

# OMSI

## CENTRAL CITY MASTER PLAN

Land Use Review  
LU 21-115214

June 2022



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# 1 Project Introduction

## The OMSI District: A Vision

The OMSI District will be a distinctive, one-of-a-kind neighborhood - an inclusive community destination with innovation, culture, the arts, and science learning at its heart.

A new waterfront education park will honor people and place. It will be the first in the city to restore an urban tribal presence on the Willamette River and create access to the river for all. It will also include public green space, plazas, restored riparian and upland habitats, hands-on outdoor science programming, and interpretation that affirms, sustains, and shares indigenous ecological knowledge and cultural connection to the river.

The OMSI District will become home. Up to 1,200 new residential units are planned for individuals and households, with a minimum of 20% qualifying as affordable housing. Mixed-use buildings will bring neighbors together alongside restaurants, businesses, Portland Community College (PCC), Portland Opera, and a Center for Tribal Nations.

The OMSI District will create sustainable innovation at scale. It will showcase and advance climate solutions through transportation, next-generation urban systems and technology, including OMSI science learning experiences advocating informed climate action.

The OMSI District comes from a collaboration of local, tribal and regional government entities, indigenous groups, non-profits, and businesses.

This neighborhood will be built together so we can thrive together. It will be:

- a community destination and inclusive neighborhood creating equitable public benefit;
- a waterfront education park opening up access to the Willamette River and grounded in indigenous ecological knowledge;
- a hub for innovation, arts, culture, science learning, and climate action;
- a city economic growth driver and OMSI pillar of financial sustainability; and
- provide a vital regional transportation connection through trail development.

The OMSI District is for everyone. For those seeking to play, to learn, to live, and to be inspired. Welcome.

## Central City Master Plan Goals

The goal of the OMSI Central City Master Plan (CCMP) is to realize the vision by documenting a flexible and inclusive urban design framework for the buildings, streets, open spaces, and infrastructure necessary to complete redevelopment of this large site. This urban design framework will ensure that future development has a strong orientation to transit and the Willamette River, a safe and vibrant public realm, and adequate public infrastructure.

To further the goal of flexible and inclusive open spaces, the CCMP proposes a major new waterfront education park. Open to the public, this park will preserve and enhance scenic viewpoints along the greenway trail, provide multiple opportunities for small educational and interpretive elements, restore riparian and shallow water habitat, and include a 0.75-acre plaza, the only such gathering space on the east side of the Willamette. The waterfront education park will be programmed to provide interpretive and educational opportunities to students and visitors alike. A variety of passageways from the interior of the OMSI District to the waterfront are planned to ensure that the waterfront is a major presence in all areas of the new neighborhood.

The urban design, public realm, and infrastructure framework will enable redevelopment that supports a variety of uses in addition to the planned continuation and expansion of the three major institutions: OMSI, PCC and Portland Opera. Commercial uses ranging from office to maker space to a potential food market are expected to be a substantial portion of the new development, in addition to apartment residences, a hotel, and/or a destination retailer. All proposed development tracts are within the 1/3 mile of the OMSI Station transit hub and connected to it by the Central Pedestrian Spine.



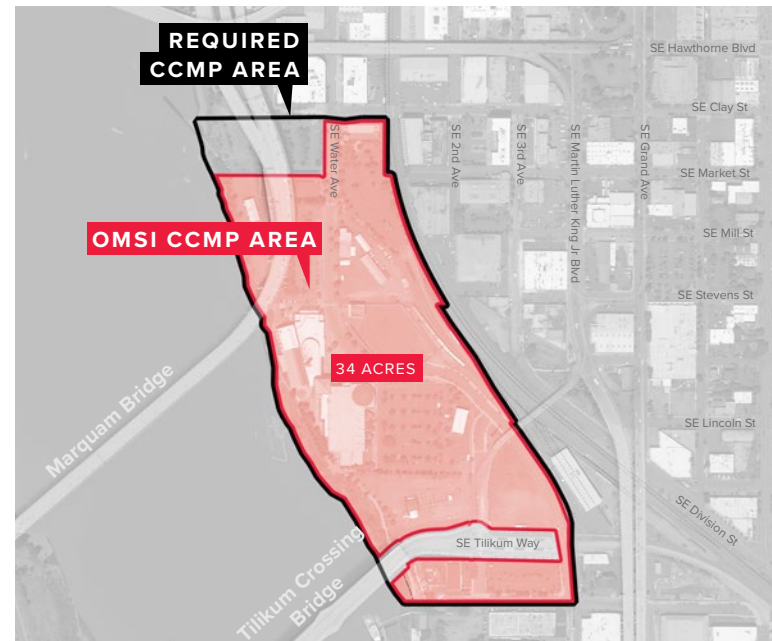
The new OMSI District north gateway, looking south on New Water Avenue toward OMSI.

# CCMP Area + Innovation Quadrant

## CCMP Area

The plan area contains approximately 34 acres in the Central Eastside Industrial District, located along the east bank of the Willamette River and separated from the Historic Central Eastside grid by Union Pacific rail lines, the Highway 99 (McLoughlin) viaduct, and an embankment. Its setting is like other recent river terrace redevelopments: North Macadam, Riverplace, and, most recently, South Waterfront. Similar to those neighborhoods, the boundaries are shaped by natural elements and the land is dictated by past industrial uses and infrastructure, rather than the city grid. The OMSI CCMP area includes seven landowners: OMSI, PCC, Portland Opera, PGE, 1800 Water Avenue Partners, TriMet, and the City of Portland. The OMSI Station provides a transit hub for the district, with light rail and bus service, along with the Streetcar station to the north (a Major Transit Priority Street).

One of the key benefits of the OMSI District's riverfront location is the spectacular views of the Willamette River, downtown Portland, and the Tilikum Crossing Bridge, uniting the Central City and its four quadrants. These site configurations and partners allow the CCMP area a unique opportunity: the ability to create a new identity as a community destination, a transit-oriented development, an economic growth driver, and a center for innovation. The development framework discussed later in this document supports and embraces these dynamics.



## Portland Innovation Quadrant

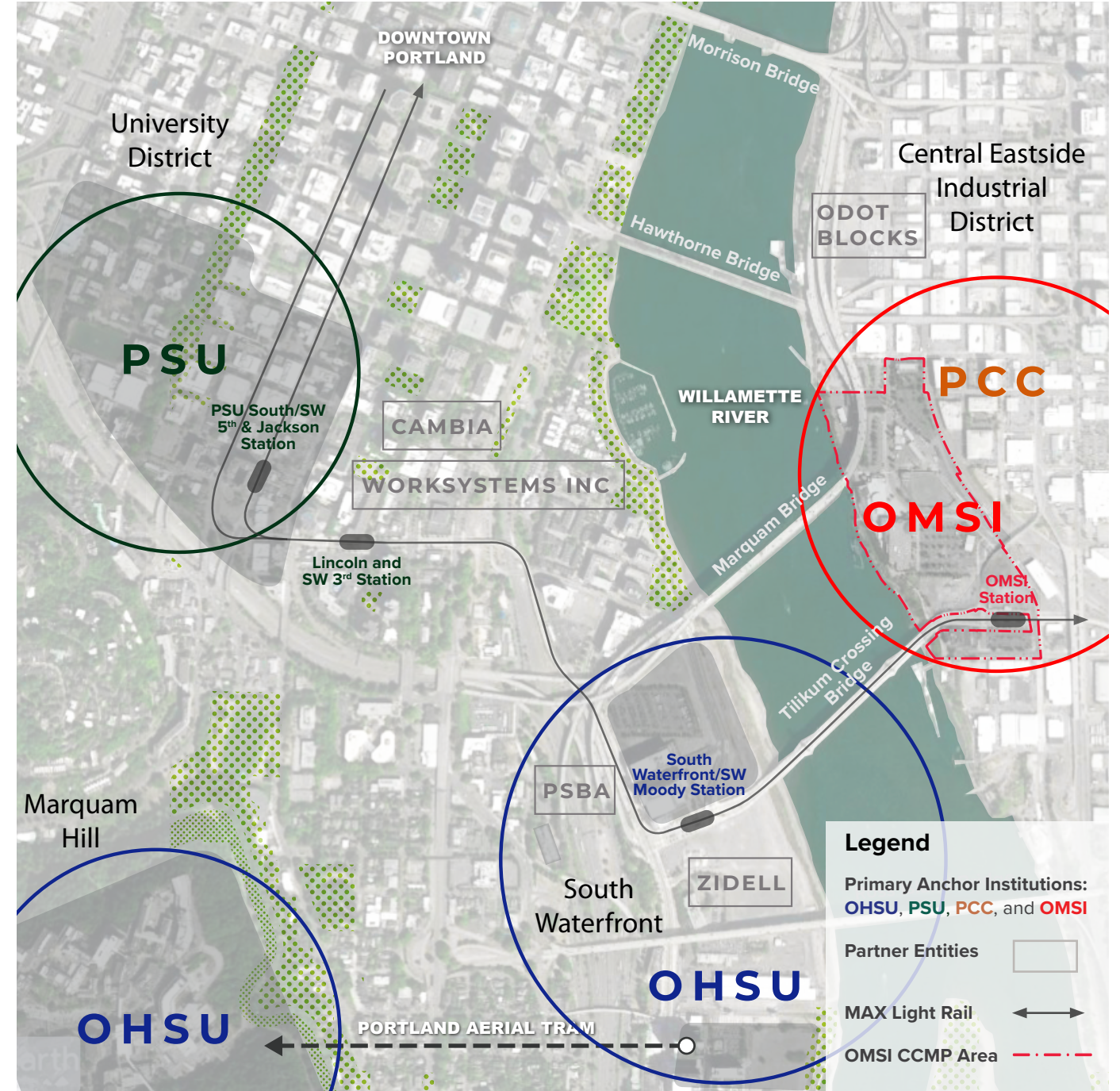
The OMSI CCMP plan area is located within the Portland Innovation Quadrant, linked across the river with partners on the west side of the Tilikum Crossing Bridge. The Innovation Quadrant is an emerging innovation district in Portland's urban core, a geographic cluster with four anchor institutions — OMSI, PCC, Portland State University (PSU), and Oregon Health Sciences University (OHSU) — as well as partner entities, incubators, and accelerators to spur investment, job creation, and economic growth. It is the center of gravity for a flourishing innovation ecosystem that attracts talent, entrepreneurs, and investment while propelling Portland to global prominence at the intersection of health, science, technology, and product design.

The City of Portland has implemented systems and policies to strengthen mature firms and institutions and build startups, both of which will promote diversity and advance inclusive growth.

The first signs of this collaborative ecosystem are already part of Portland, manifested in signature projects like the OHSU Collaborative Life Sciences Building, located at the Tilikum Crossing bridgehead in the South Waterfront redevelopment, a joint project between OHSU, Oregon State University (OSU), and PSU. The Innovation Quadrant, fed by a rich mix of alternative transportation modes and mixed-use development, is quickly emerging as a catalyst for life science, medical device, and digital health startups. The OMSI CCMP will support development of an innovation and science-based mixed-use neighborhood on the east side and maximize community investment in the OMSI Station area.

The OMSI CCMP will support the Innovation Quadrant by providing:

- A place for Innovation Quadrant businesses and institutions to build facilities in which to pursue their mission.
- Residential opportunities for people working at Innovation Quadrant institutions on both sides of the Willamette River.
- Additional and enhanced pedestrian and bicycle facilities for connecting the Innovation Quadrant workforce.
- Destinations for indoor and outdoor exhibits and programming that will manifest OMSI's education and science-based mission.
- Co-location opportunities for companies providing workforce development.
- Expansion opportunity for PCC's workforce development programs.



Portland Innovation Quadrant

# CCMP Overview + Required Components

## CCMP Overview

The OMSI District is one of five sites in downtown Portland required to complete a Central City Master Plan in order to redevelop under the Central City 2035 plan (CC2035). All properties within the OMSI district are participating in this CCMP except the property north of OMSI's Pepco Building owned by the Oregon Department of Transportation (ODOT).

The CCMP provides an urban design framework and conceptual site layout for physical design components, such as building massing, circulation, and open space.

The CCMP is also required to include plans for adequate and timely infrastructure to support the planned buildings and open spaces.

## Process to Date

OMSI sought feedback on its 2017 Master Plan from the Design Commission in DAR (LU 17-243925 DA). The current CCMP refines the vision of the 2017 plan to include new partners and sites, reflect guidance from OMSI's development partners, and to address elements of the Planning and Zoning Code (PZC) 33.510.255 (Central City Master Plans) enacted in April 2020.

This CCMP was discussed at two Design Advice Requests in 2019 (LU 19-137711). PCC and Portland Opera joined the master plan in 2020 and 2021, respectively. Throughout this process, OMSI

and its partners have collaborated with a City Technical Advisory Committee to ensure that the development proposals presented in this document coordinate with and advance the City's goals and guidelines outlined in the PZC 33.510.255 and in the CC2035 plan.

## CCMP Organization

The master plan addresses and is guided by the CC2035 Central Eastside Goals and Policies, applicable Central City Fundamental Guidelines, and applicable Central Eastside Design Guidelines, in addition to the requirements of the PZC 33.510.255 for Central City Master Plans.

Chapter 3 addresses the codified components of the OMSI CCMP under the PZC 33.510.255. Chapter 4 provides supplemental information, like illustrative examples of how the framework might unfold in the future, as well as narrative text and findings supporting the approval criteria and the larger vision. Chapter 5 is a succinct list of the applicable approval criteria with a response to each. These have been grouped into six subject matter categories, due to the amount of subject matter overlap found in the layered regulatory framework.

