommended that the Master Plan provide improved connections for all modes of travel throughout the District, particularly from west to east between Portway Street and Bay Street, Intersection improvements outside the project area should be addressed in subsequent planning and design phases, to support the Port's goals and recommendations of the Plan. The Riverwalk should be improved as a welcoming connection to the site with improved wayfinding, amenities, and lighting.

PARKING

The Project Area provides approximately 800 parking spaces. Of these, approximately 200 are in public lots operated by the Port; 530 are in lots associated with buildings. 70 spaces are currently provided in informal or undefined areas that accommodate overflow parking conditions.

There is a marked change between utilization during the short sport fishing season, when parking lots are full, and the remainder of the year, during which there is a clear excess of available parking.

Existing parking areas currently cover the majority of the District, including on potential development sites.

Given the importance of supporting current businesses and the sport fishing economy, it is recommended that parking requirements be assessed relative to preferred land uses, and address the City’s development code requirements with creative strategies such as flexible, shared lots and off-site overflow parking opportunities to address seasonal surges in demand as well as potential adjustments to parking requirements.



Figure 15: Existing parking areas

- Port West Basin Lots
- Dedicated Lots
- Informal Parking Areas

UTILITY INFRASTRUCTURE

The following is brief description of the sizes, layout, and availability of critical utilities for the District based on available data provided by the Port of Astoria.

Domestic Water

Water service is currently available throughout the District in trunk sizes of 6-8 inches. The main water source is a 12-inch cast-iron main in Highway 101. Three main connections are made to the site from the 12-inch main line, two 8-inch lines, and one 6-inch. Each water connection from the 12-inch trunk in Highway 101 appear to be non-looped, dead-end lines. The 8-inch line on the west side of the District is looped with a 6-inch connection from the west, which also stems from Highway 101.

The Pier 1 area is fed with an 8-inch line that runs the length of the pier. This line serves five fire hydrants, three of which are within the pier area, and the services to each of the boat slips, ranging from 4-inches down to 1-inch.

The sizes of lines are sufficient for future development. However, the system would be more resilient and healthier if the system was updated to be looped. This is done to avoid water stagnation in pipes, aid in increasing potential fire flow, sustaining water quality, and reducing pipe corrosion.

Storm Water

The storm system in the District has five main basins, each with one or multiple discharges into the Columbia River. The main discharge points include a 24-inch PVC, 16-inch corrugated metal pipe, a 21-inch corrugate metal pipe, and five others of unknown size and material. In order to ensure sufficient capacity, these lines with unknown sizes and material should be scoped and investigated. The age and condition of each of these discharges is currently unknown.

One 24-inch line coming from Highway 101 and collecting drainage from the ramp for the Astoria-Megler bridge discharges through the site, with a discharge point indicated underneath the Astoria Riverwalk Inn. It appears that no onsite drainage is collected by this line.

The western area of the Astoria Waterfront district, which is outside of the District, appears to have a large regional stormwater facility, consisting of a large pretreatment forebay and settling pond, followed by four parallel vegetated biofiltration swales. The stormwater is pumped to the stormwater facility via three force mains. Additional treatment capacity if available should be identified and investigated for use within the District.

Sanitary Sewer

The Astoria Waterfront sanitary system is served by several force mains serving the far ends of the piers. At least 4 pump stations are in the District, each of them leading to one of two trunks heading out to the main trunk in Highway 101.

The first collection basin discharges into the Highway 101 trunk near the bridge on/off ramp via a 10-inch line collecting the east portion of the site. The second is a 15-inch line connecting underneath Portway Street. It appears that this area is necked down near the intersection of Portway and Highway 101 to a 12-inch line. It is unclear if this would limit the capacity of the district, but it is recommended that to accommodate full development of the District that this line be verified and possibly be increased to at least a 15-inch size.

Overall, the sizes of the existing sanitary system appear to be large enough to accommodate future development, however, it is recommended to collect data on each of the pump stations and ensure each is sized properly and in sufficient working condition.

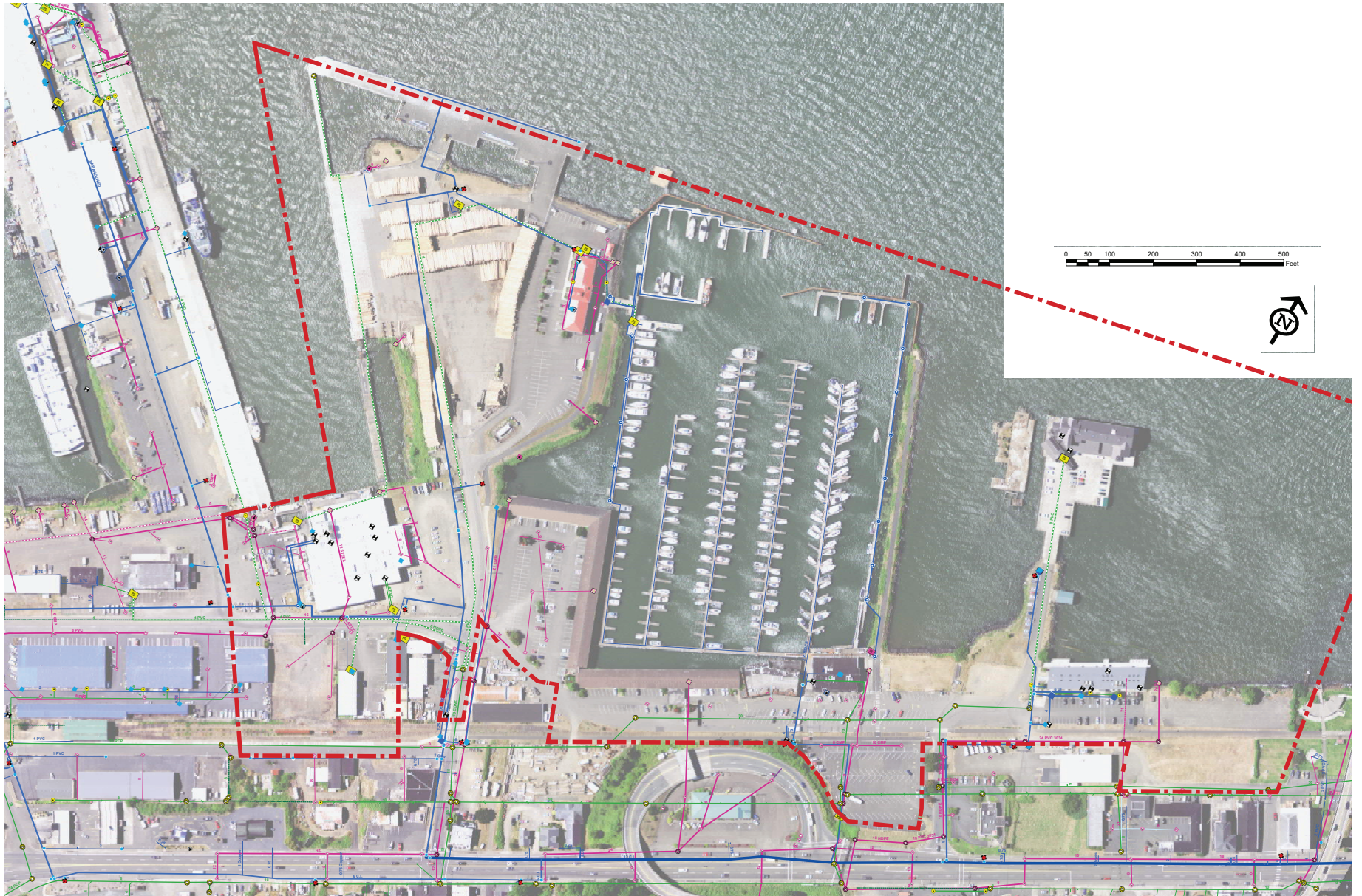


Figure 16: Existing utility infrastructure

LEGEND

Water Points	Sewer Points	Storm Points
Air Release Valve	Sewer Cleanouts	Access Point
Backflow Preventers	Sewer Manholes	Box
Blowoff Valves	Sewer Pump Stations	Cap
Fire Control		Discharge Point
Stand Pipe		Input
Water Fire Hydrants		Misc.
Water Meters		Monitoring Site
Water Pressure Reducer		Overflow
Water Sample Points		Pump Station
Water Vaults		Roof Drain
Water Valves		Separator
		Storm Catch Basins
		Storm Cleanouts
		Storm Manholes

Water Lines	Sewer Lines	Storm Lines
0.75	Abandoned	Abandoned
1	Cleanout	Culvert
1.25	Force Main	FM
1.5	Gravity Main	Force Main
2	Outfall	Main
3	Service	ODOT Main
4		Outfall
6		Overflow
8		Roof Drain
10		Swale
12		Trench Drain
16		Unknown
18		Lateral
		Trench

Franchise Utilities: Overhead Power

Power lines are served from Highway 101, with service mainly coming via power poles in Portway Street. The existing power poles along Portway Street diagonally cross the street with large transmission lines serve Pier 1 and presumably most of the buildings in the District, while a few buildings are being served from poles at the east end between the Chinook Building and the Red Building.

Franchise Utilities: Gas Lines

Three main gas line trunks serve the area. The largest is a 4-inch line just east of Basin Street. There is also a 2-inch line stemming out of the Astoria-Megler Bridge that currently serves the Astoria Riverfront Inn. Finally, there is a 2-inch line from Portway street that serves Pier 1 and the buildings east of the District. Each of these lines have existing crossings underneath the BNSF rail line.

TSUNAMI FLOOD RISK AND SEA LEVEL RISE

The District is at risk for tsunami flooding (300–600-year event). Pier 1, the West Mooring Basin, and jetties fall within the “Extreme Risk Zone”. North of the Riverwalk Trail between Portway and Basin Streets falls within the “High Risk Zone”. The rest of the District falls within the “Moderate Risk Zone”.

Sea level at the mouth of the Columbia Rivers is likely to rise by as much as 2.0 feet by 2100 and 3.7 feet by 2150, according to the Washington Coastal Hazards Resiliency Network.

Within the District, the existing top of bank averages approximately eight feet above the river’s Mean Higher High Water level; so normal fluctuations in water level projected for 2150 do not appear to directly impact the identified developable area but would severely impact any uses on the water.

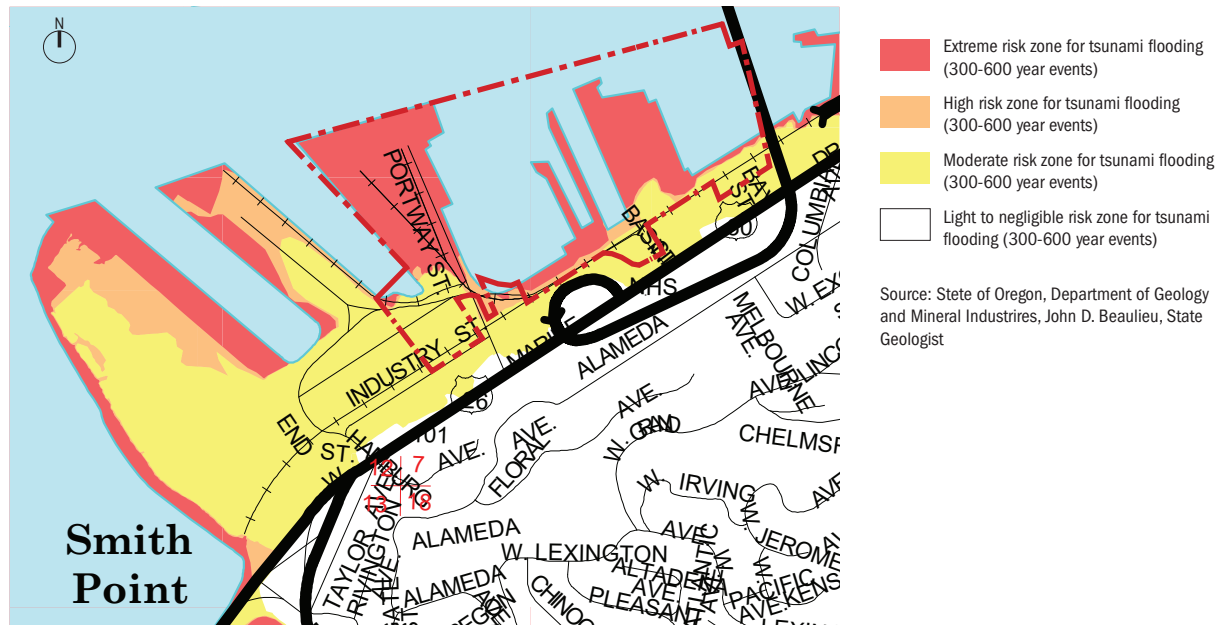
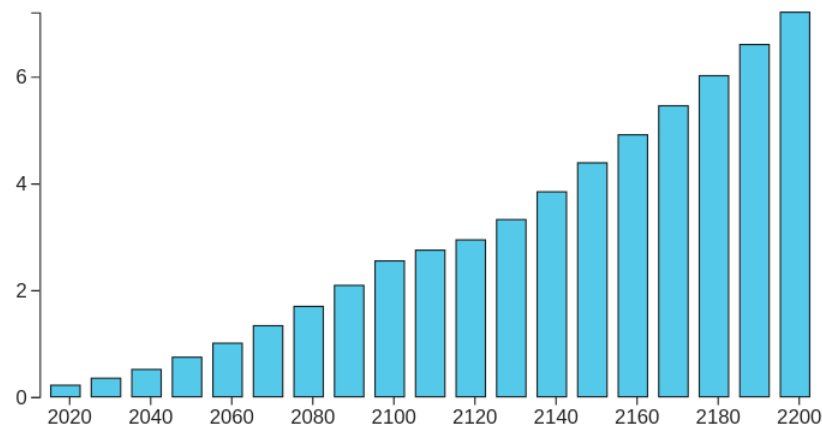


Figure 17: Tsunami Hazard Map of the Astoria Area, 1999



Source: <https://riskfinder.climatecentral.org/>

Figure 18: Projected sea level rise for Astoria Area

DEVELOPMENT OPPORTUNITY

Due to complexity of permitting, cost of construction, and high cost of ongoing maintenance of overwater structures, the Port has determined that it is in its best financial interest not to pursue constructing or maintaining buildings over water. For this reason, the team assessed the portion of the District that is fully on land, above the river's top of bank for buildings.