**The table at right represents an index of each required component under 33.510.255.G and where the responses can be found within this document.**

## TITLE 33.510.255 CENTRAL CITY MASTER PLANS

Relevant Page	G. COMPONENTS. A Central City Master Plan must include the following components:
8	<ol style="list-style-type: none"> <li>1. Boundaries. The boundaries of the master plan area must be shown on a site plan. For sites where a Central City Master Plan is required, the boundary must include all contiguous lots in common ownership within the area shown on Map 510-19. Contiguous includes lots across a shared right-of-way. Lots in separate ownership may be included, but are not required.</li> <li>2. Proposed urban design and development framework. The following materials must be included to provide clear visual information about the proposal:                             <ol style="list-style-type: none"> <li>a. A site plan showing the following:                                     <ol style="list-style-type: none"> <li>(1) Location, size, and dimensions of all existing and proposed structures, and the location of all main entrances to existing and proposed buildings;</li> <li>(2) Location, size and dimensions of the building coverage of all proposed structures;</li> <li>(3) Description of existing and proposed land uses. The description must include information as to the general amount, type and location of all uses;</li> <li>(4) Existing and proposed internal pedestrian, bicycle, and vehicle circulation system, including where each part of the proposed system connects to public rights-of-way adjacent to the master plan boundary, and transit service lines and stations within or adjacent to the master plan boundary;</li> <li>(5) Existing and proposed location of public rights-of-way</li> <li>(6) Location of bicycle and vehicle parking; and</li> <li>(7) Location, size and shape of all open areas such as parks, plazas, landscaped and hardscaped areas and outdoor recreation amenities including those that are required in 33.510.255.K.</li> </ol> </li> <li>b. A three-dimensional massing diagram that identifies the maximum existing and proposed building envelopes, with proposed building dimensions and height for each building, including building massing where a tower will be setback from the edge of a podium; and</li> <li>c. Sections, sectional elevations, and perspectives that illustrate the relationship of site redevelopment to the surrounding urban form in terms of building height and massing.</li> </ol> </li> </ol>
8, 9, 27-30	(1) Location, size, and dimensions of all existing and proposed structures, and the location of all main entrances to existing and proposed buildings;
25, 27-29	(2) Location, size and dimensions of the building coverage of all proposed structures;
8, 34-36	(3) Description of existing and proposed land uses. The description must include information as to the general amount, type and location of all uses;
11, 12, 17, 18	(4) Existing and proposed internal pedestrian, bicycle, and vehicle circulation system, including where each part of the proposed system connects to public rights-of-way adjacent to the master plan boundary, and transit service lines and stations within or adjacent to the master plan boundary;
8, 12-16, 27	(5) Existing and proposed location of public rights-of-way
11, 17, 18	(6) Location of bicycle and vehicle parking; and
19, 44-48	(7) Location, size and shape of all open areas such as parks, plazas, landscaped and hardscaped areas and outdoor recreation amenities including those that are required in 33.510.255.K.
25, 31-33	b. A three-dimensional massing diagram that identifies the maximum existing and proposed building envelopes, with proposed building dimensions and height for each building, including building massing where a tower will be setback from the edge of a podium; and
13-16, 26	c. Sections, sectional elevations, and perspectives that illustrate the relationship of site redevelopment to the surrounding urban form in terms of building height and massing.
Various- See at right	3. Project narrative. A narrative that describes the project (pp 4-45), identifies how the Central City Master Plan is consistent with the applicable design guidelines (pp 46-55). Specific information about the proposed range and density of land uses and the proposed (pp 34-35) phasing of development (p. 37) must also be included. If the proposed Central City Master Plan involves the transfer of floor area, information about the location of the receiving and sending sites, the ownership of the sites, and amount of floor area to be transferred and retained at each site must be included (p. 36).
37-41	4. Infrastructure capability. The adequacy of infrastructure must be addressed. The plan must identify and link the development of each phase of the project to the provision of services necessary to meet the infrastructure needs of the development associated with that phase.
Appendix C	5. Design advice. A copy of the design advice request summary.

# 2 Context

## Neighborhood

### Neighborhood Identity

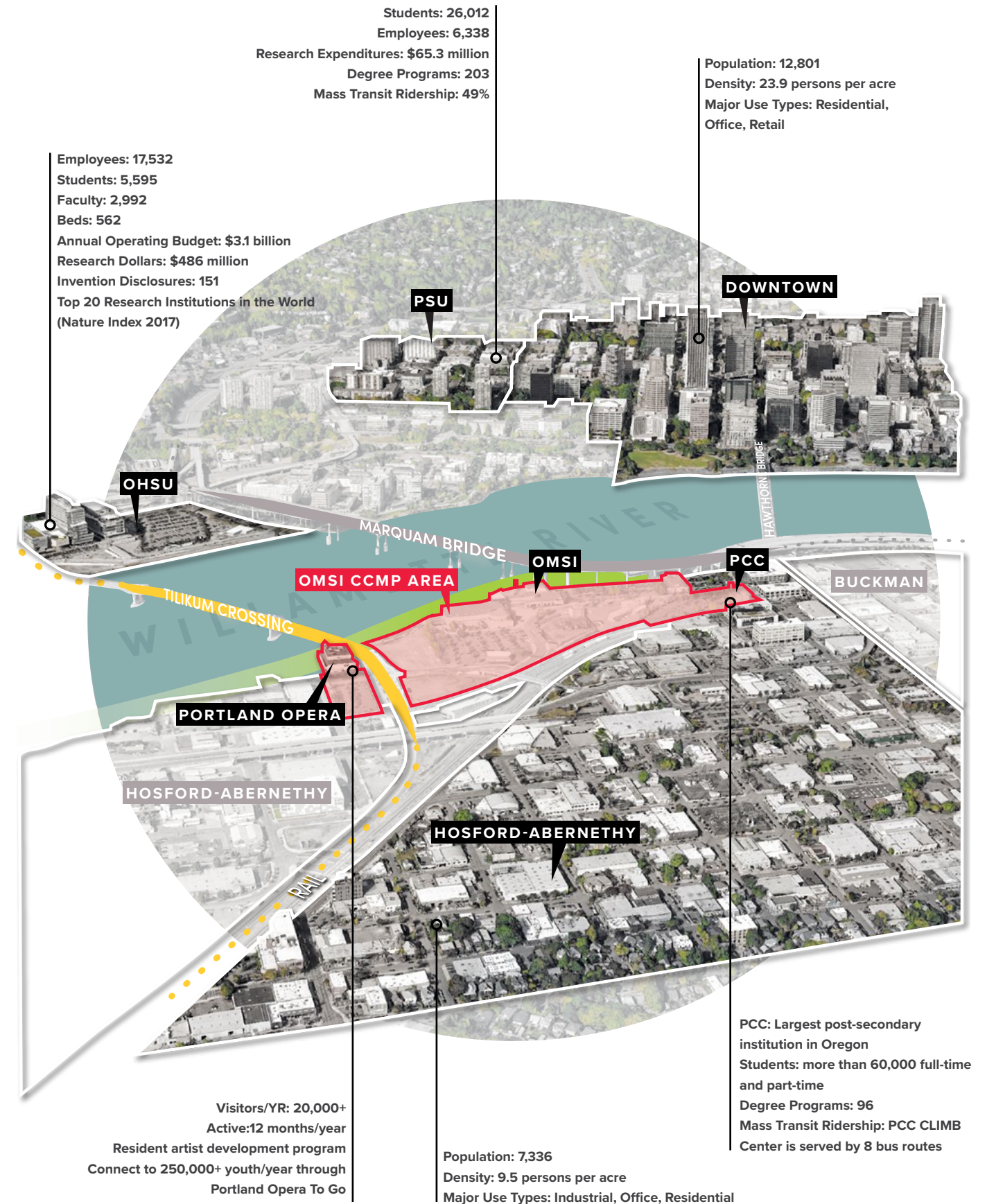
The OMSI CCMP plan area is a post-industrial site on the east side of the Willamette River within the Central Eastside Industrial District. It is located on the west side of the Hosford-Abernethy and Buckman neighborhoods by heavy rail tracks and Highway 99E. In keeping with historic urban riverfront development patterns, the alignment of the heavy rail tracks is a rough offset of the riverbank, giving the plan area its informal geometry.

The Tilikum Crossing and Hawthorne Bridges connect the plan area with downtown Portland. The greenway trail runs along the Willamette River through the plan area, connecting to local and regional parks, and also to existing pedestrian and bicycle infrastructure.

Industrial uses of the site began with James Stephens' cooerage, barge and ferry operations near the river. The first railroad was laid on or near its present alignment in the 1860s to support and exploit the city's economic growth. Between 1910 and 1929, Portland General Electric built its Station L power complex, of which little remains except OMSI's Turbine Hall. The Station was powered by burning wood debris, the enormous stockpiles of which covered much of the plan area and filled in the slough. Completed in the 1970s, I-5 and its Marquam Bridge crossing of the river arc over the northern third of the riverbank.

The 1990s saw the character of the area begin to change rapidly. The three anchor institutions in the plan area were built: the OMSI museum buildings and parking lots in 1992 on land donated by PGE; Portland Opera's Hampton Center in 1996; and PCC's CLIMB Center in 1998. Finally, the Tilikum Crossing Bridge, with OMSI Station, was completed in 2015, with the vision that dense transit-oriented development would grow up around it.

The evolution from classic heavy industry to a low-density post-industrial mixed-use zone characterizes the rest of the Central Eastside as well; it is a neighborhood in a state of change. However, there are still active industrial enterprises in the Central Eastside Industrial District, and these are highly prized for the jobs and enterprising spirit they bring to the central city. An important priority for the CCMP is to preserve the street network and freedom to operate that these businesses need to thrive, even as the OMSI plan area densifies and diversifies.



Sources: Portland Opera 2018 Annual Report, PSU by the Numbers, OHSU Fact Book, City of Portland Neighborhood Demographics 2010 Census, PCC website

# Existing Site Conditions

## Site Boundaries and Edge Conditions

Adjacent property owners include ODOT to the northwest (parking lot), SE Clay Street and a newly renovated office building north of PCC, the heavy rail lines and a steep embankment to the east, and a collection of light industrial parcels across SE Caruthers Street to the south of Portland Opera. The Willamette River bounds the plan area to the west, its bank heavily armored with riprap, and the greenway trail running along the top of its bank. The I-5 Marquam Bridge Viaduct flies over the northern third of the riverbank, while TriMet's Tilikum Crossing Bridge and OMSI/Water Avenue Station cross the site just north of the Portland Opera tracts.

## Existing Site Uses

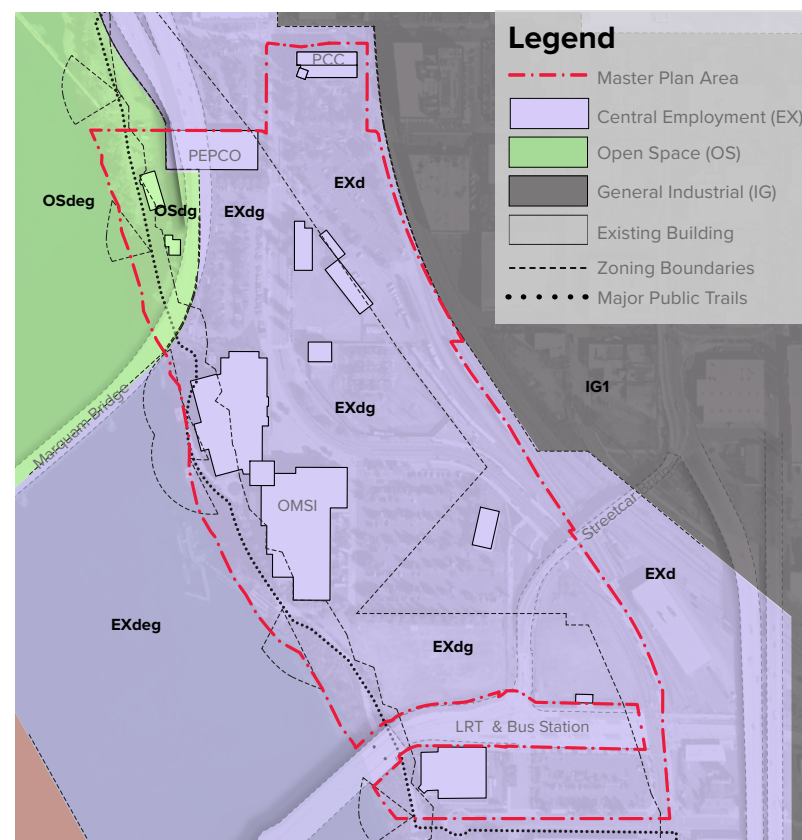
OMSI presents its science and education programming from two large exhibition halls and a collection of small support buildings. OMSI's Pepco Building, situated across SE Water Avenue from the PCC CLIMB Center at the northwestern end of the plan area, is used for storage and

construction of OMSI exhibits. PCC's CLIMB Center provides workforce training and education programming. Portland Opera's Hampton Center, a repurposed television station, holds the organization's administrative offices and some small performing spaces, plus the KQAC radio station.

The parcel owned by PGE is a recently decommissioned power station and an Oregon Department of Environmental Quality clean-up site. The site includes one small building, which PGE plans to demolish due to contamination. This is expected to be completed before development begins.

Abutting OMSI Station on its north boundary is a small structure with equipment that monitors traffic on TriMet's light rail line and on a nearby private rail line. It must operate as long as the private rail yard continues to run, and may be moved or absorbed into the proposed new building on Tract D.