Excluding parcels with viable existing buildings and tenants, the remaining available land was identified as a series of development sites (indicated in yellow in Figure 19).

The Port, Project Advisory Committee, Stakeholders and the public agreed that the primary economic opportunity for the District is maritime industrial uses that benefit from the site's valuable water access. Given the size, shape, and location of the District's development sites, it was determined that Pier 1 clearly provides the best location for maritime industrial development and should be positioned for this primary use.

Sites adjacent to the West Mooring Basin and east are better suited for supportive uses that are public-facing, due to their size, visibility, and access.

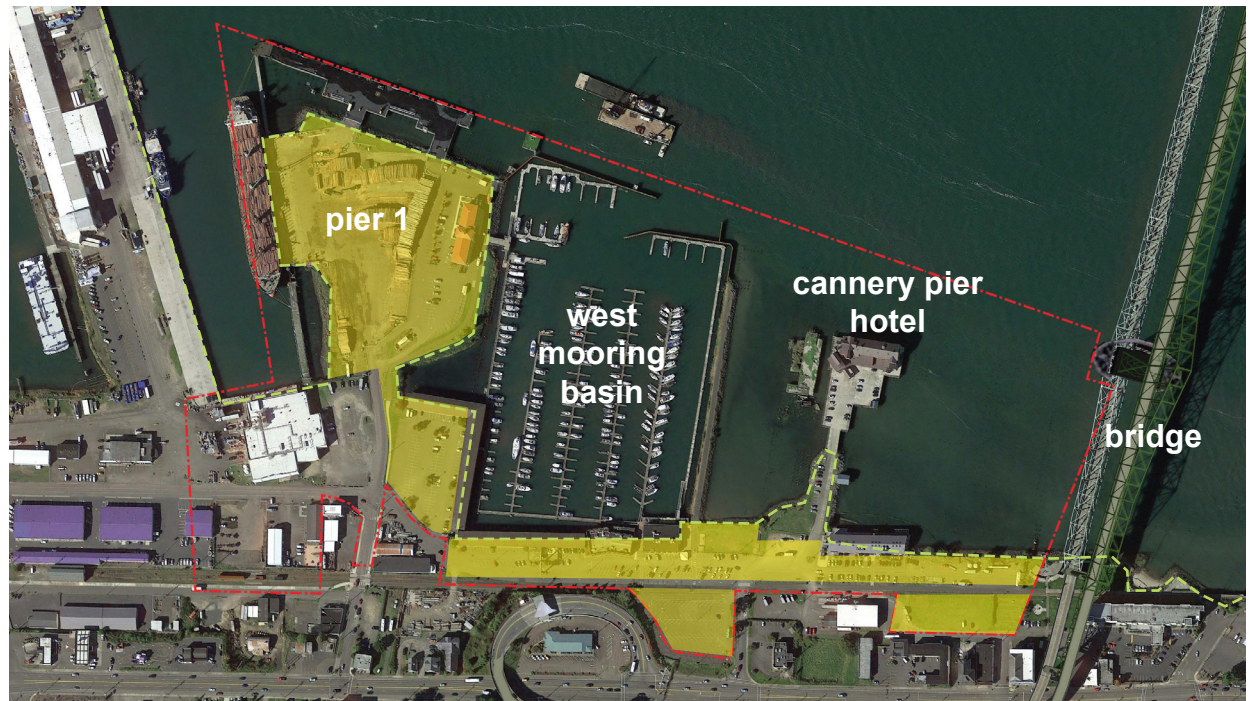


Figure 19: Development opportunity sites



3 INITIAL INPUT

Introduction
Project Advisory Committee
Stakeholder Interviews

INTRODUCTION

During the Background and Existing Conditions Review task, the planning team engaged the Project Advisory Committee (PAC) and other stakeholders in preliminary conversations to help frame the project, identify key issues and questions, and guide efforts in progress. This chapter summarizes input from both groups.



PROJECT ADVISORY COMMITTEE

During the Background and Existing Conditions Review task, the planning team conducted a kickoff meeting with the Project Advisory Committee (PAC) to gain insights into the project's opportunities and challenges, the preliminary project goals, and vision for future redevelopment.

The team presented an overview of the project scope and process, along with some initial findings from review of background information, existing site and economic conditions, and stakeholder interviews completed to date.

Notably, there was general agreement expressed by PAC members around three main questions. The following is a summary of key themes and salient points.

What story should this site tell?

- The Port Waterfront represents the “real Astoria”, the place where the work gets done. The site should be a hardworking waterfront, where people can go to enjoy the fruits of workers’ labor.
- The site’s purpose and identity are inseparable from the influence of water: the convergence of the Columbia River and Pacific Ocean, and the industry and commerce related to this unique position. The site uses should focus on water-dependent uses (like fishing and seafood processing) and celebrate the river as the basis for industry, commerce, and public access.
- As one of the last remaining water dependent industrial lands in Astoria, the site should be versatile and adaptable to changing economic circumstances and be available to accommodate a variety of current and future uses.

What specific opportunities should this Master Plan consider?

- Clear, safe access with improved wayfinding and circulation throughout the site
- Simplified zoning that promotes private investment
- A market where fishermen can sell directly to the public
- Services and facilities that support both workers and visitors
- Services that support sport fishermen and the marina.
- Improvements to the terminal for cruise ships, to alleviate impacts to businesses and public access on site and to graciously welcome visitors while encouraging them to enjoy Astoria

What are the toughest constraints and challenges to the site’s development and future?

- Attracting private investment to a site with complicated zoning and permitting conditions, and Port’s past business practices
- Truck access into the site and conflicts with public access within the site
- Competing interests and incompatible adjacent uses

STAKEHOLDER INTERVIEWS

As part of the Background and Existing Conditions phase of the project, the planning team conducted Stakeholder Interviews with individuals, identified by the City and the Port, who have special knowledge about the Port's waterfront and interest in its future. A complete list of participants is included at the beginning of this report.

The planning team hosted a series of meetings with individuals and groups to discuss the project, solicit feedback, and build a better understanding of the site, its context, its potential, challenges, and opportunities to inform the planning work.

Over numerous conversations, the team gathered detailed information, opinions, and suggestions reflecting a broad range of perspectives and priorities. Through these discussions, some recurring themes and impressions emerged. The following is a summary of salient input from stakeholders.

Significance

This is a very important site and opportunity for Astoria; it could be part of a “renaissance” for the city. The site deserves an inspired vision and durable, strategic, long-term plan to achieve it.

There is a great pride in this community and a desire to celebrate Astoria's heritage and community spirit. The site itself has meaning to many people, as a connection to the river and the city's maritime history.

The site's redevelopment warrants attention and support at the state and federal levels.

Working Waterfront

The Port of Astoria is a working waterfront. It is important that the City's zoning regulations do not challenge or impair the Port's ability to maintain

and expand industrial uses and supportive businesses on its property, to continue as a viable generator of economic growth and prosperity for the region.

Utilizing a small portion of the property for business incubators would help support local entrepreneurs. Businesses incubated on the site could include maritime-based industrial and light manufacturing startups.

It is important to recognize that this region has little land still available for water-dependent industrial uses. Pier 1 land is very valuable and should be preserved for industrial use.

The Port should take the long-term view of future of water-dependent industries, and any development should keep Pier 1 flexible for changing industrial markets and uses, such as manufacturing and assembly related to emerging technologies, and services for the ships that transport those materials.

West Mooring Basin (Marina)

The West Mooring Basin is the most recognized and public part of the Port site.

The West Mooring Basin and sport fishing industry are important to the economic support of local business. Over the years, the marina has lost crucial support services like ice supply, fish processing, and bait. These should be replaced, to support sport fishing, fishermen, and the economy fueled by their business.

The fishing opportunities and views of the river and bridge warrant a modern, upscale hotel overlooking the West Mooring Basin. Options for longer-term rentals, more amenities, small conference space, and more commercial activity would increase occupancy during the off-season.

Public Access and Use

There is enthusiasm for a fish market in this area, a place where the community can buy fresh fish directly from vendors. This could be combined with a public market with shops and services for locals and tourists alike.

The community appreciates and uses the Riverwalk and Trolley.

The west end of the Riverwalk is not highly used given its lack of pedestrian amenities, wayfinding, and sense of safety. The Memorial Park area at the east end attracts unsafe, undesirable activity at night. In general, more lighting, security, and commercial activity are needed throughout the site.

Connections to Uniontown and downtown are key to the success of the site. These connections should come in the form of an enhanced Riverwalk, improved signage for vehicular traffic, and an improved street grid at the east end of the site.

Socioeconomic Issues

There has been a change in the City's economics with the influx of new residents and increasing housing prices, especially over the last few years. There is now a feeling of "us vs them" between legacy residents and new arrivals, and concern about the impacts to legacy residents' way of life and the city's future.

Astoria needs affordable housing options, but most stakeholders felt that the priority for this site should be commercial/industrial, and that this site was not an appropriate location for housing if it comes at the expense of commercial/industrial uses.

The Hispanic community in particular lacks access to housing and support services.

Cruise Operations

Though the site is functional as a port of call, there are plenty of opportunities to improve the operations and experience for the cruise lines, passengers, and the Astoria community.

Arrival by cruise passengers should be impressive, friendly, and welcoming, with good pedestrian access through the site and connections to surrounding businesses and destinations beyond.

Site development could leverage cruise operations to bring benefits to Astoria. The cruise ships bring thousands of passengers to the site and provide opportunities for local businesses.





4 PRELIMINARY CONCEPTS

- Approach
- Circulation Concept
- Port Identity
- Preliminary Schemes
 - Orange Scheme
 - Blue Scheme
- Project Advisory Input
- Public Input



APPROACH

Building on insights from team's assessment of background information and existing conditions, stakeholder interviews, and early input from the Project Advisory Committee, the Plan Concepts reflect five important strategies to guide future investment and development toward the vision for waterfront, based on the project's core values. Starting in the Plan Alternative Concepts phase of the study, these strategies were the basis for planning recommendations.

1. Connect the site.
2. Improve identity and economic viability.
3. Position Pier 1 for maritime industry.
4. Support West Mooring Basin uses.
5. Provide public waterfront destinations.

CIRCULATION CONCEPT

A proposed new street connects from Pier 1 to the east edge of the District. It replaces the confusing and inefficient sequence of parking lots that exist today with Industry Street, a clear, safe, and welcoming thoroughfare along the West Mooring Basin. The new street provides ample perpendicular parking on both sides and better access to the Cannery Pier Hotel, Red Building, and proposed development. Bay Street is extended north to meet the new street, completing the circulation network.

Improved circulation and access through the District create a safer, more active, and inviting district that is better related to Uniontown businesses and directly supports the Port's businesses.

The new Industry Street and Bay Street extensions are both identified in the 2013 Astoria Transportation System Plan, along with improvements to intersections at Portway Street and Hamburg Avenue (discussed in Chapter 2).

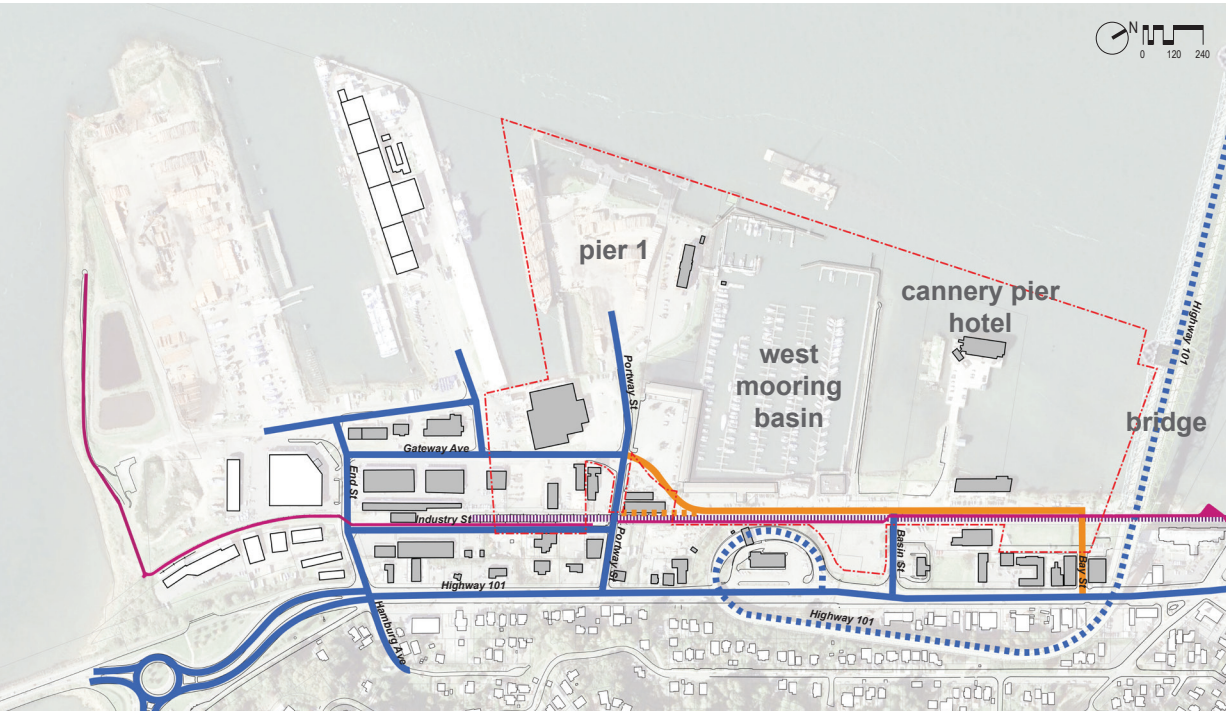


Figure 20: Proposed circulation

- Vehicular Circulation
- Riverwalk
- - - Trolley
- New Street with Parking

PORT IDENTITY

Though the Port of Astoria is located between two primary points of arrival to Astoria—the New Youngs Bay Bridge to the west and the Astoria-Megler Bridge to the east—it is barely visible from Highway 101; it is easy to drive past without noticing the Port or its activities.

The Port of Astoria would benefit by identifying its presence and its place in the community and conveying a clear invitation to do business at its industrial waterfront.

Developing and strengthening the Port’s identity is a multifaceted project. Initial components include new monument signs that identify the Port of Astoria and its entrances along Highway 101 (Hamburg Avenue, Portway Street, and Basin Street).

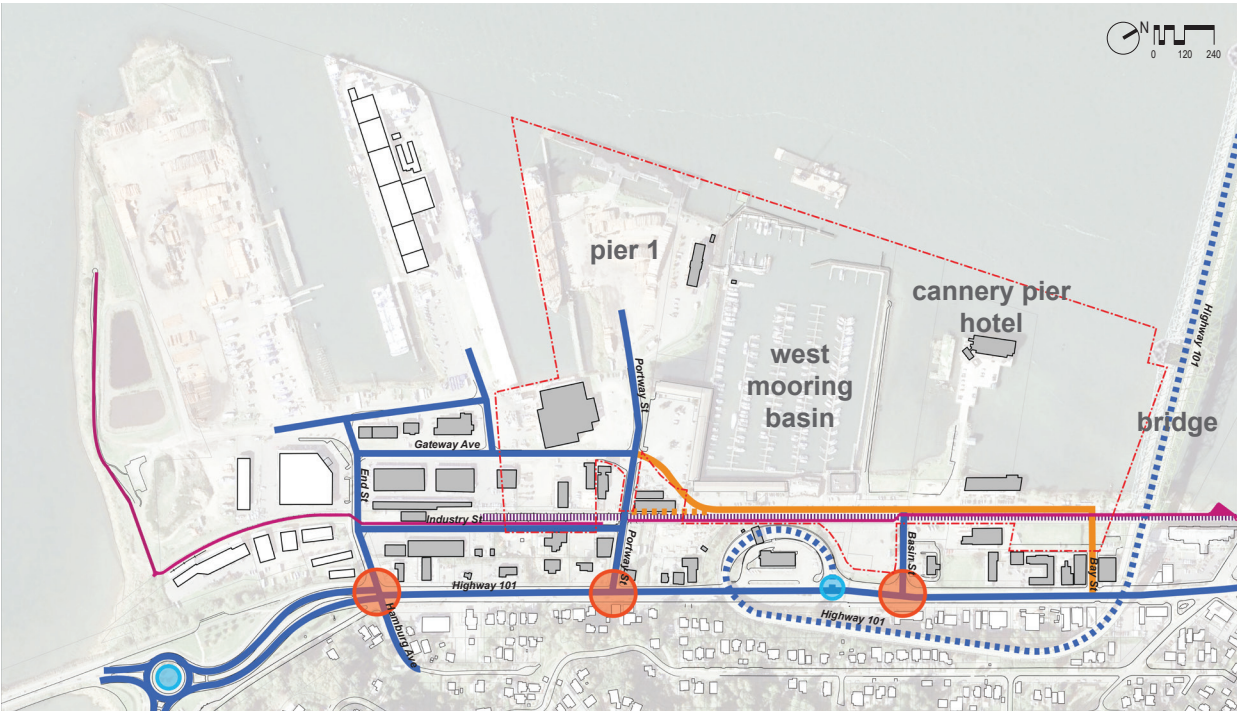


Figure 21: Proposed Port gateway sign locations

- Vehicular Circulation
- Riverwalk
- - - - - Trolley
- New Street with Parking
- Port Identity
- City Identity

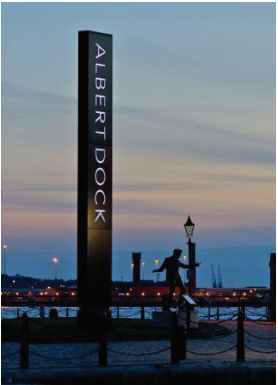


Figure 22: Inspiration

ORANGE SCHEME

This scheme explored maximizing maritime industrial use by expanding across Portway Street, connecting the Pier 1 walk to a new Fish Market next to Bornstein Seafoods, and placing a new mixed-use or hotel building north of the Riverwalk Trail at the east end of the District.

Key Elements

- ① Maritime Industrial Land
- ② Overlook & Welcome Center
- ③ Fish Market
- ④ Marina Walk
- ⑤ Marina Boardwalk
- ⑥ New Street with Parking
- ⑦ Marina Pavilion & Support Services
- ⑧ New Mixed Use Building
- ⑨ New Mixed Use Building or Hotel

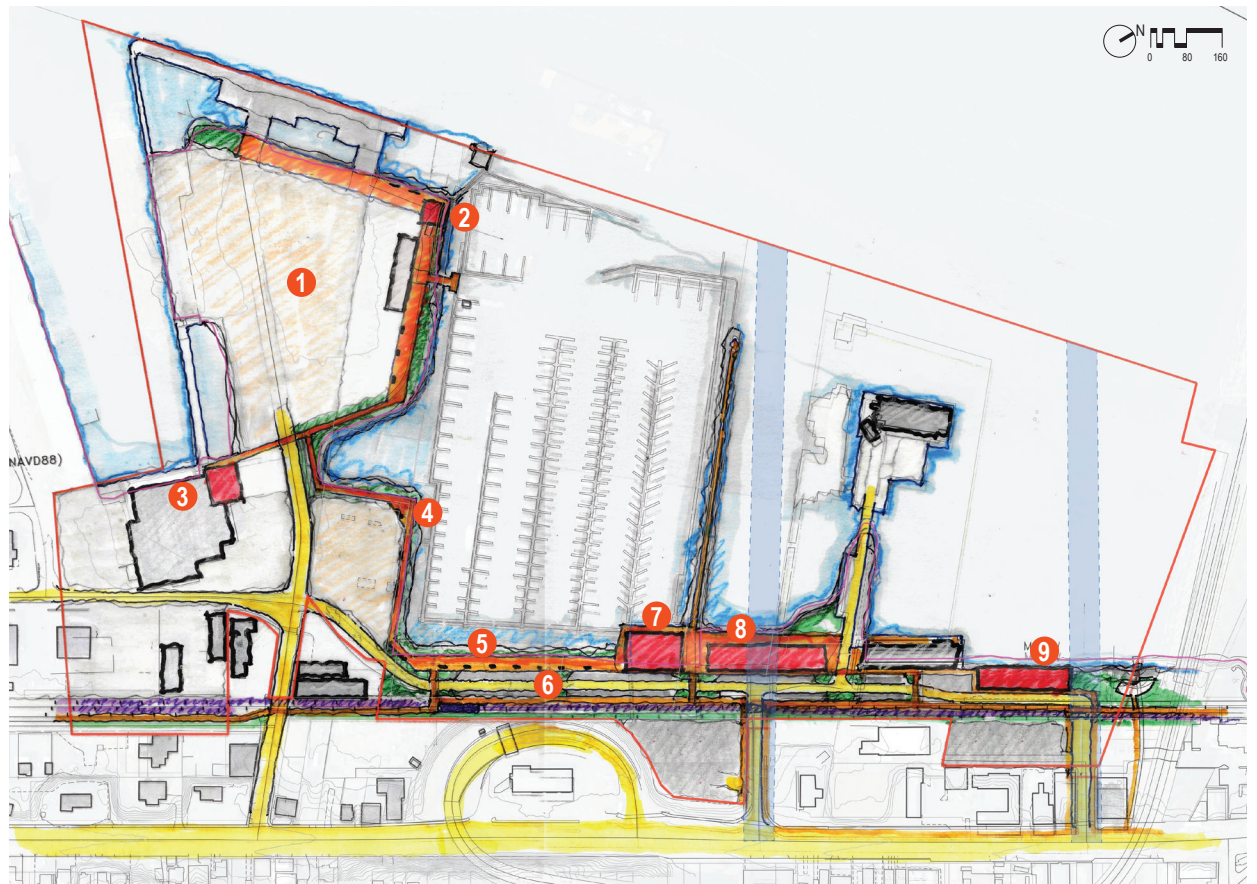


Figure 23: Orange Scheme

Presented at Public Forum, November 3, 2021

BLUE SCHEME

This scheme explored maximizing public access and activity around the West Mooring Basin by placing a new hotel and public market on the west side and placed a new mixed-use building south of the Riverwalk Trail at the east end of the District.

Key Elements

- 1 Maritime Industrial Land
- 2 Marina Walk
- 3 Footbridge
- 4 New Hotel
- 5 Public Market & Boardwalk
- 6 Fishing Village
- 7 New Street with Parking
- 8 Marina Pavilion & Support Services
- 9 New Mixed Use Building
- 10 New Mixed Use Building or Hotel

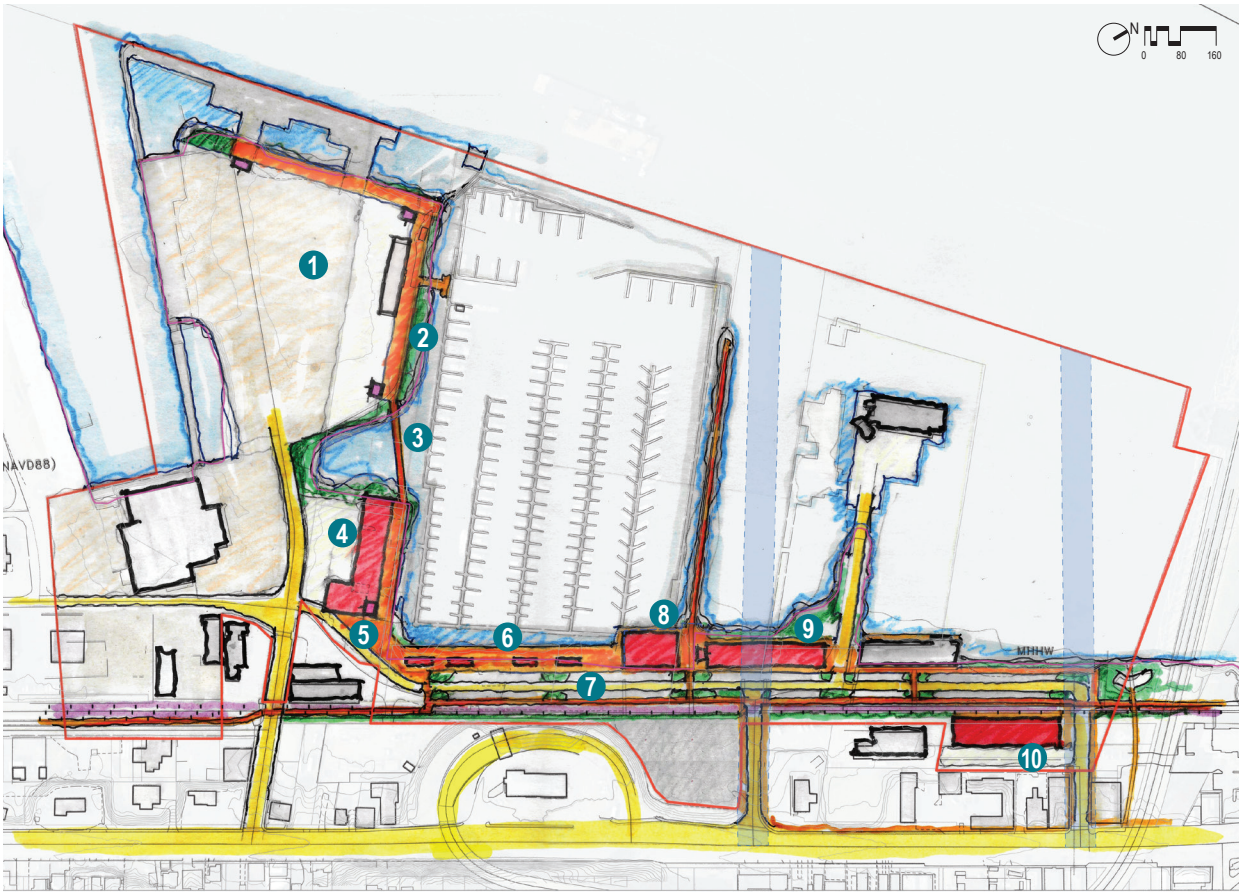


Figure 24: Blue Scheme

PROJECT ADVISORY COMMITTEE INPUT

The planning team first presented draft Preliminary Concepts to the Project Advisory Committee (PAC) for initial input, then made refinements to the plans and graphics prior to presentation to the public. The following summarizes recommendations and input from the PAC discussion (October 10, 2021).