There are four large surface parking lots in the plan area: at the PCC CLIMB Center, south of the Pepco Building, to the east of OMSI's exhibition hall, and on the east Portland Opera property.



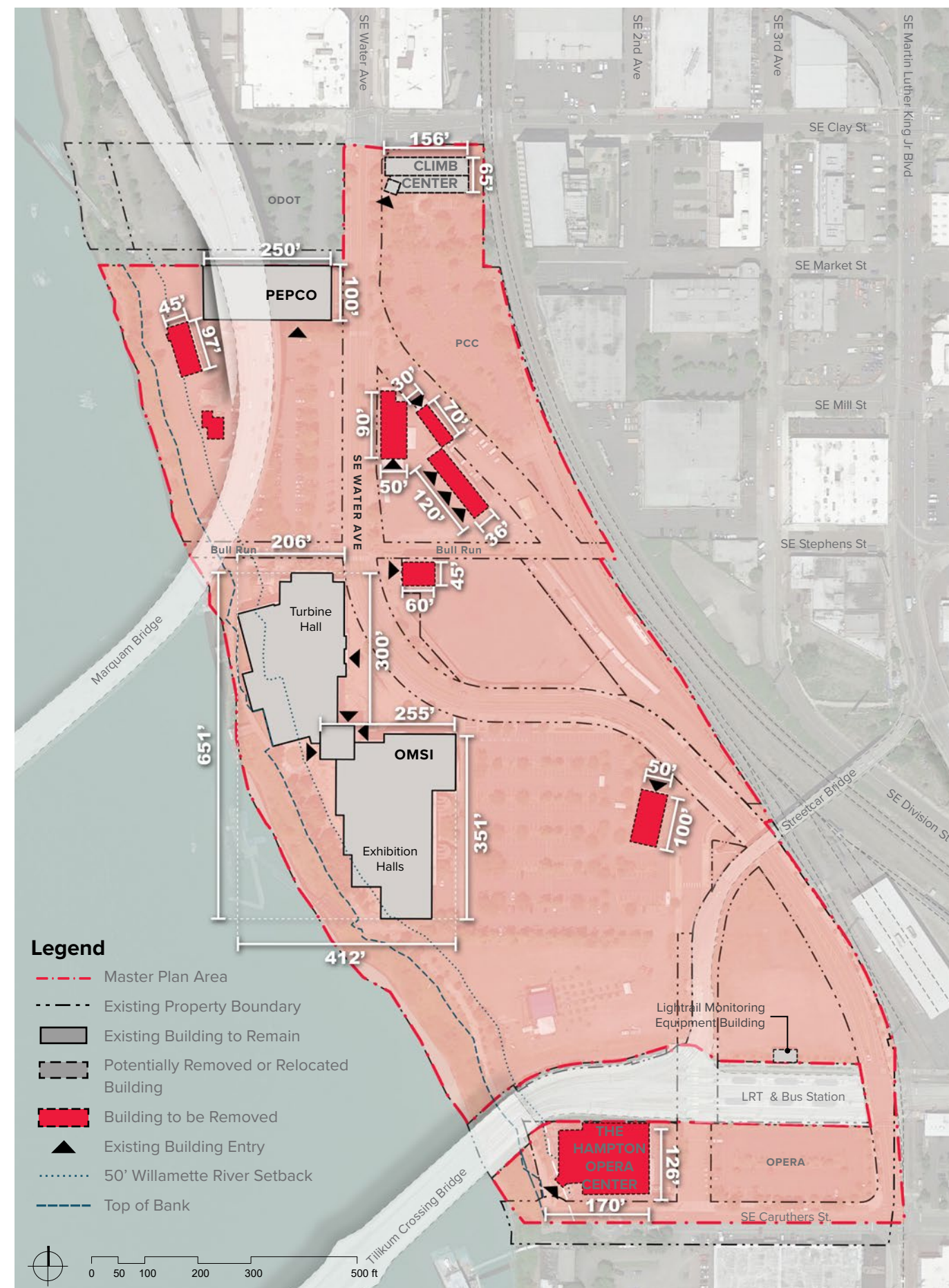
## ZONING

The master plan area is zoned almost exclusively Central Employment (EX), with Open Space (OS) zoning at the northwest corner. Within the Central Employment zone, the project area is subject to Design overlays (d); River General (g\*), River Environmental (e) and Scenic Resource (s). For more detail on overlays, see River Overlay Zones on page 23.



## OWNERSHIP

Seven property owners are collaborating to make developable tracts out of a patchwork of existing remnant parcels left from previous uses. Their interests are varied, and each benefits from the combined shared vision of an improved, highly-functional district.





# Site Constraints

The OMSI CCMP site has been shaped by its industrial history, changing uses, and central location, resulting in a number of site constraints that influence the CCMP proposal.

Bridges, railroads, topography, industrial debris, easements, and highway noise create site development constraints and limit continuity between the master plan area and surrounding neighborhoods. The Marquam Bridge is massive in scale and frames the site visually on the northern third of its western edge. The railroad and adjacent embankment inscribe a wide boundary to the east, distancing the site from the nearest buildings inland. These barriers limit current and future urban connections to the east and west, isolating the plan area.

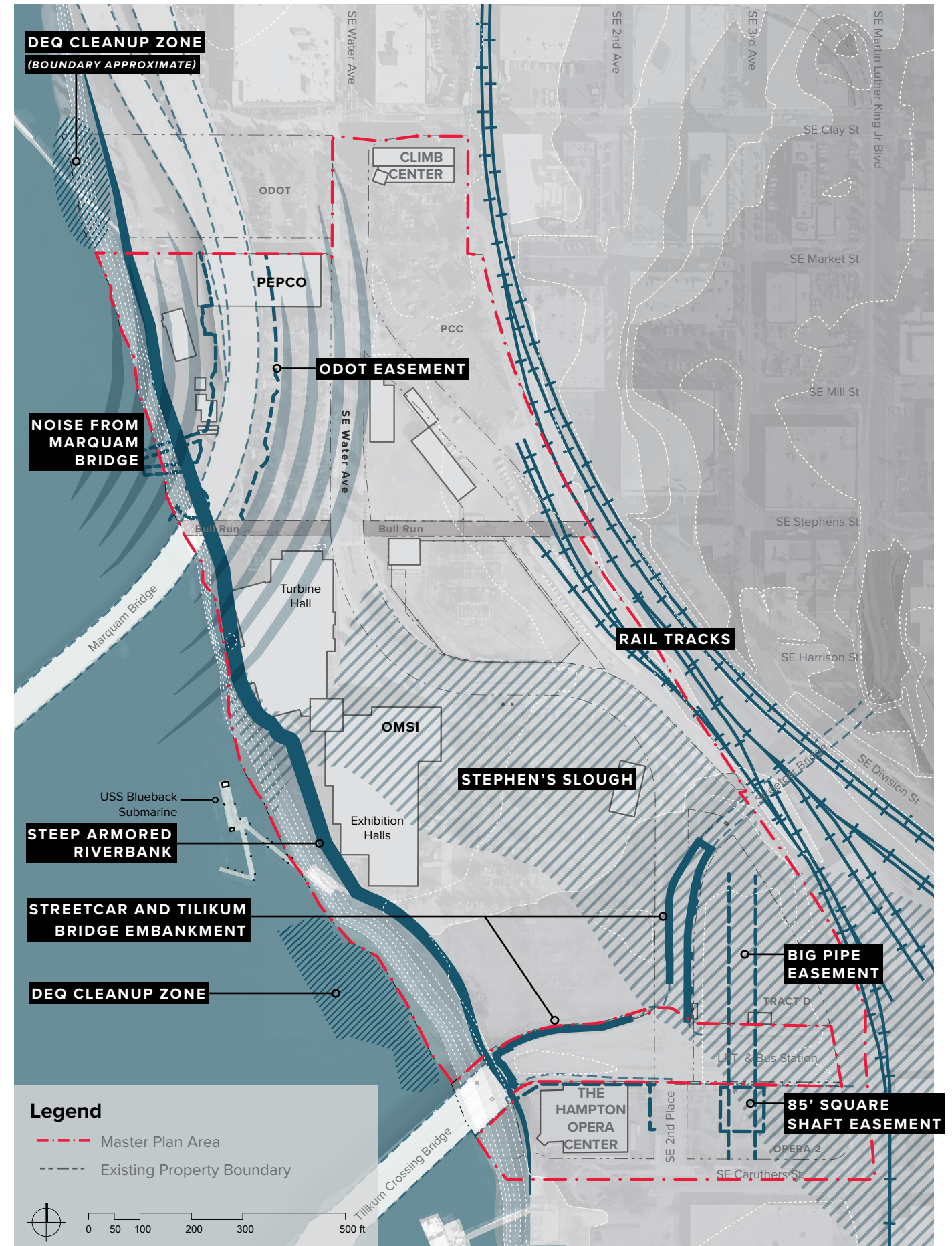
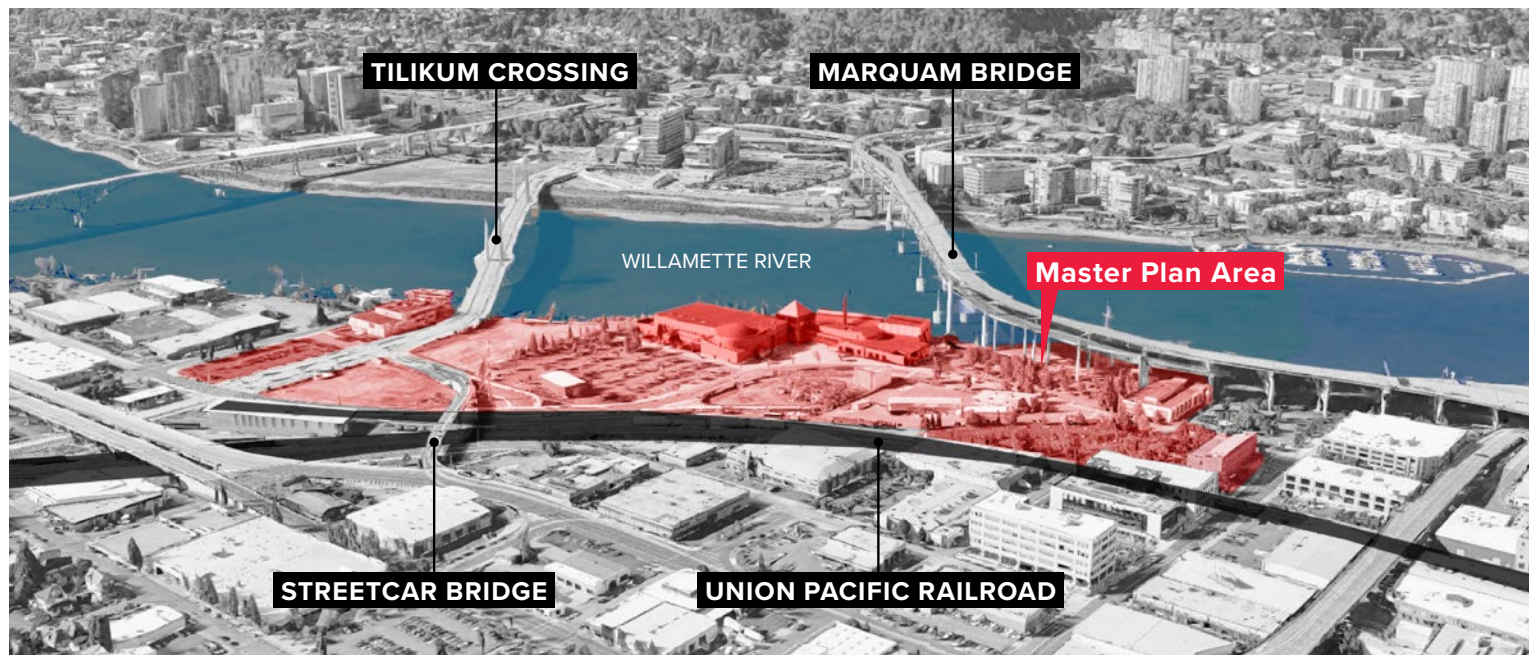
The site is bifurcated by the Bull Run property, owned by the City of Portland's Water Bureau and located just north of OMSI's Turbine Hall. Interstate 5 traffic on the Marquam Bridge results in freeway noise at all times in the northern end of the plan area. ODOT holds easements associated with the Marquam Bridge/I-5 Viaduct that constrain possible development of OMSI's northern property to its eastern edge (see page 31).

Large portions of the southern plan area present challenging geotechnical conditions caused by deep layers of sawdust and wood debris fill placed in an old watercourse, Stephen's Slough. The East Side Big Pipe owned by the City's Bureau of Environmental Services runs north-south under Tract D and Opera 2. There is also an 85' square shaft easement in the vicinity of Opera 2, the location of which will need to be verified before development occurs. See Appendix A for a structural engineering assessment of these conditions as they affect future foundation and footing designs.

In addition, the high water table will increase the cost and complexity of underground improvements.

Much of the Willamette riverbank adjacent to OMSI is steep, armored with riprap, and covered by largely invasive vegetation. However, some portions at the south end contain more robust stands of native plants as a result of recent work around the Tilikum Crossing Bridge. The grade change from Top of Bank to water's edge can approach 30 feet during seasonal low water. The OMSI riverbank is located within a high-energy zone of the river, with the current depositing significant debris every winter and spring around the existing submarine and its ramps, shown on the adjacent diagram. There is a Department of Environmental Quality (DEQ) clean-up site within the plan area and another one just north of the CCMP boundary.

OMSI's existing buildings, the historic Turbine Hall and the newer Exhibition Hall, are located quite close to the top of bank, so the greenway trail is pinched in two locations between the steep bank and the buildings. Cyclists and other wheeled users create safety issues at these "pinch points" when they move too fast with limited visibility around the corners of the buildings. This condition also affects SE 2<sup>nd</sup> Place, where cyclists turn right off of the downhill slope of the Tilikum Crossing Bridge onto the plaza.



# 3 Master Plan Components

## Urban Design Framework + Design Tenets

The CCMP is guided by and embraces the CC2035 Plan, the Central City Fundamental Design Guidelines, and the Central Eastside Design Guidelines. The response and integration of the guidelines into the master plan are influenced by the complex and unique nature of this site's location; bounded by the railroad, a major transit hub, and the river.

The urban design framework has four major components; two gateways, three primary north-south routes, a "ladder" of east-west connections, and active and passive nodes throughout the district.

### Urban Design Framework

#### Gateways

Clear neighborhood entry markers with architectural and urban design considerations

#### East-West Connections

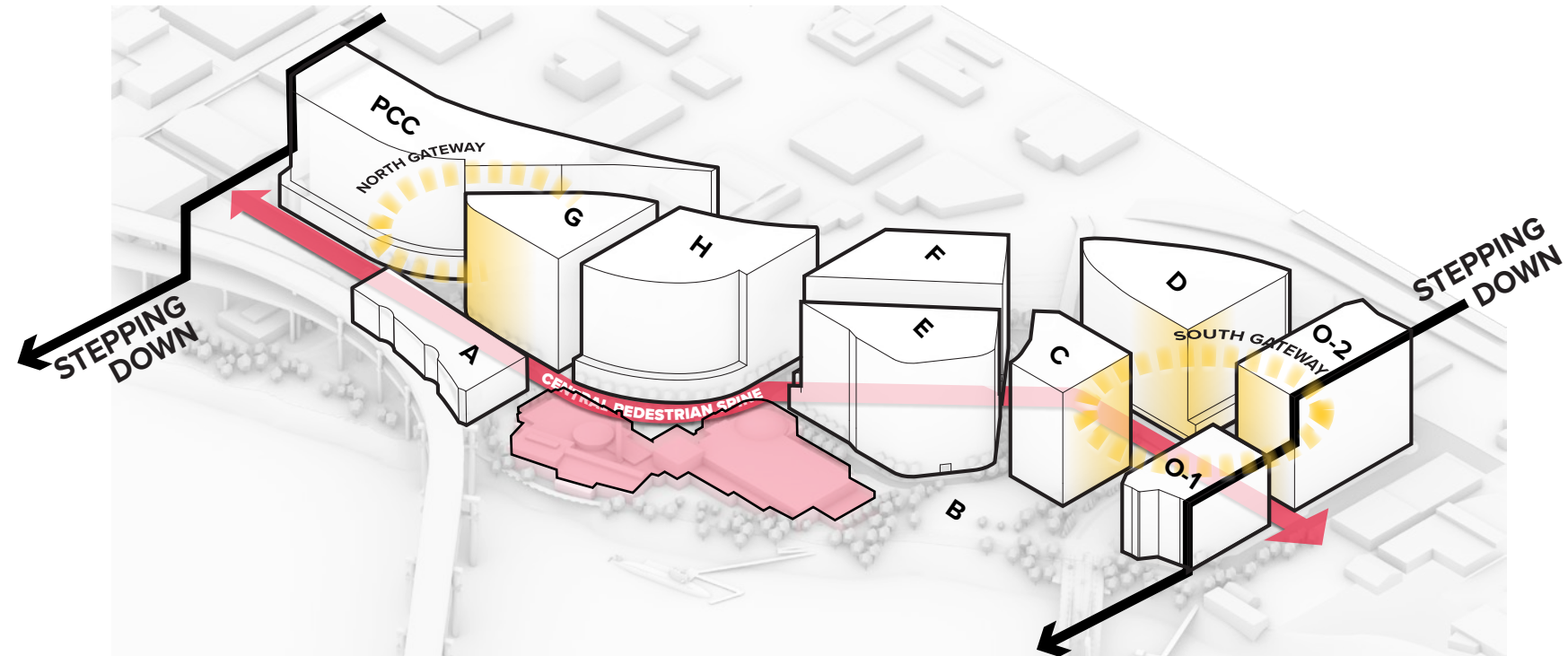
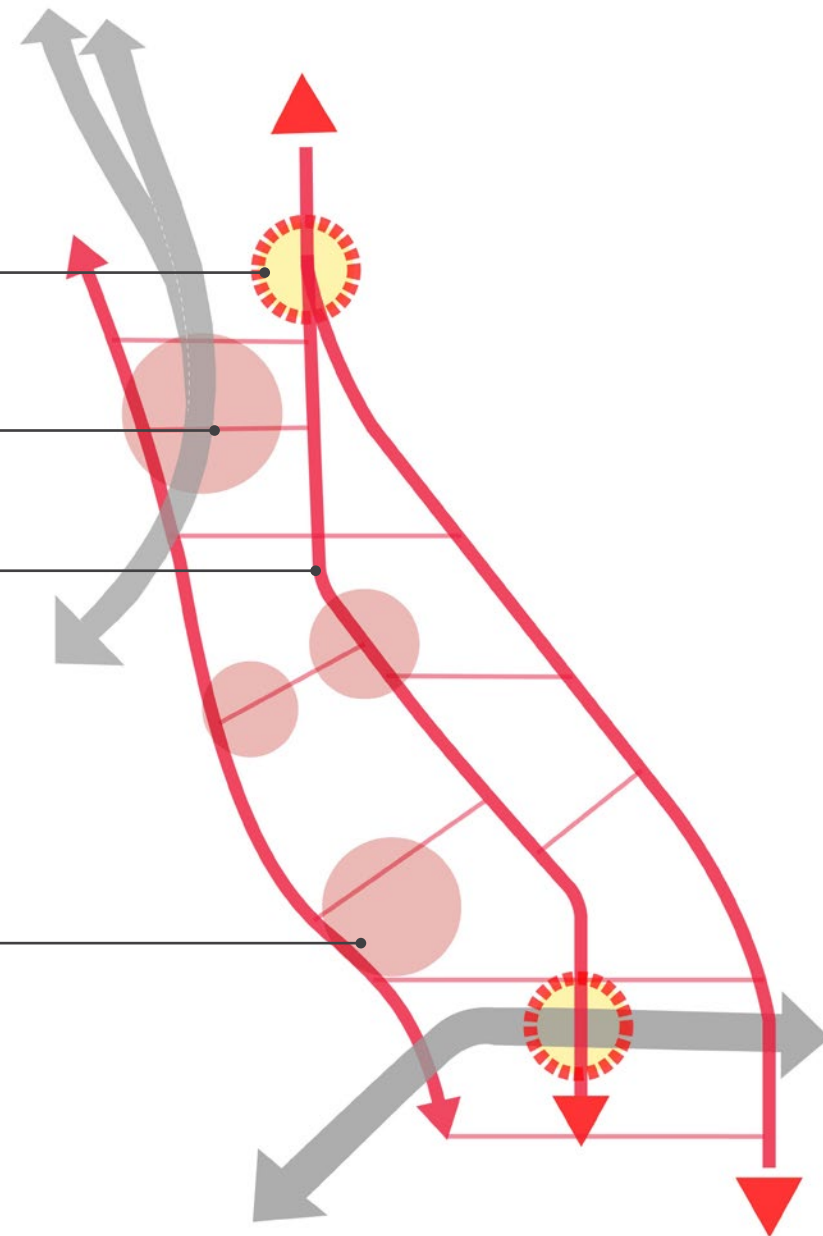
Strengthened connections to the river and connected gathering nodes

#### Central Pedestrian Spine

- Activated pedestrian environment
- Special character
- Strengthened pedestrian connections between the transit hub, OMSI, and destinations within the Central Eastside.
- Opportunities for seating, outdoor cafes, and small multi-purpose nodes

#### Gathering Nodes

- Interactive programming potential; public art, exhibits, and interpretive and active play
- Public and private use and connection to riverfront
- Both active and passive gathering



### Design Tenets for Massing

Design tenets frame the physical massing of the buildings in the district. These design tenets provide a coordinated approach to building massing and orientation that complements the Urban Design Framework, emphasizing the relationship of buildings to gateways, open spaces, the central pedestrian spine, and the river. The building massing will support and reinforce the design tenets of the new district:

#### 1 Honor and respect the massing and scale of the existing OMSI buildings:

New building façades along the Central Pedestrian Spine will have a maximum façade height of 50 feet, with a building setback for floors above 50 feet (see diagrams on page 27 & 28). This setback is intended to ease the transition between existing OMSI buildings and the rest of the district (with the exception of the west side of Tract E, which is adjacent to the OMSI service and loading areas).

#### 2 Focus Activity on the Central Spine:

The required building lines and required ground floor active uses have been focused along the Central Pedestrian Spine to encourage the buildings to engage and activate the public realm (see pages 48).

#### 3 Step Down to the River:

Tracts A, B, and Opera 1 will have lower height maximums than the standard 250 feet. Buildings on tracts directly adjacent to the river will have lower height limits to create a sense of vertical transition, creating greater visual openness and light by stepping down toward the river's edge.

#### 4 Create Gateways:

Gateways to the north near Tract G and to the south at OMSI Station will be reinforced with architectural treatments and building form that signal and celebrate a sense of arrival and identity. The CCMP guideline suggests the Tract G building façade aligns with the maximum building line at the lower and upper floors to reinforce an architectural response to the corner (see page 28).

#### 5 East-west Connections:

East-west connections are provided throughout the plan area, establishing or reinforcing visual and physical connections between north-south pathways and the river. In addition to the spaces created by at-grade pathways, the CCMP suggests 50 feet minimum between buildings.

# 3.1 Circulation

## Vehicular Circulation

As it exists today the plan area is served by two public streets from which all parking and loading access is provided: SE Water Avenue and SE Caruthers Street. Intersections along SE Water Ave at SE Caruthers and SE Clay Streets serve as the only points to access the plan area. There are two large surface parking lots adjacent to OMSI: one to the north and one to the east. There is also a large parking lot on the PCC Tract, and one to the east of the Portland Opera.