- It is crucial to preserve the marine industrial land on Pier 1. The value of flexible, industrial land on the water is higher than any other use for this site.
- Amendments to the City's zoning regulations should be considered and recommended, to allow for a development framework that invites private investment and provides necessary flexibility and adaptability.
- The Chinook Building (vacant mixed-use building) and Riverwalk Inn (active hotel), both over-water structures in poor condition, require significant and costly repair and ongoing maintenance. Because both buildings are unsustainable financially, the master plan for the site should include their removal and replacement.
- The plan should not assume that cruise operations will provide a reliable source of revenue in the long-term future.
- A flexible public market building—with both leased retail space and temporary stalls for local producers, farmers, fisherman, seafood companies, and others—would support the local economy and bring people to the Port. This building could potentially be combined with maritime office space, event/ meeting space, light manufacturing space, and services for cruise passengers.
- New light over-water structures without permanent buildings, such as boardwalks, piers, and footbridges, should be considered, to expand usable area of the limited site. However, permanent over-water buildings are prohibitively expensive to build and maintain and should be avoided.
- Water uses, such as houseboats and floating restaurants and arts venues, are not viable due to permitting and the ongoing maintenance cost of dredging in this location.
- A new street connecting the east side of the site to Pier 1 is a good idea. It would provide better connectivity for public access, invite development, and make the waterfront more active and safer.
- There was general agreement among PAC members that the plans and concepts presented were viable and reflective of the project's goals and core values, and with refinements based on PAC input, were ready to share with the public for comment.

PUBLIC INPUT

The following is a summary of public input from the Public Forum #1 virtual event (online) and Online Survey hosted on the City's project web page. Complete comments are provided in the Appendix.

People voiced support for elements of the preliminary concepts.

- Public Fish Market / Seafood Hall
- Fishing Village
- Preserving industrial uses on Pier 1
- Street connections and improved vehicle access
- Pedestrian network and public waterfront access
- Improved connections to the Riverwalk Trail
- Pier 1 Overlook Tower & Footbridge
- Open view of the West Mooring Basin (Marina)

(continued on next page)

**Public Forum
& Online Survey: 120** attendees
+ **134** views

Facebook: 5,754 people reached

People expressed desire to see other elements included in the Master Plan.

- Improved safety and security
- Good pedestrian lighting
- Wayfinding and interpretive signage throughout
- Riverwalk Trail improvements: maintenance, pavement
- Bike rentals along the Riverwalk Trail
- Celebration of local maritime history
- Improvements to promote the trolley
- Places to sit
- Waterfront park
- Support for local “mom and pop” businesses
- Leasable space for small, industrial uses
- A restaurant to replace the Seafarer Restaurant
- An affordable cafe overlooking the water
- Shops
- Seasonal food carts and stands
- Space for a food truck pod
- Better facilities for cruise passengers and tour operators
- Better connections between the cruises and local businesses
- A district identity using a name, like “Fish District” or “The Basin”

People stated or demonstrated concern about certain issues.

- Shortage of workforce housing
- Parking availability
- Protecting view corridors
- Tourism and its effect on Astoria’s economy and quality of life
- Economics: costs, revenue/ return on investment, operations
- Feasibility and time frame to implement
- Response to public feedback
- Consistency and coordination with other planning initiatives and projects (Uniontown Reborn, Riverwalk, Fort George)
- The Port’s and City’s long-term commitment to and support of the Master Plan





5 PORT OF ASTORIA WATERFRONT MASTER PLAN

Overview
Framework Plan
Demonstration Plan
Index of Plan Elements
Zoning Recommendation
Additional Recommendations

OVERVIEW

This chapter presents the Port of Astoria Waterfront Master Plan: a spatial organization of land uses and specific plan elements within the District.

The Master Plan's foundation is a framework for overall circulation, building sites, and open space. The Framework Plan establishes a permanent strategy for developing the District to accomplish the Master Plan's goals and realize the vision for the Port's waterfront. It provides a baseline of certainty while retaining flexibility for future engagement with private sector partners and resiliency amidst changing economic conditions.

The Demonstration Plan illustrates how the framework could be expressed and envisioned; it provides a picture of one possible scenario, brought to fruition. New circulation, buildings, and open spaces are represented realistically so that the plan serves as a useful reference to assist subsequent planning, development, and design efforts. It also provides a visual index for the Plan Elements, in a successful arrangement.

Plan Elements are rendered in brief descriptions and images explaining their purpose and importance and to inform future work and decision making.

Zoning considerations are offered to set the stage for code amendments required to make implementation possible. While this Master Plan does not prescribe specific changes to the City's development code, it outlines discrepancies between the recommended Plan Elements and what current zoning allows.

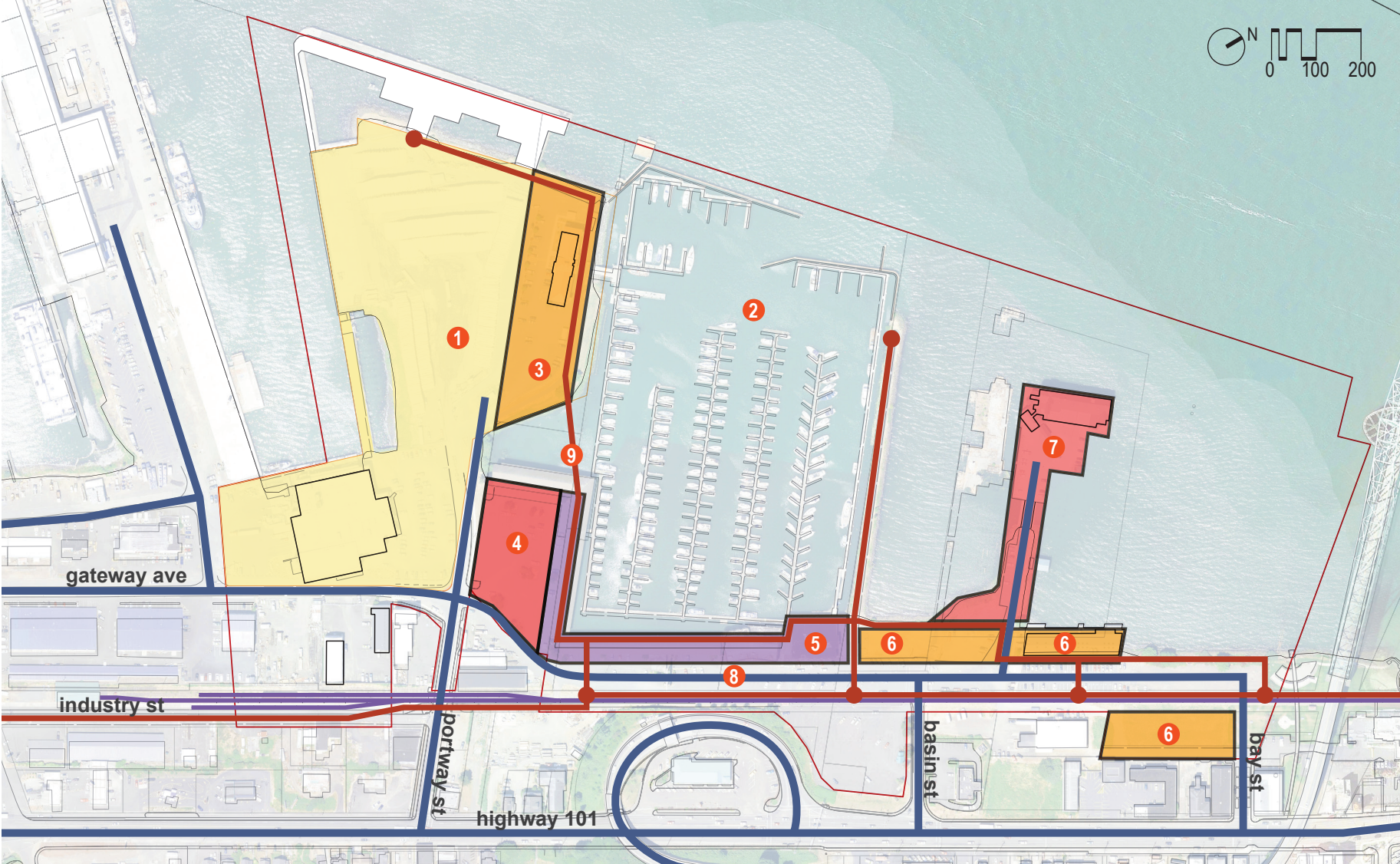
Finally, this chapter provides a few Additional Recommendations for work beyond the scope of the Master Plan, to bolster the success of investments within the District and Port of Astoria generally.

Framework Plan

The Port of Astoria Waterfront Master Plan framework is comprised of the following structural elements.

- 1 Pier 1 west of Portway Street is designated for maritime industrial uses.
- 2 The West Mooring Basin is designated for marina use.
- 3 The northeast section of Pier 1 is designated for mixed uses that support the Port's working waterfront, specifically Pier 1 maritime industry, the West Mooring Basin, and cruise ship operations. This includes public access near the river, along the top of bank.
- 4 The southeast section of Pier 1 is designated for a hotel and public market oriented to the West Mooring Basin.
- 5 The area surrounding the south end of the West Mooring Basin is designated as a "fishing village", a public waterfront open space with support services for sport fishing and the marina, and visitor amenities.
- 6 Three parcels east of the fishing village are designated for mixed uses that support the Port's working waterfront.
- 7 The land and pier extending into the river continue to be designated for the Cannery Pier Hotel (no change to existing use).
- 8 A network of public streets provides interconnected circulation and access to destinations inside and outside the District. The street network is comprised of Portway Street, Basin Street, Bay Street, Industry Street (a new street), and Gateway Avenue.
- 9 A pedestrian network provides safe, intuitive, and pleasing connections and prioritizes public access and views to the river. Waterside circulation is linked to the Riverwalk Trail at several places, to reinforce the District's connection a larger recreational experience of Astoria and the Columbia River. The Riverwalk is improved with lighting and wayfinding.

FRAMEWORK PLAN



- maritime industrial use
- hotel /market use
- vehicle
- trolley
- supportive mixed use
- West Mooring Basin fishing village
- pedestrian

Figure 25: Framework Plan
Port of Astoria Waterfront Master Plan

DEMONSTRATION PLAN



Figure 26: Demonstration Plan

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1 MARITIME INDUSTRIAL DEVELOPMENT

A 5.6-acre site on Pier 1 is prepared and positioned for maritime industrial private development (e.g. manufacturing and assembly, seafood processing, industrial incubator space, shipping, etc).

Potential investments include utility infrastructure upgrades and replacement of the dilapidated existing dock on the west side to allow berthing of vessels.

Security measures must be evaluated to control access and ensure safety as regulated by the Port of Astoria, City, and U.S. Department of Homeland Security.

See Chapter 6 Implementation Strategy, for a detailed description of steps to promote maritime industrial development on Pier 1.



Figure 27: Bornstein Seafoods



Figure 28: Demonstration plan

2 PORT TOWER

At the junction of the Port's industrial land, West Mooring Basin, and mighty Columbia River, the public viewing tower offers sweeping views and serves as beacon for people arriving on foot and by boat. A destination for locals who come to watch the weather as well as welcoming landmark for cruise passengers, the tower is an iconic feature in the Port's waterfront landscape.

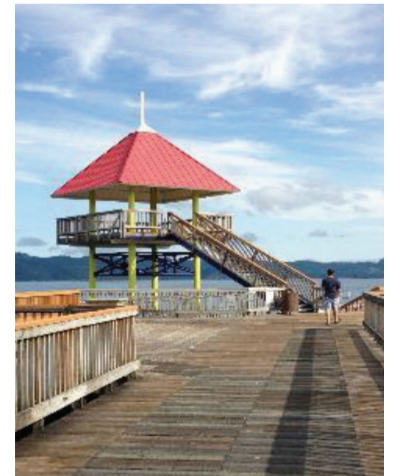


Figure 29: Inspiration



Figure 30: Views from tower: East (top) and West (bottom)

3 PIER 1 WALK

The Pier 1 Walk provides public access along the water from the cruise ship landing to the West Mooring Basin, as well as flexible space for programming and events in front of the Port's Pier 1 Building. As an integral part of the arrival experience for cruise passengers, the Pier 1 Walk is scaled and appointed for large crowds, welcome activities, and queues for transportation. Potential amenities include seating and site furnishings, lighting, shelter from wind and rain, and wayfinding and interpretive signage.



Figure 31: Inspiration

4 CRUISE PASSENGER TRANSPORTATION

Improvements are made to cruise passenger connections with transportation into Astoria and the region beyond. Buses, vans, taxis and rideshares queue and load in a more organized and efficient manner. Bike rentals and tourist information are available. Improvements are focused on two primary goals: to provide a high-quality welcome to travelers and to connect them with Astoria's businesses.



Figure 32: Demonstration plan

5 FOOTBRIDGE

A footbridge over the water between Pier 1 and the West Mooring Basin fishing village offers a new, direct path and distinctive pedestrian experience.



Figure 33: Inspiration

6 HOTEL

A new hotel replaces the existing Riverwalk motel building. Built on land—not on piers over water like the original—and oriented to minimize obstructions to public view corridors to the river, the hotel accommodates 80-120 guest rooms and amenities. A destination restaurant on the ground floor opens onto the West Mooring Basin Boardwalk, with views to the Columbia River and bridge. Guests enjoy being amid a working waterfront and access to the Riverwalk Trail and trolley; they activate the District and support Uniontown businesses.

7 MARKET HALL

Adjacent to the hotel and Fishing Village, a public market hall offers fresh fish “right off the boat”, produce and goods from local vendors, food and drink, flexible community space, and covered outdoor areas. The Market Hall is the social and commercial hub of the district, a melting pot of locals, Port workers, and visitors.

The Market Hall could be a winter home for the Astoria Sunday Market and provide services and space for the cruise ship lines.



Figure 34: Inspiration



Figure 35: Demonstration plan



Figure 36: Inspiration

8 WEST MOORING BASIN BOARDWALK

The West Mooring Basin Boardwalk is a public open space wrapping the south end of the Basin, connecting the hotel, market, and Fishing Village. It anchors the district's pedestrian network and provides space for programming and events overlooking the water.

Potential amenities include seating and site furnishings, lighting, shelter from wind and rain, and wayfinding and interpretive signage.

Subsequent phases of planning and design should evaluate multiple options for constructing the Boardwalk. One option is to remove the existing pier structures and build the new Boardwalk on new pier structures over the water. A second option is to repair the existing pier structures as needed and repair or replace the deck to a functional condition. A third option is to remove the existing pier structures and build the majority of the Boardwalk on land (behind the Top of Bank) to avoid the complexity and cost of construction and maintenance of over-water structures.

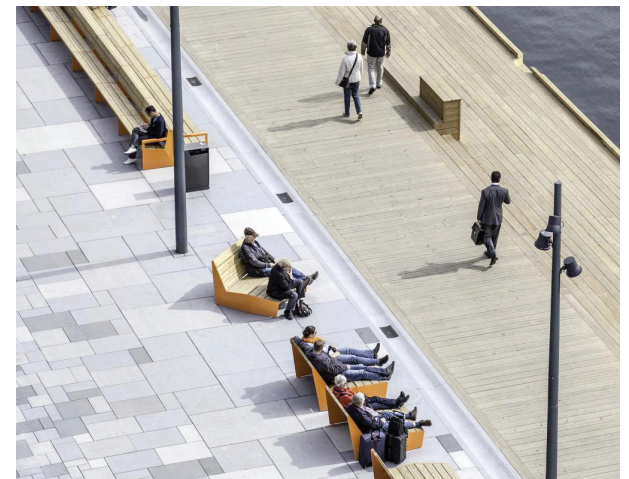


Figure 37: Inspiration

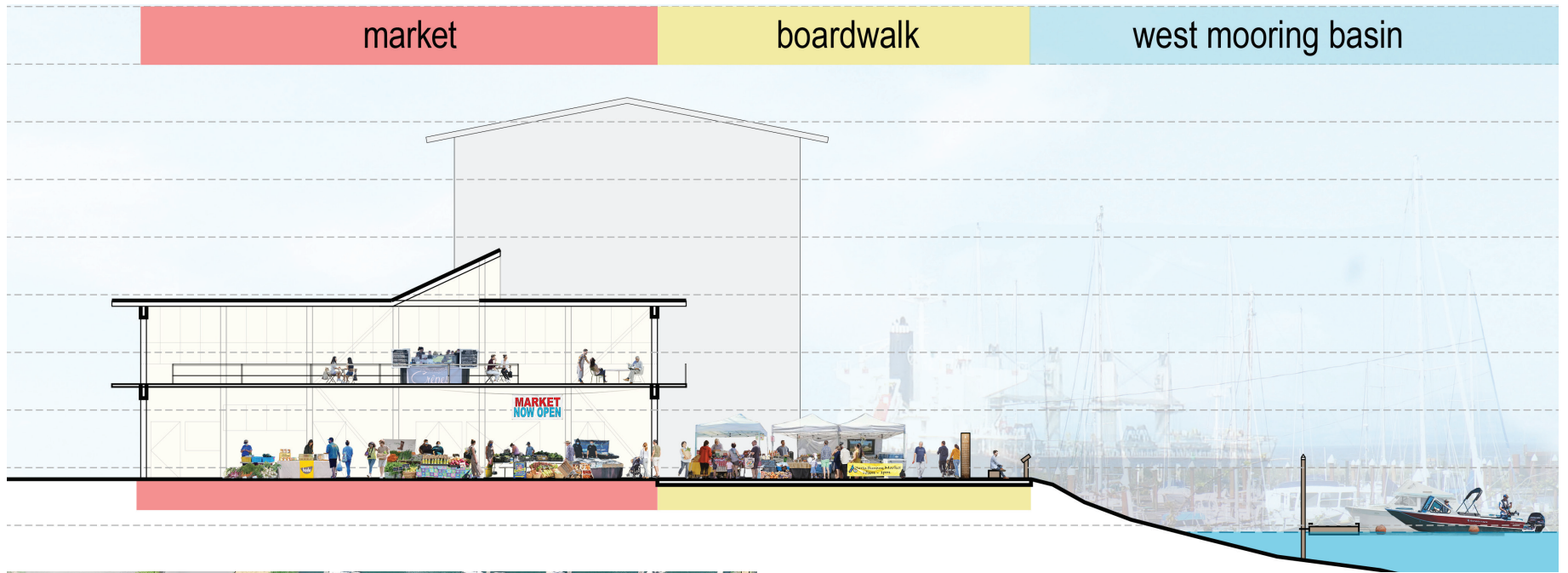


Figure 38: Cross-section through Market Hall and Boardwalk



Figure 39: Demonstration plan

9 FISHING VILLAGE

The Fishing Village is a group of small buildings on the Boardwalk, along Industry Street and overlooking the Basin, that provide support services for sport fishing and the marina in general, as well as amenities for the public. The buildings are simple, small structures with utilities, allowing vendors to use them on a seasonal or temporary basis. Uses could include fishing guide services, tackle and bait sales, fish cleaning and packing, coffee shop, deli, and bike rentals. Amenities could include picnic tables and fish cleaning stations.

The Fishing Village is an operative extension of the West Mooring Basin and establishes a destination that brings people together by the water.



Figure 40: Cross-section through Fishing Village



Figure 41: Inspiration

10 MULTI-USE SUPPORT STRUCTURE

Part of the Fishing Village, the Multi-Use Support Structure provides a large, flexible covered space for support services and amenities (see Fishing Village), events and gatherings. Its purpose is to provide weather protection and comfort year-round, to allow vendors to operate and keep the Fishing Village active throughout the year including during the cold, windy, and wet months.

Subsequent phases of planning and design should evaluate optional approaches to the Support Structure. One option is an enclosed building with walls, large roll-up doors, and heating. A second option is an open canopy structure that could provide rain protection for a variety of seasonal uses. Both options are envisioned to provide power and plumbing to support programming and support services inside.



Figure 42: Demonstration plan



Figure 43: Inspiration

11 INDUSTRY STREET

Industry Street is a new street connecting Portway Street, Basin Street, and Bay Street. Designed as a two-way “parking street” with perpendicular parking on both sides, it maximizes public parking while providing a clear connection across the district and an impressive arrival to the West Mooring Basin.

The street integrates with adjacent waterside pedestrian circulation and the Improved Riverwalk Trail to the south, and provides easy access to buildings and passenger loading areas throughout the corridor.

The streetscape includes planting and trees, lighting, and directional signage.

A version of this concept is included in the 2013 Astoria Transportation System Plan (TSP), called Industry Street Extension (Project D24).

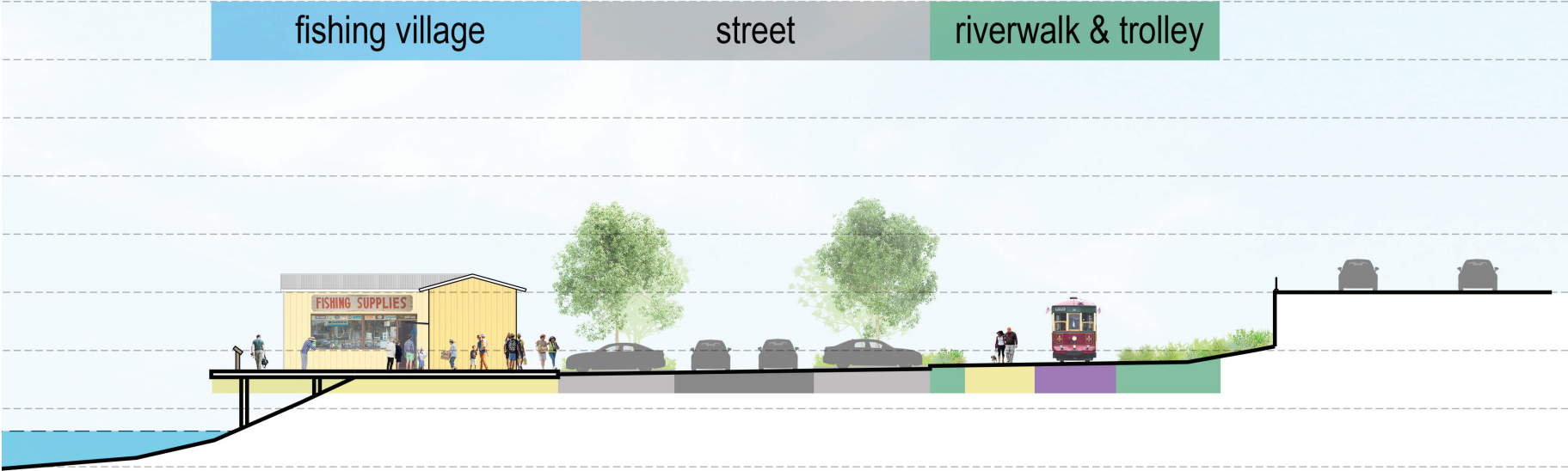


Figure 44: Cross-section through Industry Street

12-14 STREET CONNECTIONS

The addition of Industry Street entails modifying existing streets. At a minimum, functional and safe intersections and approaches are built at Portway Street, Basin Street, and Bay Street, which is extended by half a block to meet Industry Street (TSP Project D25). These connections occur within the District.

See Additional Recommendations (this chapter) for a description of enhanced improvements.

15 WEST MOORING BASIN TROLLEY STOP

A relocated stop on the Astoria Riverfront Trolley line provides easy access a short walk from the Fishing Village, Market Hall, and Hotel. Its location near the center of waterfront activity promotes the trolley as a feature of the District and desirable link to downtown Astoria and destinations east.



Figure 45: Demonstration Plan

16 IMPROVED RIVERWALK TRAIL

The Riverwalk Trail is an existing pedestrian and bike trail between the Port's Pier 3 and the Astoria Wastewater Treatment Facility more than six miles upriver. Through the District, it runs beside the trolley within a 50 foot right of way operated by Astoria Parks and Recreation. The Riverwalk Trail provides a recreational experience and scenic link to downtown and beyond and is an open space asset to the community. As it passes through the District, however, its character changes to the point that many people heading west feel lost or unwelcome by the time they reach Basin Street, at which point the trail crosses from the north side (waterside) to the south side of the trolley line.

The Improved Riverwalk Trail is realigned to the north side of the right of way where it also serves Industry Street and is well connected to the waterfront by several marked crosswalks. New lighting and wayfinding signage, consistent with the Astoria Parks and Recreation's Riverwalk

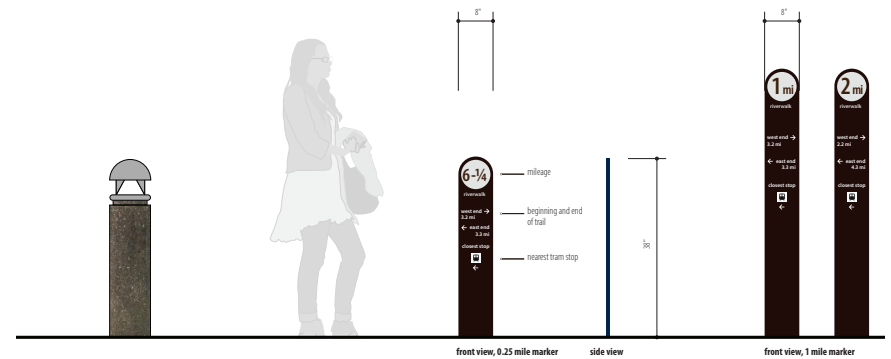


Figure 46: Riverwalk Trail wayfinding and lighting elements (City of Astoria)

Wayfinding program, promote an important sense of quality and continuity. Enhanced street crossing treatments, planting, and connections to adjacent properties foster a seamless, comfortable and attractive experience for pedestrians and cyclists.



Figure 47: Demonstration Plan

17 DISTRICT SIGNAGE PROGRAM

A comprehensive strategy and consistent family of wayfinding and interpretive signage elements is applied throughout District. As a system, signs orient and direct people to their destinations, enhance their understanding and experience of the Port waterfront, and promote a cohesive identity unique to this place.



Figure 48: Inspiration

18-19 SUPPORTIVE MIXED USE BUILDINGS

Two new mixed-use buildings provide space for businesses that support the Port's working waterfront commerce and character. These could include light manufacturing and incubator space, maritime professional offices, food and drink options, and small retail spaces.

A new mixed-use building is developed on the water, near the Fishing Village, Red Building, and entrance to the Cannery Pier Hotel.

A new mixed-use building is also developed adjacent to Bay Street and the Riverwalk Trail, across from Maritime Memorial Park and well connected to Uniontown.

Both sites enjoy impressive views of the river.



Figure 49: Demonstration Plan

20 UTILITIES

Construction of new buildings while preserving the other existing structures will require maintaining most of the existing utility systems, removing or abandoning many old connections, and extending new services to new structures.

The Pier 1 building is served by existing water and sewer force main from Portway Street. Both utilities take large loops through the Pier 1 site. With the future development of Pier 1, it is recommended that the existing water and sewer be relocated to provide a more direct route. Additional service laterals should be provided to the Pier 1 lot.

New water, storm and sanitary service laterals will be required to each new building, with the existing main lines being utilized for most of the building connections. An exception to this could be the 12" sanitary sewer main near Portway Street and Highway 101, which should be evaluated and possibly upsized to a 15" main.

Effort should also be made to loop the existing waterlines wherever possible for improved resiliency and health, which would require connecting existing lines together that currently dead-end.

A new stormwater main is also recommended for Industry Street to ensure sufficient and well distributed stormwater treatment and discharge. Rather than a large regional stormwater facility, it is recommended that more localized treatment areas within Industry Street and other impervious area basins be considered, possibly curb tight planters along Industry Street.

All stormwater improvements shall meet local code requirements for treatment, detention, and discharge. The waterfront site has sufficient area to provide full stormwater treatment for new impervious areas.