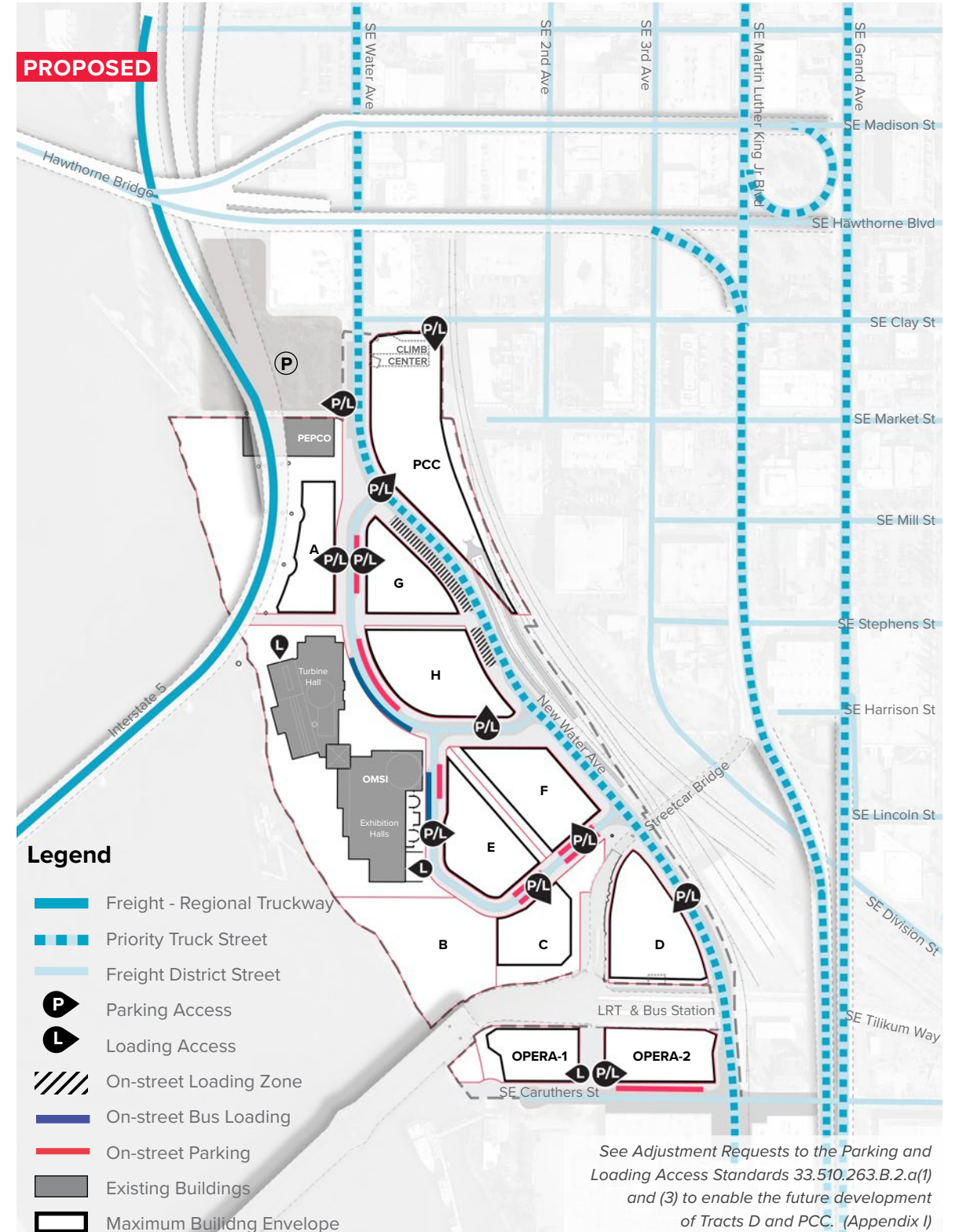
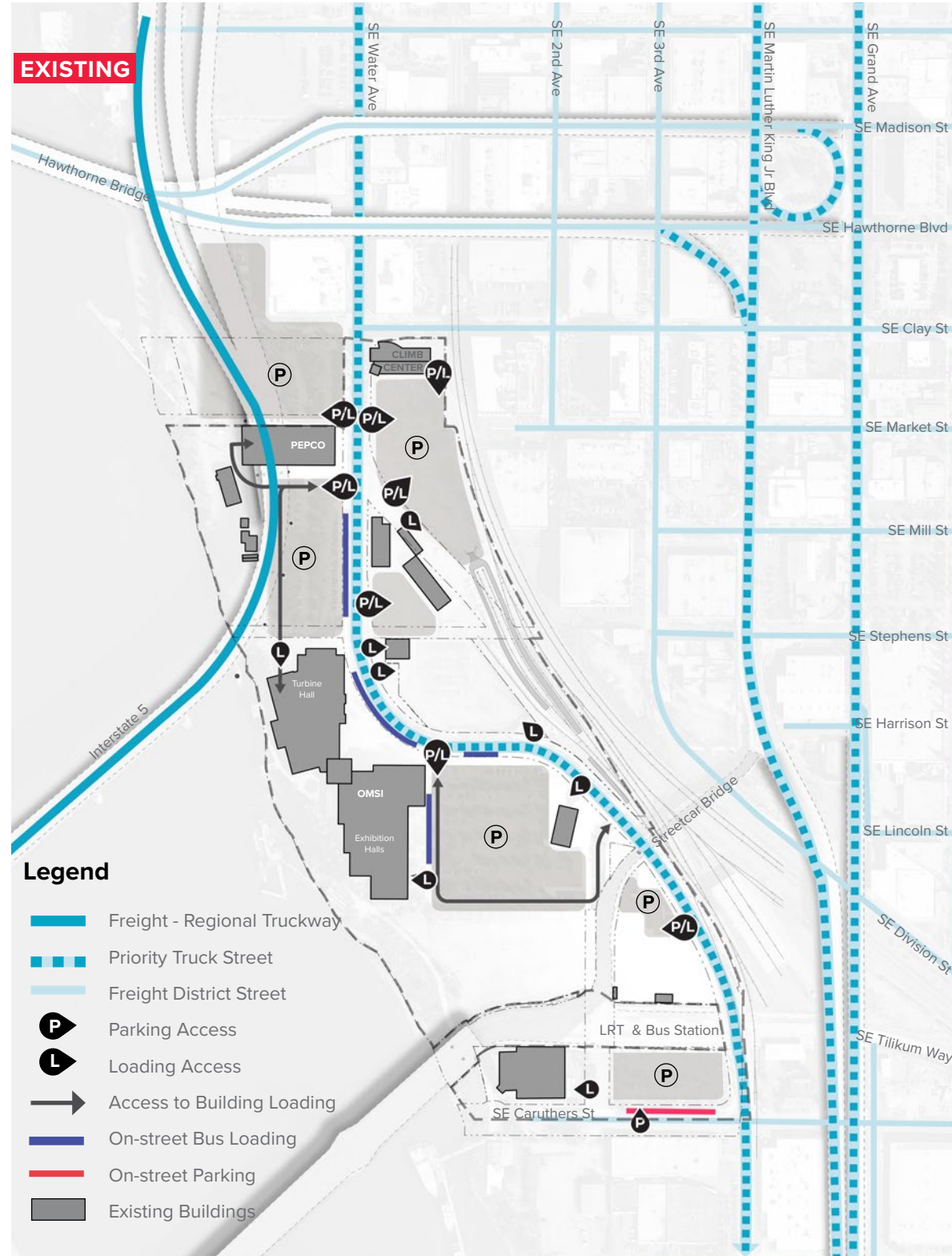
A fundamental component of the CCMP is the realignment of Water Avenue, called New Water Avenue, between the PEPCO building and Tract F. The segment of Water Avenue between those two points is referred to as Old Water Avenue. New Water Avenue will allow freight and vehicular traffic heading through to points north or south the center of the plan area on a street with softer curves and fewer access points, while Old Water Avenue is prioritized for pedestrian activity and local service and loading access.

Two new signalized intersections along New Water Avenue will allow for optimization of vehicular, freight, and bicycle traffic flows along the corridor and enhance multimodal connections between interior parts of the district.

A supplemental Transportation Impact Study (Appendix F) found that, with the recommended improvements, the transportation system will be capable of safely supporting development of the OMSI CCMP district, in addition to accommodating the existing uses in the area. Recommended measures consist of multimodal facilities along streets and between blocks that enhance pedestrian, bicycle, and transit connections, and intersection safety and capacity improvements.

## Parking and Loading

Each tract will have off-street loading access. On-street parking is also provided on the Loop Road and along New and Old Water Avenues in "flex zones" that can also be used for on-street loading or car service drop-off/pick-up. The school bus drop-off zones adjacent to the museum will be preserved to the greatest degree possible. Structured parking is planned to support residential uses, families visiting OMSI, Portland Opera patrons, and the other mixed uses in the plan area. To avoid conflicts with the cycle track, no curb cuts for parking or loading are planned on New Water Avenue except for Tract D, which has no other option for vehicular access (see following page).



See Adjustment Requests to the Parking and Loading Access Standards 33.510.263.B.2.a(1) and (3) to enable the future development of Tracts D and PCC. (Appendix I)

## Proposed Streets

A stepped hierarchy of public streets: a Priority Truck Street paralleling the rail to the east, a Neighborhood Main Street serving the interior, and Local Service Traffic Streets providing access to destinations in the southern plan area.

### Street Hierarchy

The OMSI CCMP proposes a stepped hierarchy of streets to support a thriving, mixed-use district while facilitating existing freight and commuter traffic. The primary road is New Water Avenue, a Priority Truck Street on the eastern perimeter of the plan area, which introduces a new two-way cycle track to provide a separated facility for cyclists moving to and through the area. This new high-quality bike facility will link to the Major City Bikeway on the Tilikum Crossing Bridge, and connect the Hawthorne Bridge with the Springwater Corridor Trail to provide a convenient alternate mode for commuters heading to new opportunities in the OMSI District or passing through it from all directions.

Old Water Avenue is a quieter, slower neighborhood street in the center of the district, and the Loop Road is an internal circulation route to serve locations interior to the site.

Half-street improvements are planned for SE Caruthers St to widen the sidewalk along Opera 2 to 12 feet and bring it up to current code requirements.

Following approval of this CCMP, the Transportation System Plan will be amended to relocate the Major City Bikeway designation that currently exists on SE Water Avenue (changed to Old Water Avenue in this document) to New Water Avenue.

### Circulation Concept

The basic circulation concept is a non-orthogonal grid of connected streets:

- New Water Avenue will serve as a Priority Truck Street and Traffic Access Street for all district and adjacent users and will be the most direct and convenient route for through traffic. A grade separated two-way cycle track will be integrated along the west side of the roadway.
- Old Water Avenue will serve as a Local Service Traffic Street for OMSI's main entrance as well as active, mixed-use development on adjacent tracts; it will also accommodate access to parking garages and loading for fronting buildings. A grade separated two-way cycle track will extend toward OMSI along the north and east legs of Old Water Avenue to bike parking areas.
- The Loop Road will extend local vehicular access to the district's southern tracts and serve OMSI's loading dock. No formal bike lanes are proposed along the Loop Road.

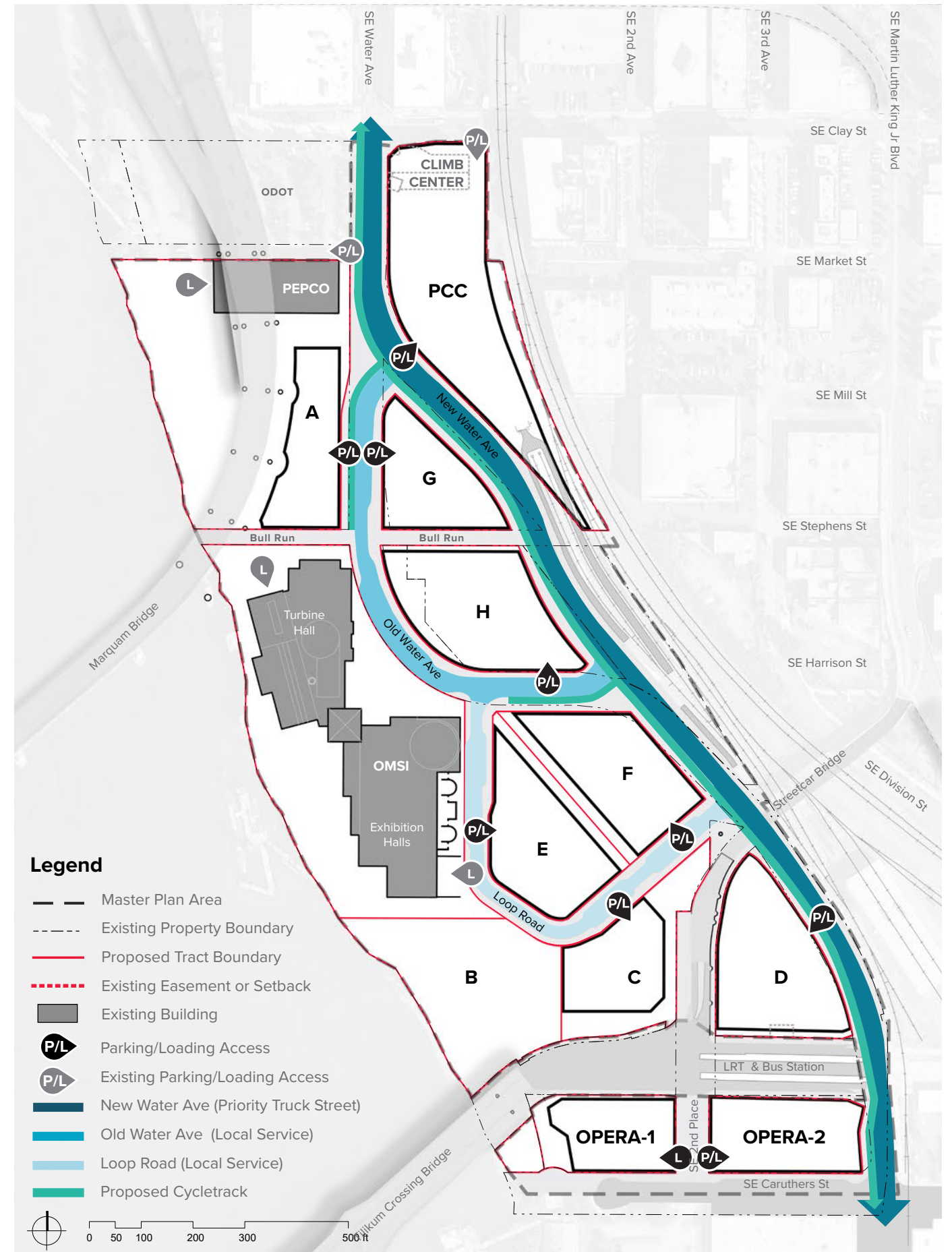
- SE Caruthers will serve as a Local Service Traffic Street and provide access to both Portland Opera tracts and the greenway trail, in addition to the existing uses on the south side of the street.

#### Intersections

- Where the north end of Old Water Avenue intersects New Water Avenue will be a signalized four-way intersection (PCC's entry will be modified to align). Through movements for the cycle track will be protected and prioritized, with southbound and northbound turn lanes on New Water Avenue. Southbound left turns from New Water Avenue into the PCC Tract will occur within the through travel lane and will not be protected.
- Where the south end of Old Water Avenue intersects New Water Avenue will be a signalized 3-way intersection. Through movements for the cycle track will be protected and prioritized with southbound and northbound turn lanes on New Water Avenue.
- Where the Loop Road intersects New Water Avenue will be a one-way outbound (eastbound) stop-controlled intersection. Inbound (westbound) traffic will be open to bicyclists only via a contraflow bike lane.
- The design concept for the intersection of SE Water Avenue and SE Caruthers Street is under study. Preliminarily, it is anticipated to maintain stop control at the SE Caruthers approaches. A southbound right-turn lane will be provided along SE Water Avenue to accommodate vehicle queuing for the cycle track and pedestrian crossings without backing up traffic into the signalized rail crossing intersection.

#### Cycle Track

- To avoid conflicts with the cycle track, no curb cuts for parking or loading are planned on New Water Avenue except for Tract D, which has no other option for vehicular access.
- Traffic signals on New Water Avenue will be coordinated to optimize the flow of bicyclists along the cycle track in the peak direction.
- Cycle track spurs will provide families and others access to OMSI without riding alongside vehicular traffic in the street or among pedestrians along the greenway trail.