With this future development planned, it is recommended that the overhead utilities in Portway Street and east of the Red Building be undergrounded, when appropriate. This will allow Portway Street to be widened and create a cohesive streetscape leading to the waterfront. In addition to new underground power service to all new and existing buildings, fiber-optic internet service will be added to all new and existing buildings as well. New undergrounded services from the overhead lines in Portway will be needed throughout the site.

ZONING RECOMMENDATION

It is recommended that the City of Astoria adopt a simplified framework of development standards for the District to enable progress toward the waterfront vision and goals established in the Port of Astoria Waterfront Master Plan.

Figure 51 (page 87) outlines considerations for potential code adjustments. The new zoning should provide maximum flexibility consistent with the vision and goals of this Master Plan and Framework, in support of the success of Port and stated purpose of the Code.

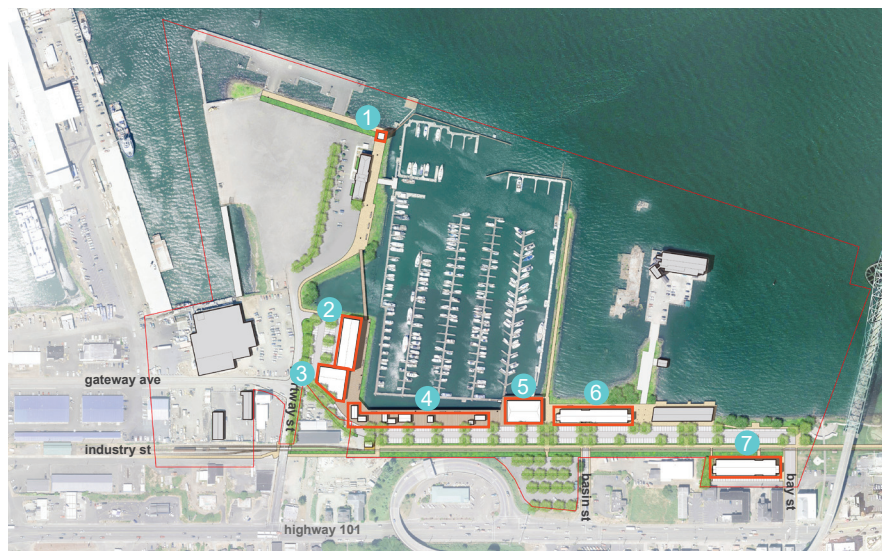


Figure 50: Proposed new buildings

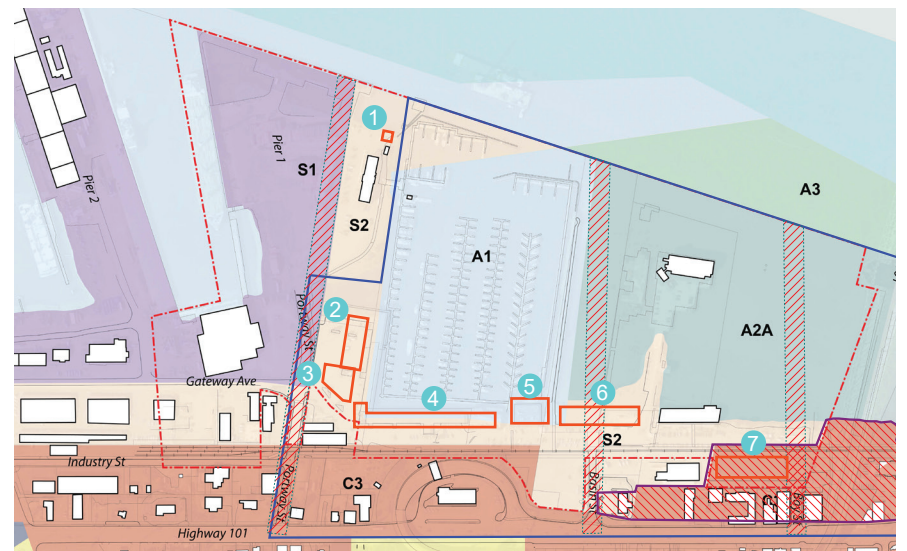
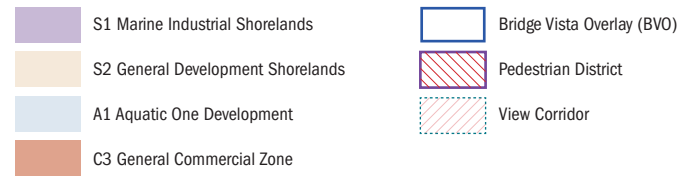


Figure 51: Proposed new buildings with existing zoning

#	Name	Considerations	Status
1	Port Tower*	(In S2, General Development Shorelands)	
		Uses: Recreation	allowed
		Height: If over 28'	not allowed
2	Hotel	(In S2, General Development Shorelands, BVO)	
		Uses: Recreation	allowed
		Height: If over 28'/35'	not allowed
3	Market Hall	(In S2, General Development Shorelands, BVO)	
		Uses: Fish Market	conditional
		Food & Drink	conditional
		Retail	conditional
		Office	not allowed
		Meeting Space	not allowed
		Height: If over 28'/35'	not allowed
4	Fishing Village	(In S2, General Development Shorelands, BVO)	
		Uses: Seasonal/temp retail	conditional
		Food & Drink	conditional
		Height: If 28' or under	allowed
5	Multi-Use Support Structure**	(In A1, Aquatic 1 Development, BVO)	
		Uses: Fish Market	not allowed
		Sports fishing retail	not allowed
		Food & Drink	not allowed
		Height: If 28' or under	allowed
6	Mixed-Use Building	(In S2, General Development Shorelands, BVO)	
		Uses: Light Manufacturing	allowed
		Maritime office	not allowed
		Food & Drink	conditional
		Retail	conditional
		Height: If 28'/35' or under	allowed
7	Mixed-Use Building	(In C3 General Commercial, BVO, Pedestrian-Oriented District)	
		Uses: Light Manufacturing without retail	amendment required
		Light Manufacturing with retail	allowed
		Maritime office	allowed
		Food & Drink	allowed
		Retail	allowed
		Height: If 28'/35' or under	allowed

*
The Port Tower (1) site is located outside the BVO and outside the Port of Astoria West Mooring Basin Plan District.

**
The Mixed-Use Building (6) site is located within the Basin Street view corridor, which is not allowed by current zoning. Removal of the Astoria Riverwalk Inn provides new public views to the Columbia River and West Mooring Basin, which could be considered as an offset or "swap" for this development site.

Figure 52: Considerations for potential amendments to zoning

ADDITIONAL RECOMMENDATIONS

The following recommendations bolster the success of investments within the District and Port of Astoria generally.

TRANSPORTATION

Related to the development of Industry Street and work within the District to connect Portway, Basin, and Bay Streets, it is recommended that the Port of Astoria work with the City and Oregon Department of Transportation (ODOT) to improve street connections to Highway 101. The following is a summary of potential projects which are outside the District.

- Address challenges to truck access into the Port at Portway Street. This involves realigning Portway where it approaches Highway 101 and providing wider through lanes to accommodate turns (left and right) by semi trailer trucks. Additional upgrades could include bike lanes and street trees. This project is included in the 2013 Astoria Transportation System Plan (TSP) (D-34) as a long-term, aspirational plan. Intersection design and signalization improvements to facilitate safer turns should be assessed. Signalization optimization is included in the TSP (D-2) as a medium-term, likely-funded plan.
- Upgrade Basin Street and Bay Street to mixed-use local street section, with shared through/bike lanes, on-street parking, and street trees. Upgrades to Bay Street are included in the TSP (D-35) as a long-term, aspirational plan. Signalization optimization at Basin Street is included in the TSP (D-2) as a medium-term, likely-funded plan.
- Improve truck access at Hamburg Avenue. This may involve intersection design and signalization improvements at Highway 101, to accommodate safer turns. Improvements are included in the TSP (D-19) as a long-term, aspirational plan, limited to restricting access or installation of a new signal. It is recommended that a review of more extensive improvements is conducted, to assess Hamburg Avenue's potential as a primary truck entrance into the Port, to take pressure off Portway Street.

PORT IDENTITY AND WELCOME SIGNAGE

As discussed in Chapter 4, the Port of Astoria would greatly benefit by identifying its presence and its place in the community and conveying a clear invitation to do business at its industrial waterfront. It is recommended that the Port of Astoria develop a branding program that serves as a guide for visual elements including signage throughout its public-facing areas.

As part of this program, it is recommended that the Port of Astoria introduce new monumental signs that clearly identify the Port of Astoria and its entrances along Highway 101 (Hamburg Avenue, Portway Street, and Basin Street) and welcome visitors to the waterfront.



6 IMPLEMENTATION STRATEGY

Introduction

Set the Table

Attract Commercial Development

Attract Industrial Development

Potential Partnerships and Funding Sources

Development Conditions and Factors

Early Wins

Costs

INTRODUCTION

Implementing the Port of Astoria Waterfront Master Plan will take the concerted effort of multiple parties in soliciting grants, securing capital funding, convening stakeholders, and attracting site users. The purpose of this Implementation Strategy is to outline the steps to be taken to realize the vision of this Master Plan.

The framework for implementation of the Plan is composed of three components:

- **Set the Table** (Zoning Changes and Horizontal Development). Horizontal development of public infrastructure (streets, sidewalks, utilities) that will support the desired uses on the site
- **Attract Commercial Development** (hotel, mixed-use, and commercial facilities)
- **Attract Industrial Development** (maritime-related industrial facilities)

The team recommends that the Port construct horizontal development first, followed by the two vertical development tracks that can be executed entrepreneurially dependent on the market and opportunities.

The horizontal development is akin to the foundation of a house, upon which all the vertical construction sits. The horizontal must be constructed first, before the vertical development can begin. The two vertical components of the project may occur in tandem depending on opportunities available.

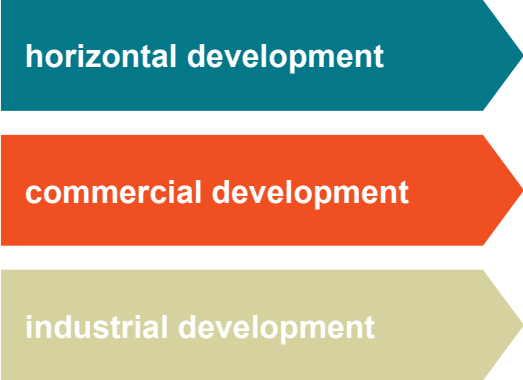
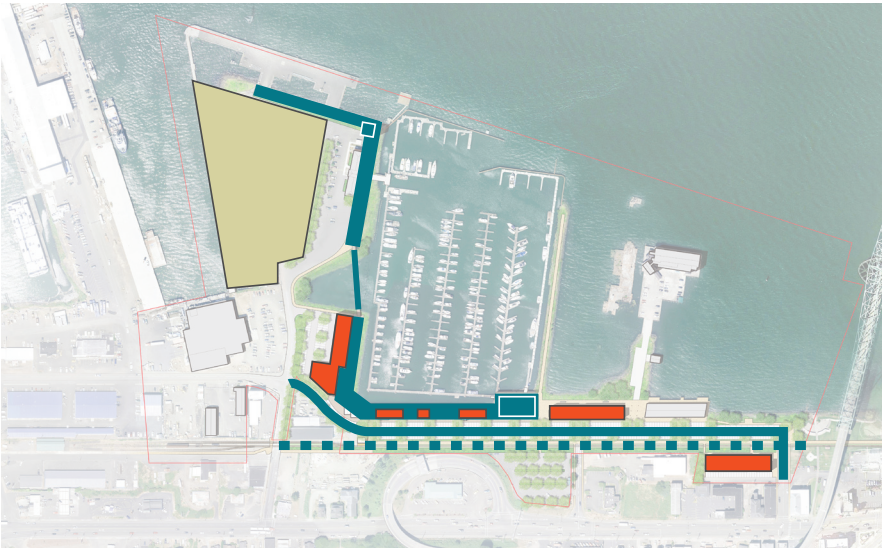


Figure 53: Development tracks

1 SET THE TABLE

1. Make Zoning Code Changes.
2. Identify Funding Sources for Horizontal Development Projects.
3. Fund-raise and Plan.
4. Construct Improvements.

STEP 1. MAKE ZONING CODE CHANGES

The first action that the Port can take is to work with the City to craft development regulations to simplify and clarify the uses and form of development that may occur on the site. Once these code improvements have been implemented, the Port can turn its attention to horizontal development that will set the table for subsequent vertical development.

STEP 2: IDENTIFY FUNDING SOURCES FOR HORIZONTAL DEVELOPMENT PROJECTS

The Port should undertake several projects to provide the necessary infrastructure to support the type of development identified in the Master Plan. The following investments are intended to occur early in the effort.

Demolish the Chinook Building.

The Chinook Building has exhausted its useful life. Renovating the structure is not economically viable. The removal of the existing structure is an early step toward implementing the horizontal development of the area and will indicate to the community that positive changes are underway. By removing the building, views of the mooring basin and river will be improved thereby meeting community desires for visual access and improving the perception of the area for prospective private development of other parcels.

Improve the street grid by developing Industry Street from Portway to Bay Street.

The goals of this street investment are to:

- Create a new gateway to the waterfront from the east and a better connection to Uniontown.
- Improve multi-modal circulation.
- Enhance access to all sites within the project area, but especially sites at the east end, rendering them more viable for development.
- Use the transportation investment as an opportunity to upgrade existing water, storm water, and sewer connections to and through the site, as well as bringing high speed data fiber to the site to support new and existing uses.

Improve pedestrian connectivity.

Enhancing pedestrian access will improve the feasibility of all of the Master Plan components. An improved pedestrian experience through the area will encourage visitors to eat, shop, and stay at the hotels and various commercial offerings in the area, maximizing the development potential of available sites. These improvements should also help to attract private investment.

Projects include:

- West Mooring Basin Boardwalk: With the future replacement of the Riverwalk Hotel, this area will be available for supportive activities and greatly improved visual and physical access to the marina and the river. This improvement will increase the desirability of all the parcels in the District.
- Enhancements to the Riverwalk Trail. Improving lighting, wayfinding, amenities and connections to the site will encourage use, improve

safety and increase the perceived value of the area for perspective investment.

- Construct the Pier 1 Walk. Better connecting the Pier 1 Building and the Cruise Dock to the area will help the viability of both entities as it connects the public to the waterfront.
- A new pedestrian footbridge over a small water inlet adjacent to the marina. This improvement will add a new experience to the waterfront and improve the perceptions and use of the Port's property.
- Relocated trolley stop. Relocating the trolley stop will better connect riders to waterfront improvements.
- Improved lighting and wayfinding signage. Providing these improvements will encourage public access and improve the perception and safety of the area.
- The Port Tower that will serve as an iconic viewpoint elevated above the site to offer visitors stunning views of the surrounding area. This improvement will become a draw for the community and better connect the public with Port activities and the benefits the two brings to the region.

Programming Opportunity: Business Spotlights

The Port could use the West Mooring Basin Boardwalk and Riverwalk Trail to create pedestrian amenities that celebrate and support specific local business owners and entrepreneurs who provide goods and services. For example, the Port could create signage along these walkways that spotlights local businesses within walking distance, tells their stories, and highlights their contributions to the community.

Funding Sources

An early step to implementation of the horizontal development is to identify prospective local and state funding sources for improvements to infrastructure, streets and pedestrian connections. The planning team identified a set of potential funding tools in **Figure 53** (page 101). Some of the grant programs identified may be used for project planning purposes, some may be used for construction of improvements, and some may be used for both planning and construction. It will be important to prioritize planning grant applications first, as much of the completed planning work will support later applications for funds dedicated to construction of the improvements. In this way, it may be that multiple applications to the same program will be required to maximize the amount of funds the project can obtain from some programs.

The Port should also leverage the support and advocacy of local and state elected leaders in pursuing each of these funding tools. In particular, former Senator Johnson and Representative Weber are ardent supporters of this project, and willing advocates for state-level requests. Partnering with them and others to tell the story of the project within the state capitol will be important to securing planning and construction funds for this phase of the project.

STEP 3: PLAN AND FUND-RAISE FOR CONSTRUCTION

With grant applications submitted and approved, the process of developing the project details begins.

- **Develop detailed plans for horizontal development including construction drawings for street improvements, walking paths, and other horizontal infrastructure.** The Port should engage with community stakeholders around the design of public realm infrastructure, wayfinding signage,

trolley stop, pedestrian amenities, the Port Tower, and other vehicular and pedestrian improvements. This effort will help build support and champions for construction of those amenities.

- **Develop building massing strategies and sequencing strategy for vertical development.** As part of the process of developing plans for the construction of horizontal infrastructure, it will be important to identify the size and shape of buildings on the site and how they will interact with streets, sidewalks, walking paths, and other public rights-of-way.

Additionally, the Port may want to consider sequencing development of the vertical improvements, particularly those in the mixed-use/commercial category. For example, developing smaller, less expensive buildings first will drive traffic to the site, followed later by the hotel and larger mixed-use buildings. A sequencing plan will allow the Port to strategically identify and engage with developers and tenants for various vertical development components. It will also help to determine whether some of the infrastructure investments could be phased.

- **Perform Economic Impact Analysis (EIA).** An economic impact analysis should be performed to quantify the economic development impact of the project on the local economy. Many of the grant applications identified in the previous step will ask for the number of construction and permanent jobs created or retained, forecast of direct and indirect economic activity (in dollars) generated by the project both on site and in the local and regional community, expected wages of workers at the project site, as well as other metrics. Identifying these metrics early will help project advocates tell the story of how additional grant dollars will help support the local economy.
- **Apply for construction funding.** Once the project plans are developed, the Port should submit applications and secure funds for construction activities via the sources identified earlier. As mentioned above, many of those funding sources have funds available for both planning and construction. This is the time for securing funding commitments for the

construction phase of the horizontal development portion of the project. For example, if the Chinook Building demolition requires abatement of any hazardous substances such as lead paint or asbestos, Business Oregon's Brownfield Remediation Program should be engaged to provide financial assistance for this scope of work.

- **Submit for permits.** Once funds for construction are secured and detailed plans for horizontal development are created, the horizontal infrastructure elements of the project become “shovel-ready.” At this stage, the Port would submit for building permits for each component of the horizontal infrastructure. This may be done in phases as funding for horizontal construction becomes available or as vertical development plans (described later) move closer to fruition.

STEP 4: CONSTRUCT IMPROVEMENTS

With the horizontal development permits in hand and funds in place to construct the improvements, the Port may elect to hire an “owner’s representative” to oversee construction activities. A key consideration for the Port will be whether to manage the project and subcontractors itself, or to engage with a construction company to do so on the Port’s behalf. While this decision may not need to be made until permits are ready, it may be helpful to have a contractor involved in the design process to provide feedback on construction cost and constructability issues during the design phase.

The first task under the “Construct Improvements” category is to demolish the Chinook Building. The remaining tasks of the horizontal development phase should follow.

With horizontal construction complete, the table is now set for vertical development. The Port will now be able to move the project into the two vertical development components: commercial development and maritime industrial development.

2

ATTRACT COMMERCIAL DEVELOPMENT

1. Identify Funding Sources and Define and Engage Stakeholders.
2. Fund-raise and Plan.
3. Construct Improvements.

STEP 1: IDENTIFY FUNDING SOURCES AND DEFINE AND ENGAGE STAKEHOLDERS

- **Identify and secure funding for project planning and market feasibility studies.** There are several funding sources that may be tapped to support the planning and development of the mixed-use/commercial components of the project. Engaging local and state partners will be vital to the successful implementation of the commercial development phase of the project. The first step is to identify prospective funding sources for planning and engagement, as well as for vertical construction. Any public funds secured for the commercial development components of the project should be considered gap funds to make the project viable, not the sole source of funding for the project. It is anticipated that the selected developers will contribute some measure of debt and equity financing to the project.

- **Engage Community on the Market Hall and Fishing Village and Create Concept Plans.** The most public-facing aspects of the project are the Market Hall and Fishing Village, both of which are anchored by the West Mooring Basin Boardwalk. The Market Hall and Fishing Village will generate the highest foot traffic and attract the greatest number of local small businesses.

Through this process, the Port can listen to the public's thoughts about the future of the site and how it can serve residents and business owners. Community engagement during this step should focus on:

- The design and programming for commercial elements, informing the creation of concept plans for the Market Hall and Fishing Village.
- Recruit tenants for commercial spaces, including a list of prospective tenants. Engaging the community to understand the products, services, amenities, and business they would like to see will be vital to understanding how to recruit tenants to these spaces.

STEP 2: FUND-RAISE AND PLAN

With the community engagement complete on the most public-facing elements of the project, the Port can identify and secure public funding sources for the commercial components of the project. Most of the public funding sources identified earlier can fund capital construction and should be engaged again as this phase nears the construction stage.

- **Solicit a Developer for the Market Hall and Fishing Village.** With the community engagement process for this step complete, concept plans are created, and grant applications submitted and approved, the Port can then solicit a developer to build the Market Hall and Fishing Village, knowing that several prospective tenants have already been identified. By identifying prospective tenants and funding sources early, the Port can reduce leasing and financial risks for the developer and make the commercial components of the project more feasible. The Port may choose to implement the Fishing Village itself.
- **Solicit a Hotel Developer.** The Port should begin this step by retaining the services of a hotel development consulting firm to perform a feasibility and positioning analysis for a hotel on the site.

The Port should use the hotel feasibility analysis to issue an RFP for a hotel developer. With a specific type and scale of hotel in mind, backed by empirical data and analysis, the solicitation is likely to be successful in identifying and selecting a hotel developer.

- **Solicit a Light Industrial / Creative Office Developer.** Engage with commercial real estate brokers and economic development professionals to better understand the specific economic viability of development. For pads on the site identified for light industrial or creative office development, engage with regional and state economic development professionals and industrial real estate brokers to identify users for this type of space (for example the Hood River development with Full Sail, Tofurkey, etc.). Meet with representatives of such

companies to determine their facilities needs and expansion plans and discuss how the port site might be able to meet those needs.

With prospective users identified, issue an RFP for developer to build projects that meet the needs of the identified users. Identifying tenants with the project before issuing the RFP is vital to gaining developer interest and financial feasibility.

STEP 3: CONSTRUCT IMPROVEMENTS

With the public funds secured and developers selected, the Port should enter into development agreements and ground leases with the developer of each component (hotel, mixed-use buildings, Market Hall, fishing village, etc.). Once development agreements are executed, the developers can proceed to create construction plans, secure private debt and equity financing, sign tenants to leases, and prepare for the start of construction.

Upon expiration of the lease for the Riverwalk Inn, we recommend demolishing the structure and repairing or replacing the overwater structure if necessary. In the event that demolition of the structure requires abatement of any hazardous substances such as lead paint or asbestos, Business Oregon's Brownfield Remediation Program should be engaged to provide financial assistance for this scope of work. If shoreline restoration is required, Regional Solutions should be consulted, along with Oregon DEQ.

3

ATTRACT INDUSTRIAL DEVELOPMENT

1. Define and Engage Stakeholders.
2. Fund-raise and Plan.
3. Construct Improvements.

STEP 1: DEFINE AND ENGAGE STAKEHOLDERS

- **Engage industrial stakeholders.** Assemble a stakeholder group of industrial real estate brokers, economic development professionals, industrial real estate developers, and maritime industrial users to identify uses and businesses that would maximize the industrial potential of the Pier 1 portion of the site.

Industrial users could be categorized in three groups:

- Established users looking to expand their manufacturing capacity,
- Small industrial startups that would benefit from a business incubator.
- Maritime service and support users

This engagement process will help the Port to identify future tenant users of the site and work with them to obtain nonbinding letters of intent for leasing space on the site. The Port may find it beneficial to

engage the services of an industrial real estate broker for this effort. In addition, the Port may identify and engage with a nonprofit or other entity that could be tapped to manage and operate the industrial business incubator.

- **Identify public funding sources for the maritime industrial development.** This will include funding sources for both traditional maritime-related facilities, as well as a business incubator for similar startup businesses (see *Figure 53*, page 101). Any public funds secured for the industrial development components of the project should be considered gap funding to make the project viable, not the sole source of funding for the project. It is anticipated that the selected developers will contribute some measure of debt and equity financing to the project.

STEP 2: FUND-RAISE AND PLAN

With stakeholder engagement complete, prospective users identified and signed to letters of intent, the Port can pursue and secure public funding sources for the industrial components of the project.

- **Attract public subsidy for infrastructure.** The Port should use letters of intent to build the case for public subsidy for infrastructure to support new facilities on Pier 1. State legislators should be engaged to obtain state-level funds identified above, as well as with federal delegation to obtain federal infrastructure funds to support industrial development and job creation on the site. With specific industrial users identified, the Port could leverage those users and representatives from Business Oregon to advocate for state funding in Salem.

Like the commercial development effort, it would be helpful to have an economic impact analysis performed on the industrial components of the site to quantify the impact these uses will create in the local and regional economy (number of jobs created, economic activity in dollars, etc.). The Port should utilize this analysis, letters of intent, and support from elected representatives to secure gap funding from various sources.

- **Design business incubator program and facility.** Work with large and small industrial users, trade organizations, economic development agencies, and others to identify the types of users, amenities, and support services required for an industrial business incubator. The Port should identify similar facilities in other areas and learn from the managers of those facilities how to program and manage one on the project site, including how to establish a pipeline of future users. The business incubator may need to be operated as a nonprofit to maximize benefit, so identifying prospective organizations early will be important. Whether the program is run by an existing nonprofit, or one newly created for this project, the entity, staff and board will need to be put in place prior to the start of construction on the incubator facility.

- **Issue RFP to select industrial developers.** With users and gap funding in hand, the Port can issue an RFP(s) to solicit developer interest for the industrial components of the site. It may be that industrial users choose to build their own facilities, in which case developer RFPs for those buildings won't be necessary. To the extent that users will be leasing space rather than owning it, these buildings will be best served by attaching a developer to those projects.

STEP 3: CONSTRUCT IMPROVEMENTS

- **Build incubator and industrial facilities.** With the public funds secured and developers selected, the Port should enter into development agreements and ground leases with the developer of each industrial component, and for the industrial business incubator. With development agreements executed, the developers can proceed to create construction plans, secure private debt and equity financing, sign tenants to leases, and prepare for the start of construction.