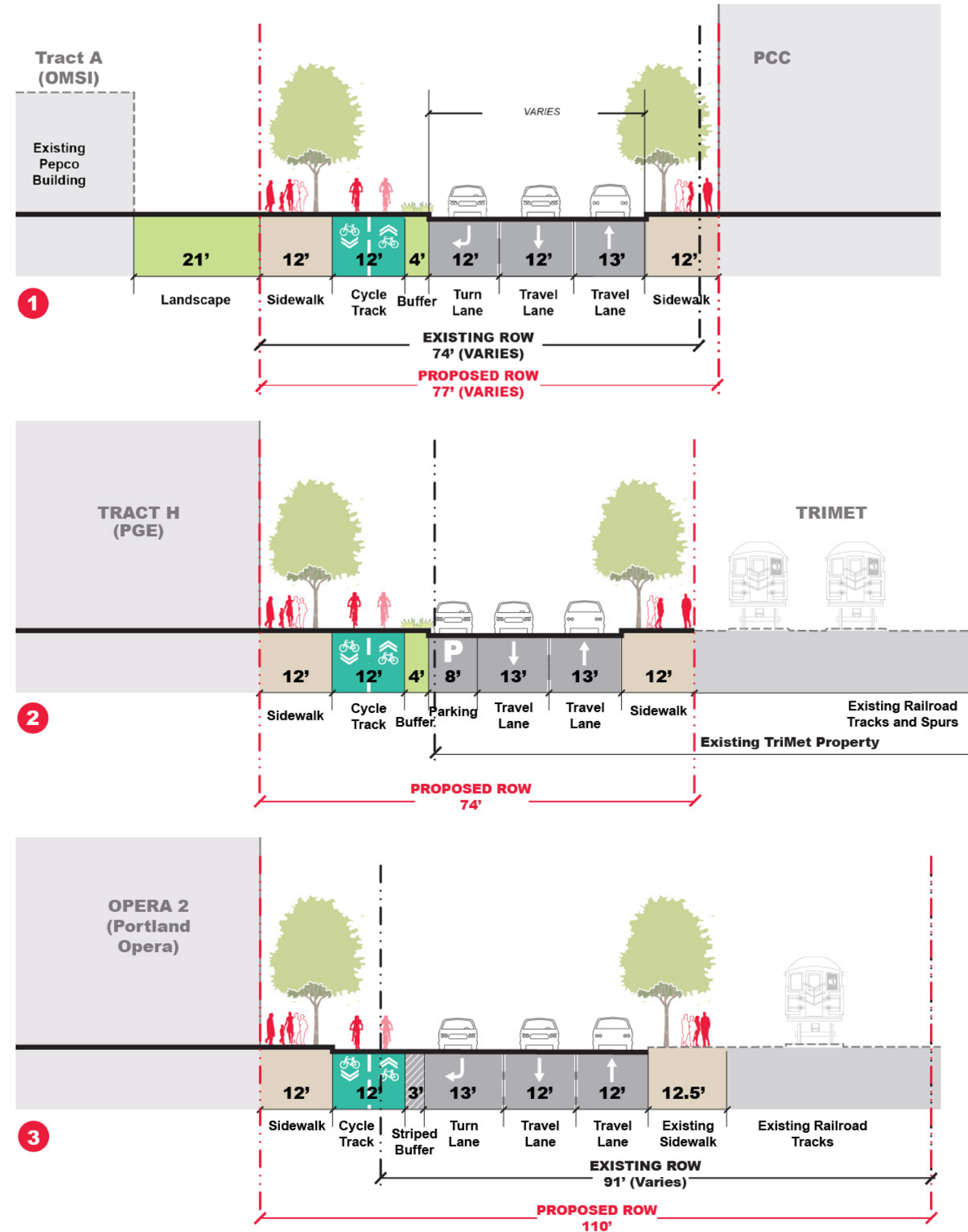
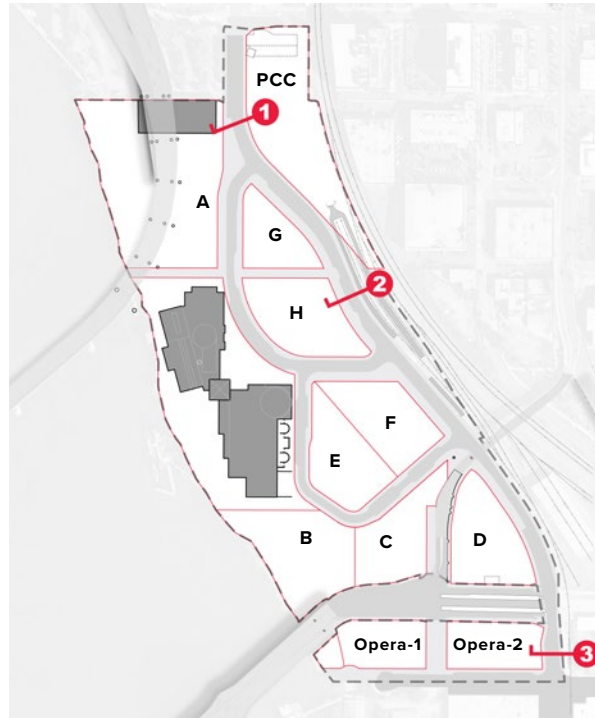


# Street Cross-Sections

## New Water Avenue

SE Water Avenue will be realigned to the eastern edge of the plan area. This New Water Avenue will provide primary passenger vehicle and freight circulation through the plan area, and will maintain the Traffic Access Street, Major City Bikeway, and Priority Truck Street designations. Although New Water Avenue can also retain its Major City Walkway and Neighborhood Main Street designations, the intent of the CCMP is for Old Water Avenue to become the primary north-south route for pedestrians through the core of the district.

It will be a multi-modal public street, including 12-foot-wide sidewalks with an 8-foot through pedestrian zone, landscaping, stormwater planters, a protected two-way cycle track, on-street parking and/or loading lanes, and travel lanes optimized to minimize widths while still accommodating a large truck design vehicle. No driveway curb cuts are planned for New Water Avenue except at Tract D, where no alternative access option exists. New Water Avenue will intersect with the Old Water Avenue alignment at two proposed signalized locations, where separate northbound left-turn and southbound right-turn lanes will be provided. New Water Avenue will also intersect with the proposed Loop Road, although the Loop Road approach will be one-way eastbound for vehicle and bicycle travel, with westbound traffic limited to bicycle travel only at the New Water Avenue intersection.



### Legend

- Existing Right-of-Way (ROW)
- - - Proposed Right-of-Way (ROW)
- Proposed Tract Boundary
- ▭ Maximum Building Envelope
- ▭ Existing Building or Structure

# Street Cross-Sections

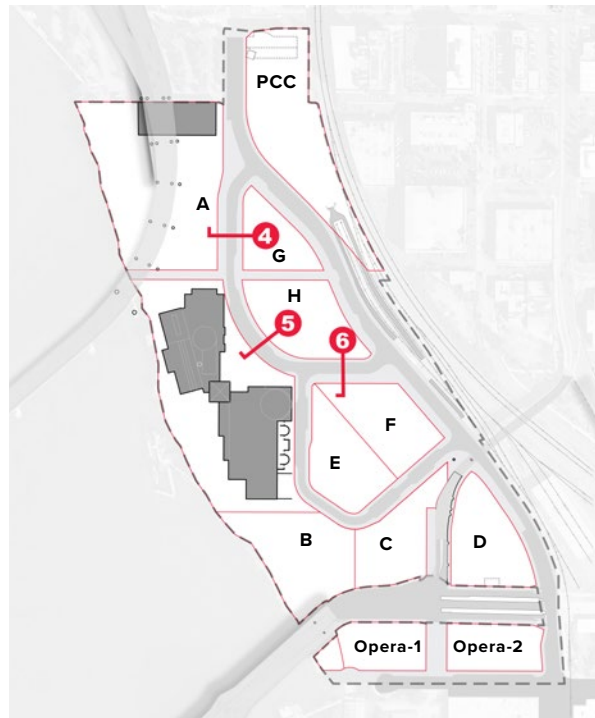
## Old Water Avenue

Much of the existing Water Avenue alignment will remain with some reconstruction to establish the modified roadway section, at which time SE Water Avenue will become Old Water Avenue. Old Water Avenue will provide circulation and access to local destinations at the north end of the plan area. It is proposed to become a Local Service Traffic Street, with slow vehicle operating speeds. It is also recommended to include Major City Walkway and City Bikeway designations. Old Water Avenue will include generous 12-foot-wide sidewalks with 8-foot through pedestrian zones, street trees, and landscaping, except where it aligns with the Central Pedestrian Spine, where the sidewalks on the east side will widen to 15 feet. The existing median will be removed to facilitate turning movements to new buildings, pedestrian crossings, and to visually knit the two sides of the street together. The slower speeds and lighter traffic volumes will allow robust pedestrian crossings for the Central Spine and Bull Run pedestrian ways, as well as parking and off-street loading access for the proposed new buildings fronting this street. It will also hold on-street bus loading and parking or flex zones.

As indicated on the previous page, Old Water Avenue will intersect with New Water Avenue at two proposed signalized locations, where separate left-turn lanes will be provided.

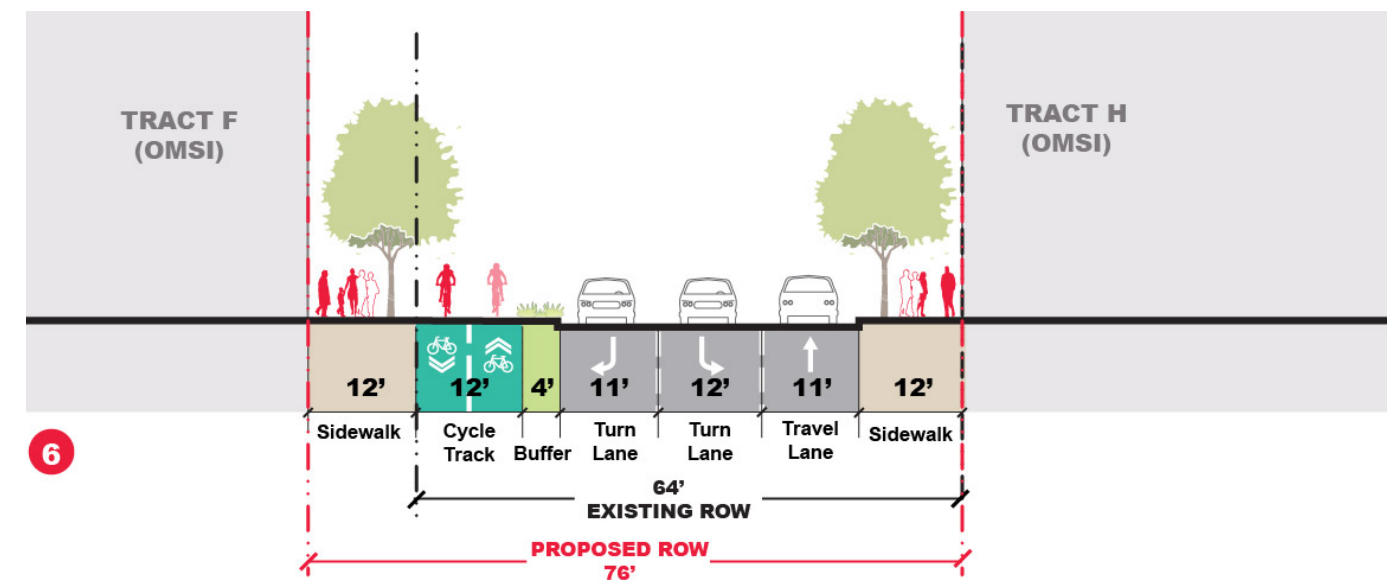
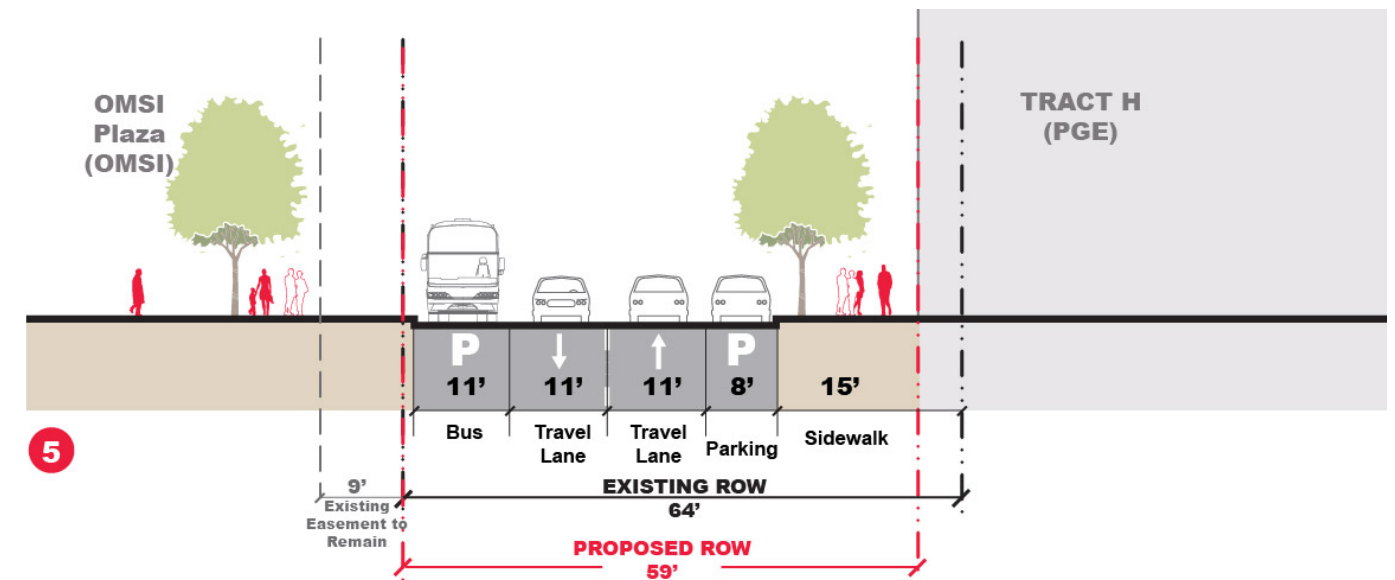
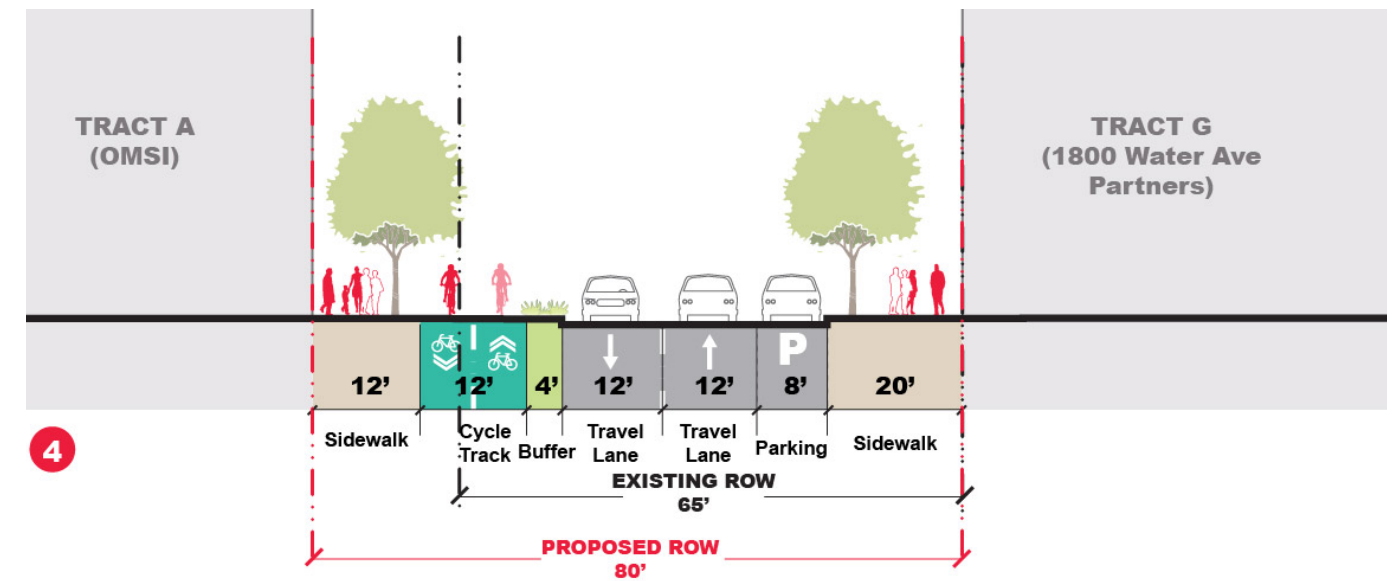
The design concept for bicycles on Old Water Avenue is to facilitate movement of families and other local visitors from exterior routes, such as the greenway trail and the cycle track on New Water Avenue to interior destinations, such as OMSI or the waterfront.