POTENTIAL PARTNERSHIPS AND FUNDING SOURCES

Potential Funding Source	Description	Funding for Planning or Capital	Horizontal Development	Commercial Development	Maritime Industrial Development
FEDERAL					
Economic Development Administration	Programs that may be applicable to the project include Travel, Tourism and Outdoor Recreation grants; American Rescue Plan Act funds; Build Back Better Regional Challenge grants; Economic Adjustment Assistance grants; and others.	Both	★	★	★
Federal Emergency Management Administration (FEMA)	In designing the horizontal development, the City should aim for climate resistant design. Due to the site's location on the waterfront in a tsunami zone, it may be possible to secure funding from FEMA for climate-resistant design and use of project elements as an evacuation site.	Both	★		
New Markets Tax Credits (NMTC)	Incentivize community development and economic growth through the use of tax credits that attract private investment to distressed communities. Commercial developments that create jobs in qualifying census tracts are eligible to compete for these tax credits on an annual basis. The census tract where the project is located was an NMTC-qualifying tract in 2010 but is not as of the 2015 census. It is possible that it may be so designated again when the next NMTC map is released in 2022.	Capital		★	★

Figure 54: Potential partnerships and funding sources

Potential Funding Source	Description	Funding for Planning or Capital	Horizontal Development	Commercial Development	Maritime Industrial Development
STATE					
Oregon Lottery	The state legislature allocates Oregon Lottery funds to qualifying economic development projects as part of the legislature’s annual budget process. Lottery funds are allocated for job creation and economic growth, assisting a variety of Oregon’s industries. These include manufacturing, high-tech, agriculture, fisheries, solar, medical, tourism, as well as small businesses. The funded projects in turn help local communities in the form of employment and business expansion.	Both		★	★
Regional Infrastructure Fund (Business Oregon)	Provides grants and loans to local governments for Regional Solutions capital construction projects. The enhanced street grid will set the table for vertical development and connect the study area to Uniontown and downtown. The investment will create new economic development opportunities, which is an important criterion for securing RIF funds. The funds could also be used for vertical development that creates jobs and enhances economic activity.	Capital	★	★	★
Business Oregon Special Public Works Fund	Provides low-cost financing to eligible municipalities for planning, design, and construction of utilities and facilities essential to industrial growth, commercial enterprise, and job creation.	Both	★		

<i>Potential Funding Source</i>	<i>Description</i>	<i>Funding for Planning or Capital</i>	<i>Horizontal Development</i>	<i>Commercial Development</i>	<i>Maritime Industrial Development</i>
STATE					
Port Revolving Loan Fund	The State of Oregon includes ports in planning and implementation of economic development by way of technical assistance, intergovernmental coordination, and responsible investment. The Fund provides loan funding to assist ports in the planning and construction of facilities and infrastructure.	Both	★		
Oregon Recreational Trails Program	Federally funded grant program administered by the Oregon Parks and Recreation Department. Since 1993, Oregon has funded over 500 projects with these funds to develop, improve, or expand motorized and non-motorized trails and their facilities.	Both	★		
Oregon Community Paths Program	A competitive grant program that supports investment in biking and walking facilities that are “off system,” meaning facilities that are not primarily on or along a roadway. Off System facilities may be routes or segments that traverse a park, between housing developments, along greenways, on old rail lines, or areas that are not otherwise within the public road right-of-way.	Both	★		
Oregon Parks and Recreation grants	More than \$13 million of grant funding is awarded each year to Oregon communities to support recreation on public lands. The grants help acquire, develop, improve and maintain public recreation and facilities.	Both	★		

<i>Potential Funding Source</i>	<i>Description</i>	<i>Funding for Planning or Capital</i>	<i>Horizontal Development</i>	<i>Commercial Development</i>	<i>Maritime Industrial Development</i>
STATE					
Travel Oregon Industry Grant	Projects that contribute to the development and improvement of local economies and communities throughout Oregon by means of the enhancement, expansion and promotion of the visitor industry are eligible to receive grant funding.	Planning	★	★	
Oregon Dept of Transportation (ODOT) Transportation Growth Management (TGM) grants	TGM Planning Grants help local jurisdictions plan for streets and land with the goal of creating more livable, sustainable, and economically vital communities. The Preferred Alternative increases opportunities for transit, walking and bicycling. Next step: Connect with David Helton at ODOT who manages TGM grants for Clatsop County.	Planning	★		
Connect Oregon	Connect Oregon is an initiative established by the 2005 state legislature to invest in non-highway modes of transportation. Future rounds of the program will fund aviation, rail, and marine projects, and previous rounds included bicycle/ pedestrian and transit projects. These infrastructure projects ensure Oregon's transportation system is strong, diverse, and efficient.	Both	★		
Business Oregon Loans	For mixed-use buildings that accommodate light manufacturing and/or food processing, Business Oregon could potentially fund a loan using lease revenue to service the debt. Another program is the Industrial Development Bond program, with maximum funding of \$10 million available.	Capital		★	★

<i>Potential Funding Source</i>	<i>Description</i>	<i>Funding for Planning or Capital</i>	<i>Horizontal Development</i>	<i>Commercial Development</i>	<i>Maritime Industrial Development</i>
LOCAL					
Tax Increment Financing / Urban Renewal Funds	Astoria's TIF funds are well suited to capital projects within the URA that advance economic development within the City of Astoria.	Both	★	★ (main tool)	★
Enterprise Zone Incentives	The enterprise zone covering the project site is a partnership between Clatsop County, the Port of Astoria, and cities of Astoria and Warrenton. Enterprise Zone incentives include tax abatements for qualifying projects, typically tied to amount of investment dollars spent and number of jobs created. Mixed-use/commercial development on the site is very likely to qualify for enterprise zone incentives that would support new development. Note that under current law, enterprise zones will sunset by 2025 .	Capital		★	★
Astoria Transient Lodging Tax	TLT funding is a great source of funds for tourism related amenities such as wayfinding signage.	Both	★		
Partnerships with Local Economic Development Organizations	Engaging with Clatsop Economic Development Resources (CEDR), Columbia-Pacific Economic Development District (CoIPac), and Northwest Oregon Economic Alliance to identify ways these organizations may be able to support the project directly or as a conduit to other sources of capital.	Both		★	★

<i>Potential Funding Source</i>	<i>Description</i>	<i>Funding for Planning or Capital</i>	<i>Horizontal Development</i>	<i>Commercial Development</i>	<i>Maritime Industrial Development</i>
PRIVATE					
Cruise Lines	The Port should explore partnership opportunities with the cruise lines that serve Astoria and dock at the project site. Because these corporate partners may find that enhanced pedestrian amenities at the project site will benefit their cruise passengers, they may have some interest in helping to fund pedestrian improvements.	Both	Maybe	Maybe (Market Hall)	
Philanthropy	The Port Tower viewing deck may be of interest to philanthropic groups due to its educational, accessibility, and environmental benefits. In addition, philanthropic groups may be interested in funding the Market Hall or any industrial incubators on the site.	Both	★	Maybe	Maybe

DEVELOPMENT CONDITIONS AND FACTORS

The Port should implement the Master Plan with a clear understanding of the “headwinds” that could inhibit or delay implementation over time. In addition, the Port should understand the “tailwinds” that could help the Port to implement the plan with greater success than anticipated. *Figure 54* provides a preliminary list of potential factors, which should be revisited as economic context and existing conditions evolve.

	Tailwinds <i>Factors and events that help increase growth or cause positive effects on profits and revenue.</i>	Headwinds <i>Conditions that impede or inhibit progress</i>
Local Demand	<ul style="list-style-type: none"> • Population migration patterns create stable and educated workforce in Astoria that meets Advance Astoria Goals • Increasing entrepreneurial activity results in demand for industrial and retail space. • Local residents support amenities, retail. 	<ul style="list-style-type: none"> • Astoria's investments (e.g. broadband, schools) to attract a skilled workforce do not keep pace with other regions, limiting local market for potential investments • Lack of new business starts or expansions limit demand for industrial space and entrepreneurial activity.
Tourism	<ul style="list-style-type: none"> • Cruise ship calls increase, and the Port is able to accommodate them with existing berths, helping to bolster local business activity • Cruise ship industry is an active partner in advancing Master Plan goals at Pier 1 • Tourist demand for Astoria's unique assets increase. 	<ul style="list-style-type: none"> • Cruise industry trends continue toward larger ships that the Port cannot handle with existing infrastructure • Cruise ships are not interested in partnerships • Increased volatility in the cruise sector creates a less certain source of market support.

Figure 55: Astoria Waterfront Master Plan Implementation – Headwinds and Tailwinds

	<i>Tailwinds</i> <i>Factors and events that help increase growth or cause positive effects on profits and revenue.</i>	<i>Headwinds</i> <i>Conditions that impede or inhibit progress</i>
Funding, Implementation, and Political Factors	<ul style="list-style-type: none"> • The Port is successful in winning grants to match local urban renewal dollars for implementation • Port successfully balances local priorities for the site with tourism needs • Developers are interested in working with the Port and have the capacity for large-scale vertical development. 	<ul style="list-style-type: none"> • Stiff competition for limited grant dollars • “Stranded infrastructure” - vertical development does to materialize, even after Port makes all infrastructure investments. • City/port priorities shift away from waterfront master plan implementation • Developer capacity or interest is limited, and the project is delayed
Broad Macroeconomic Factors	<ul style="list-style-type: none"> • Growth in Astoria’s economy accelerates, and this area helps to support this increased economic activity. • Marine cargo activity increases on the Lower Columbia, increasing demand for river-adjacent industrial space 	<ul style="list-style-type: none"> • Astoria experiences a recession or changes in the business cycle that disrupts market support and timing of the project. • Cost increases and volatility inhibit project feasibility. These could delay any component of the development. • Demand for river-adjacent space slows.
Natural Hazards	<ul style="list-style-type: none"> • Investments in resilience help to mitigate risks from natural hazards 	<ul style="list-style-type: none"> • The area experiences a significant earthquake and tsunami and area infrastructure does not withstand the impacts.

EARLY WINS

The transformation of the waterfront envisioned in this Master Plan will take the concerted efforts of multiple entities over time. To draw attention to Port's vision, demonstrate commitment, and instigate progress, it is prudent to initiate this process with some "early wins" that are relatively simple to accomplish and begin the momentum of change that helps to build excitement. The following steps offer tangible benefits to the Port and community that will signify improvement and help attract private investment to the waterfront.

Replace the Chinook Building with interim uses.

An early tangible start to the Port waterfront's redevelopment, could be to remove the now closed Chinook Building and rehabilitate the pier structure to provide a public space for interim uses that support the celebrate the West Mooring Basin. Through the establishment of simple additions to the pier such as stands, picnic tables, and fish cleaning stations, lighting, and signage, the area will take on new life. Views of the West Mooring Basin and Columbia River will be greatly enhanced and this early step will begin to promote the Basin as the heart of the District and center of activity.

Implement Riverwalk Trail lighting and wayfinding.

As an early step of Riverwalk Trail improvements, the City of Astoria should install new lighting and signage through its Riverwalk Wayfinding program. These improvements will help connect the Port's waterfront to other destinations along the trail and welcome the community in a safe environment.

Develop and promote the Port's identity.

The Port should burnish and update its identity to announce its presence and its place in the community and convey a clear invitation to do business. The branding program will serve as a guide for visual elements including signage throughout its public-facing areas. The Port should prioritize pilot installations of wayfinding signage around the West Mooring Basin, to promote its identity to current users, visitors, prospective tenants, and investors.

Improve seasonal cruise facilities to encourage passengers to enjoy Astoria.

The Port should make provisional improvements to how cruise passengers connect with transportation, focused on a stronger benefit to local businesses. As a limited version of the Cruise Passenger Transportation project, the initial step may involve wayfinding signage that promotes destinations and transportation options including bike rentals, along with improvements to circulation, queuing, and loading and seasonal market facilities to accommodate a wider range of Astoria vendors.

Improve access, availability, and amenities within the West Mooring Basin.

Early improvements to the mooring facilities will increase the marina's capacity and welcome new boat owners to lease slips. This will accommodate some of those on the waiting list, add activity to the Basin, and improve Port revenue.

COSTS

The following order of magnitude costs were established to assist the Port in establishing initial budgeting strategies. Estimates are based on conceptual illustrations and narrative descriptions provided by the planning team and are stated here as a range of potential costs (low and high). Subsequent phases of design and engineering will provide clearer definitions of scope and greater detail for more accurate estimates.

Each estimate includes direct construction costs plus the following markups: design and construction contingency, general conditions and requirements, Contractor's overhead and profit, bonds and insurance, and soft costs (permits and fees). Owner's operational costs, escalation, remediation, and sales tax are not included. Cost ranges are calculated in 2022 dollars.

The following is a summary of the Conceptual Cost Plan. The complete report is included in the Appendix.



	Low (Millions)	High (Millions)
Demolish Riverwalk Inn Hotel	\$ 1.06	\$ 1.60
Demolish Chinook Building	\$ 0.19	\$ 0.28
Maritime Industrial Site Preparation	\$ 4.88	\$ 7.33
Port Tower	\$ 1.29	\$ 1.94
Pier 1 Walk	\$ 1.56	\$ 2.33
Cruise Passenger Transportation	\$ 0.29	\$ 0.43
Footbridge	\$ 1.05	\$ 1.57
West Mooring Basin Boardwalk Option 1: New Pier Structure	\$ 11.78	\$ 17.67
West Mooring Basin Boardwalk Option 2: Repair Existing Pier Structure	\$ 4.87	\$ 7.30
West Mooring Basin Boardwalk Option 3: Reduced Footprint (Limited Over-Water Structure)	\$ 4.32	\$ 6.49
Fishing Village	\$ 0.33	\$ 0.49
Multi-Use Support Structure Option 1: Enclosed Building	\$ 2.79	\$ 4.18
Multi-Use Support Structure Option 2: Open Canopy Structure	\$ 2.05	\$ 3.07

	Low (Millions)	High (Millions)
Industry Street	\$ 2.96	\$ 4.42
Riverwalk Trail Improvements	\$ 0.86	\$ 1.29
Relocated Trolley Stop	\$ 0.03	\$ 0.05
Bay Street Connection (Inside Study Area)	\$ 0.63	\$ 0.94
Bay Street Connection (Outside Study Area)	\$ 0.08	\$ 0.94
Basin Street Connection (Inside Study Area)	\$ 0.37	\$ 0.56
Basin Street Connection (Outside Study Area)	\$ 0.08	\$ 0.11
Portway Street Connection (Inside Study Area)	\$ 1.70	\$ 2.56
Portway Street Connection (Outside Study Area)	\$ 0.32	\$ 0.48
T-Dock Electrical Service	\$ 0.36	\$ 0.54
Utility Infrastructure	\$ 1.40	\$ 2.09

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PORT OF ASTORIA WATERFRONT MASTER PLAN



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