Two short segments (or spurs) of two-way cycle track will connect the New Water Avenue cycle track to OMSI Plaza so that families and less-confident riders do not need to ride directly on Old Water Avenue, one from the north along the Tract A frontage, and one from the south along the Tract F frontage.



### Legend

- Existing Right-of-Way (ROW)
- Proposed Right-of-Way (ROW)
- Proposed Tract Boundary
- Maximum Building Envelope
- Existing Building or Structure

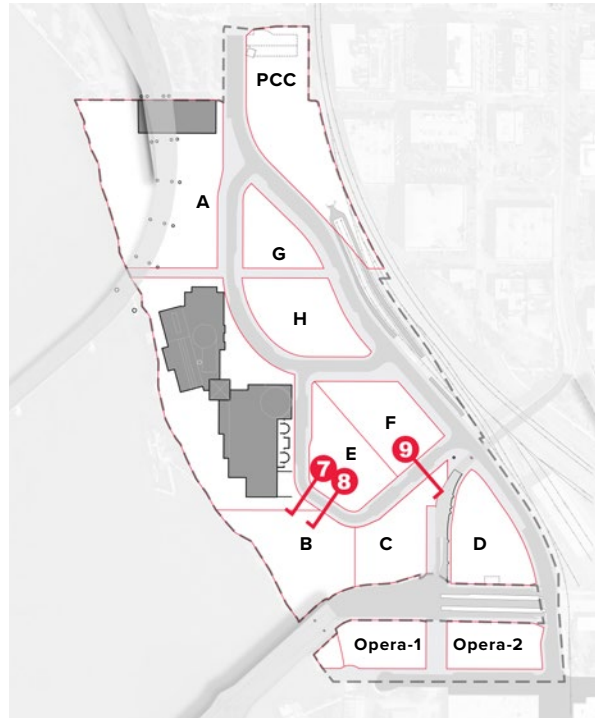


# Street Cross-Sections

## Loop Road

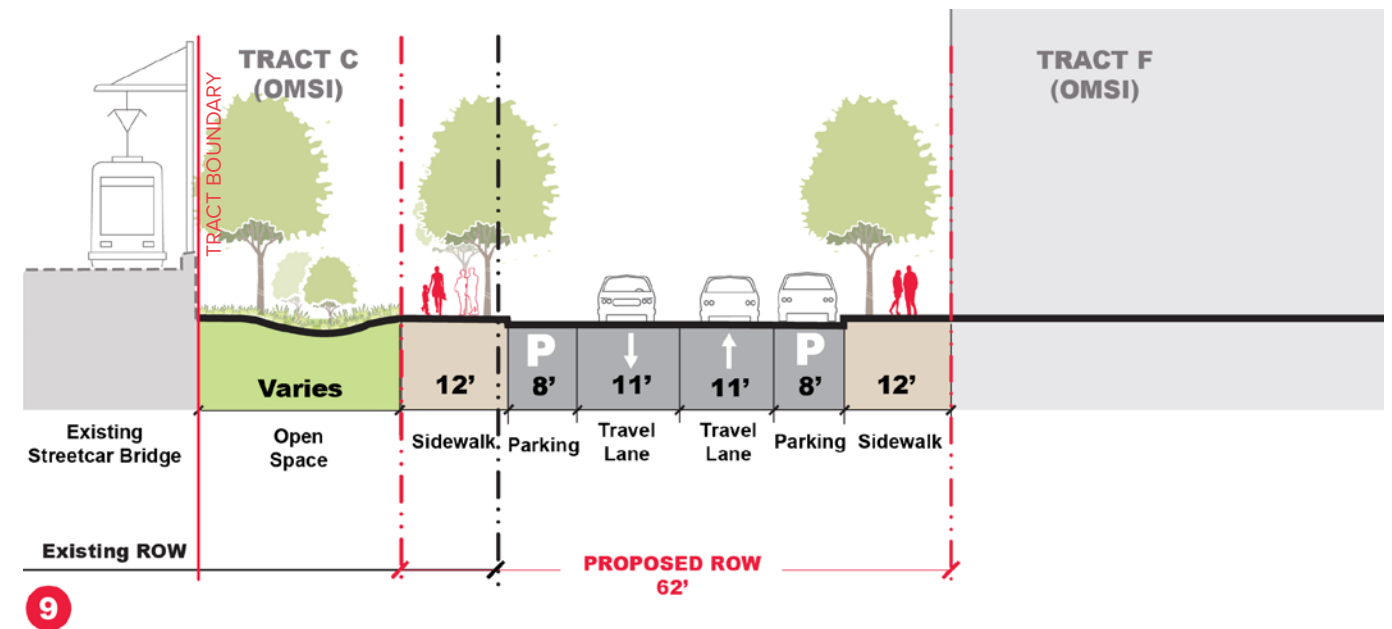
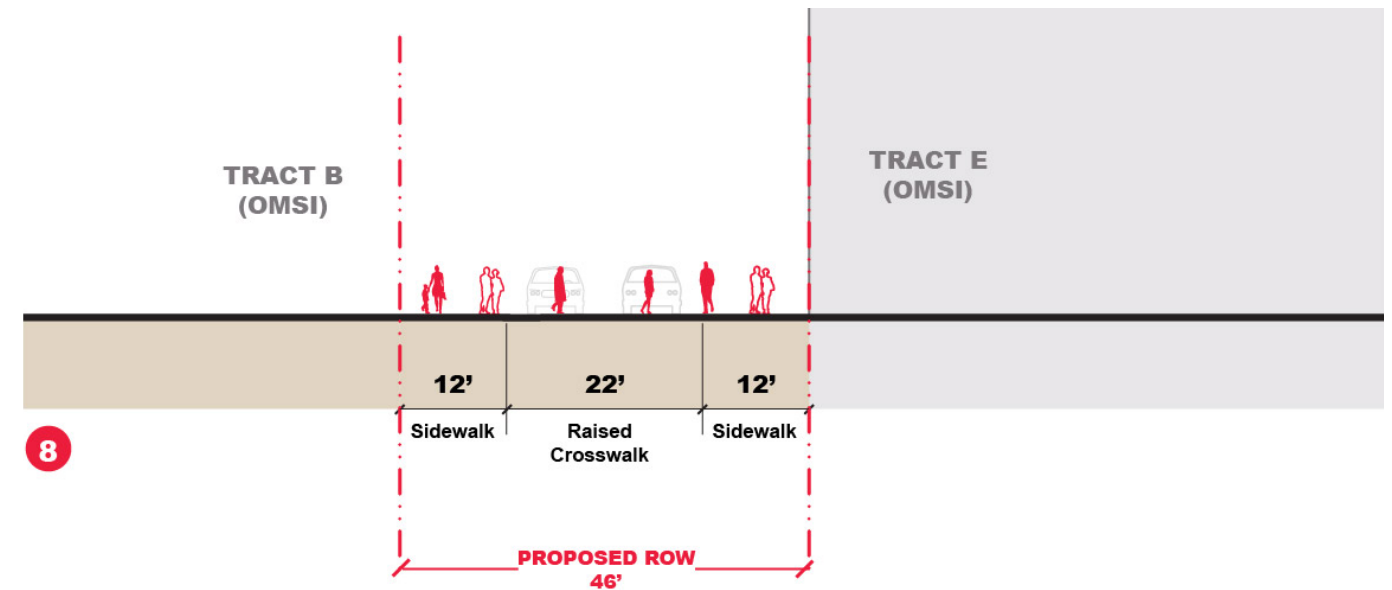
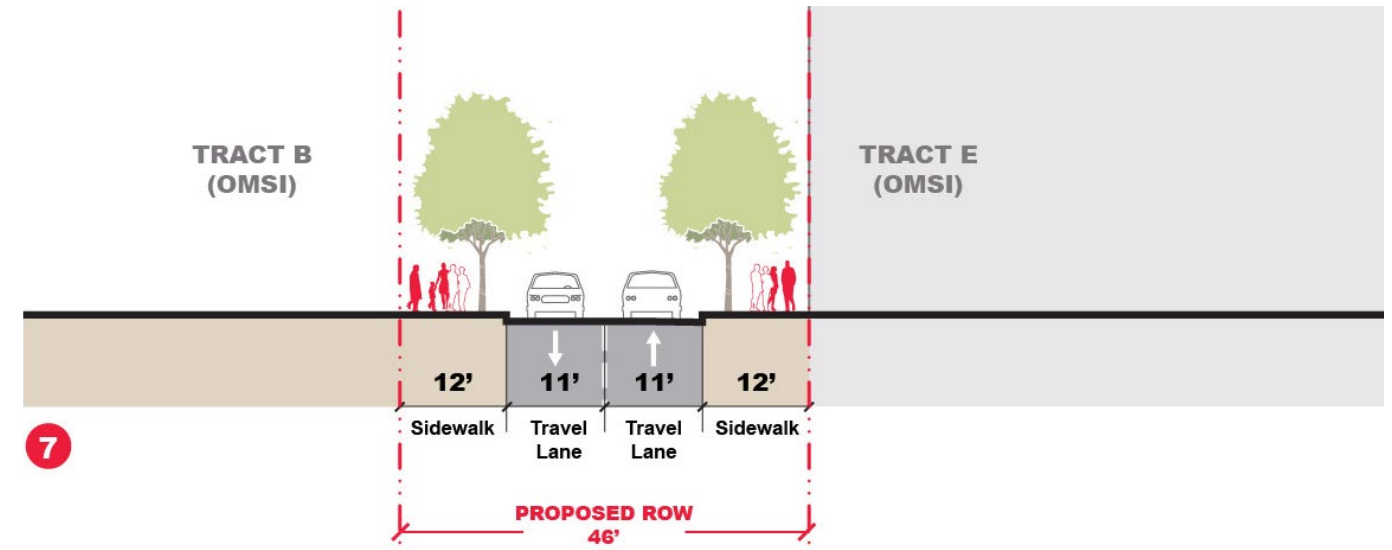
The proposed Loop Road will provide access to local destinations at the south end of the plan area. It will run from Old Water Avenue along the east side of the OMSI museum and existing loading docks, the front entry of Tract C, and the service entries to Tracts E and F and will connect to New Water Avenue just north of the Streetcar bridge abutment. It will also hold bus loading and parking or flex zones, as well as two prominent pedestrian crossings, one holding the Central Pedestrian Spine connecting Portland Opera and OMSI Station to points north, and the other connecting Tracts E and F with OMSI's south plaza. Both pedestrian crossings are proposed to be raised, to prioritize pedestrians and remind vehicles to slow down.

Sidewalks will be 12 feet wide with an 8-foot through pedestrian zone, which will include street trees and stormwater planters. At this time it is assumed the Loop Road will be a public road. It is proposed to have Local Service Traffic Street, Local Pedestrian Street, and Local Service Bikeway designations. To enhance circulation and safety along the proposed New Water Avenue cycle track, the Loop Road intersection with New Water Avenue will be one-way eastbound for vehicle and bicycle travel, with westbound limited to bicycle travel only.



### Legend

- Existing Right-of-Way (ROW)
- Proposed Right-of-Way (ROW)
- Proposed Tract Boundary
- Maximum Building Envelope
- Existing Building or Structure



# Street Cross-Sections

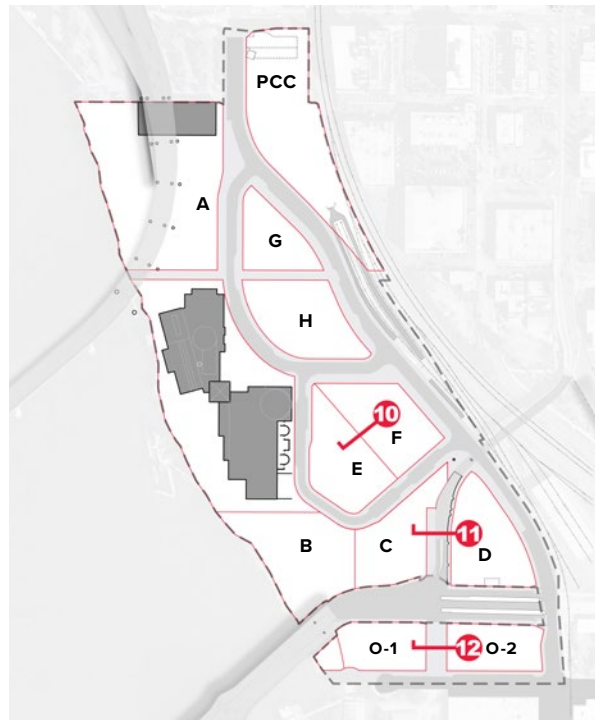
## Central Pedestrian Spine

The Central Pedestrian Spine will be the primary pedestrian route linking Portland Opera and OMSI Station with OMSI, PCC, and points north. It begins at SE 2<sup>nd</sup> Place, between the two Portland Opera tracts, crosses the OMSI Station, passes between Tracts E and F, and then crosses Old Water Avenue, proceeding north to the intersection with New Water Avenue. At that point, pedestrians can proceed straight up the west side of SE Water Avenue, or cross to PCC and proceed up the east side of SE Water Avenue. The Spine links Central Eastside pedestrians to OMSI, light rail, the Tilikum Crossing Bridge, and the potential performing arts center at Opera 1.

There are opportunities to see the river and connect to it on east-west passageways south of Pepco, on Bull Run, through OMSI's lobby, through Tract E, south of Tract C, and on SE Caruthers Street.

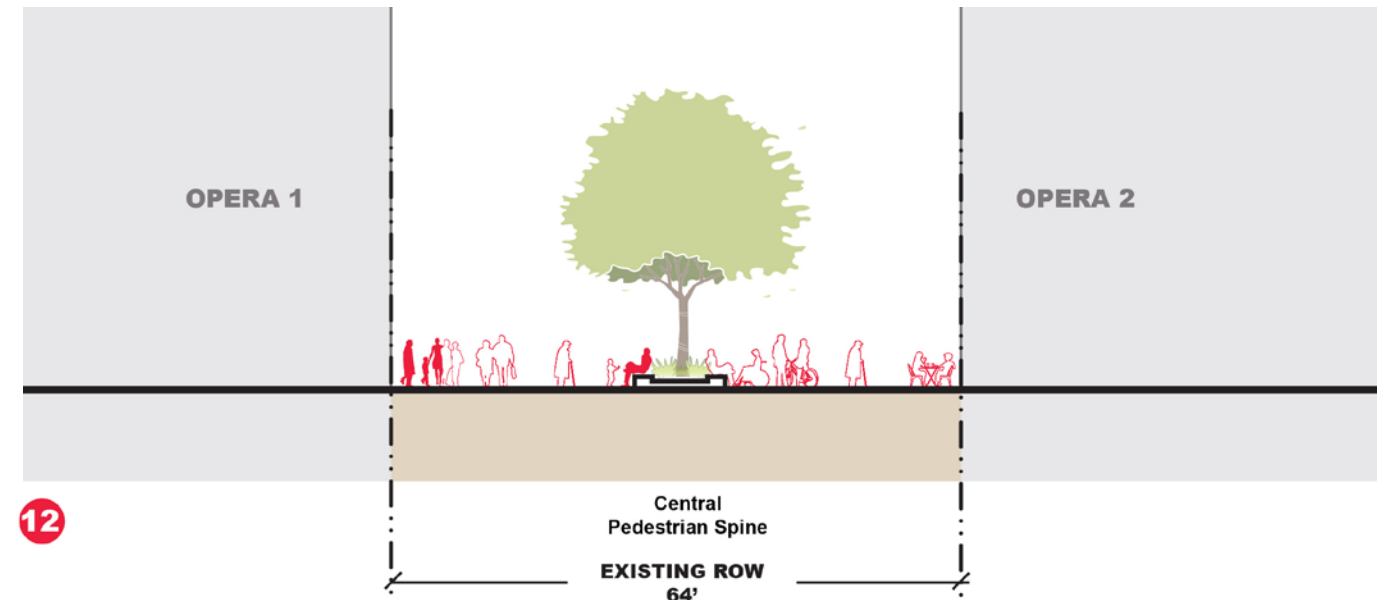
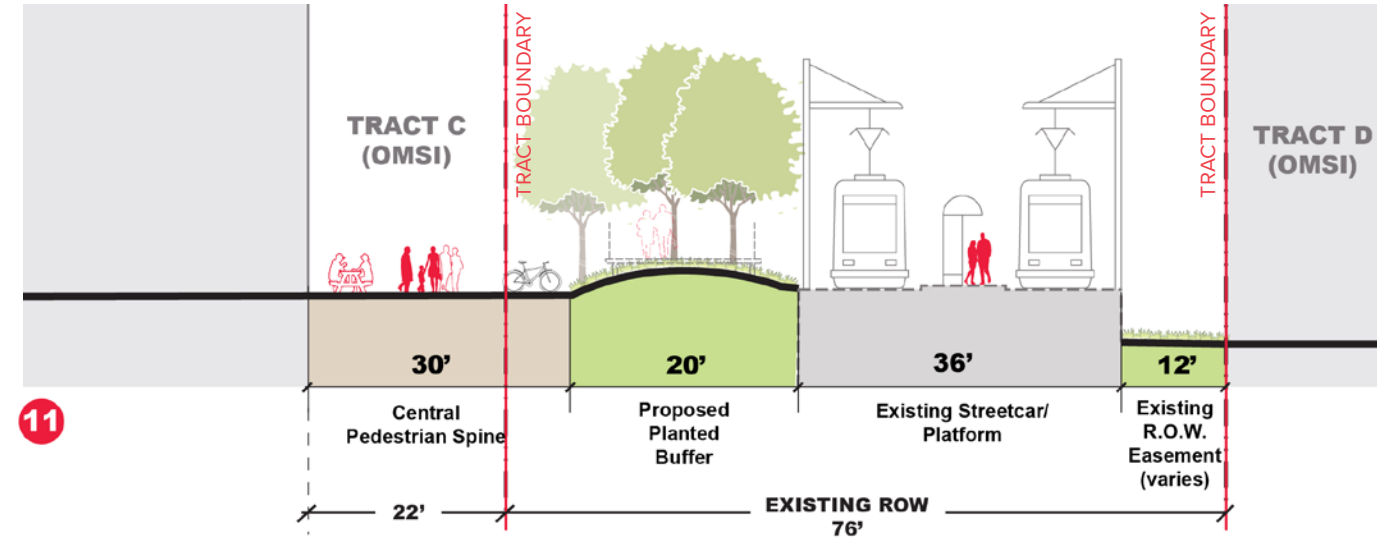
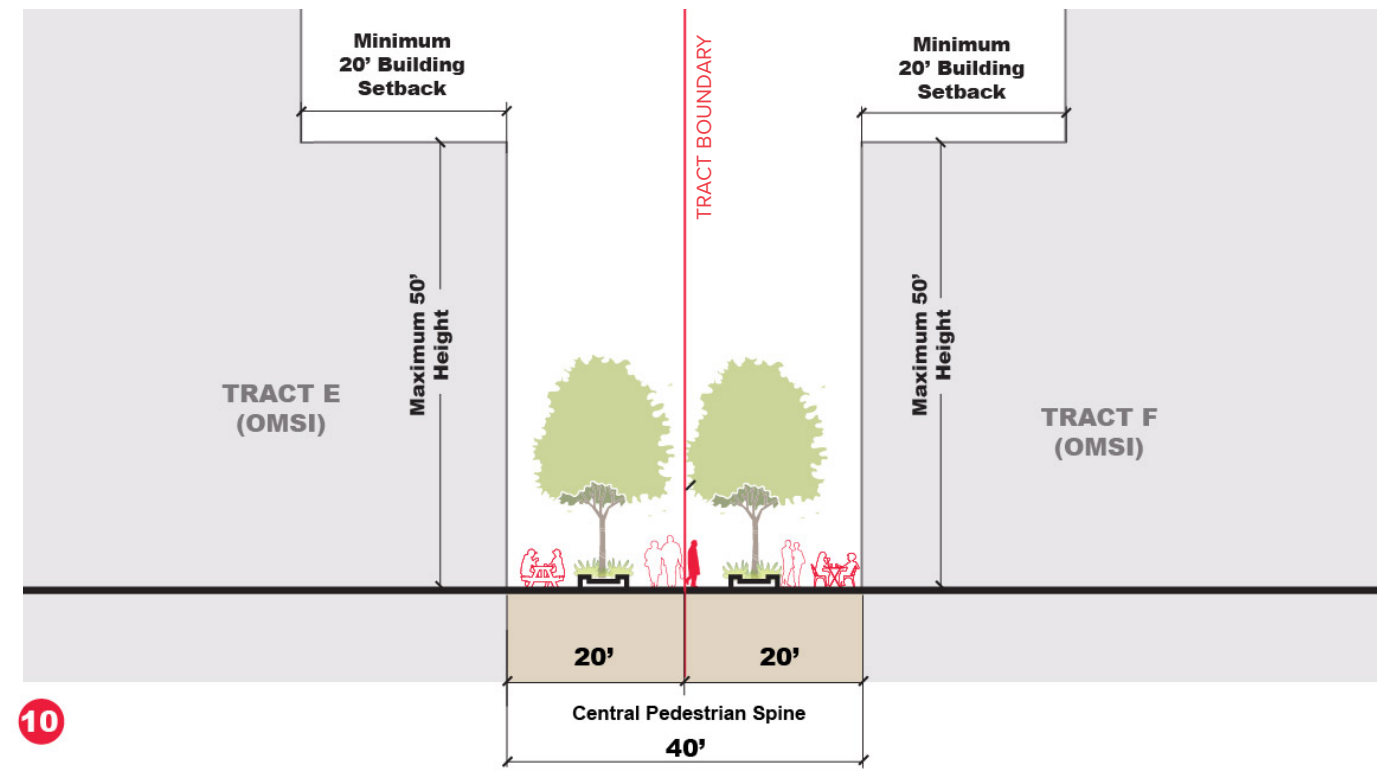
The critical passage between Tracts E and F has been set wide enough to host seating and interpretive opportunities in addition to the through zone; development guidelines for the two buildings will require that the upper floors be set back to let in light and air. Minimum dimensions have been set for the passage through Tract E to ensure that this walkway will feel comfortable and to accommodate art and interpretive elements.

SE 2<sup>nd</sup> Place, a public right of way, features a short connection between OMSI Station and SE Caruthers Street, passing between Portland Opera's proposed performing arts building on Opera 1 and the rest of the performing arts center program on Opera 2. The passage is proposed to operate as a shared pedestrian and bike plaza, possibly hosting artistic events, food and drink activities, or interpretive features in addition to pedestrian and cyclist movements. Cyclists will be encouraged to either walk their bikes or ride very slowly by design elements such as grade changes, changes in pavement, site furnishings, and signage. For more information on the Central Spine, see page 48.



### Legend

- Existing Right-of-Way (ROW)
- Proposed Right-of-Way (ROW)
- Proposed Tract Boundary
- Maximum Building Envelope
- Existing Building or Structure





# Multimodal Circulation

## Pedestrian Network

The OMSI CCMP area is a Pedestrian District. It features two key existing north-south routes between the Tilikum Crossing Bridge and the Central Eastside, the greenway trail, and SE Water Avenue. These will be enhanced: SE Water Avenue will be transformed into Old Water Avenue and will carry the Central Pedestrian Spine, the key promenade linking the Portland Opera and the Tilikum Crossing Bridge/ OMSI Station to the Central Eastside (see page 18), the greenway trail will be widened where possible to reduce conflicts with wheeled modes, and pedestrian refuge spaces are proposed in the form of overlooks and a short flyover near the north corner of OMSI's Turbine Hall. The city's Green Loop linear park is proposed to connect the Tilikum Crossing Bridge with the Central Eastside. A third route, New Water Avenue, will also be added. Multiple east-west passages will be provided between these north-south routes so that users can see the river and reach it directly.

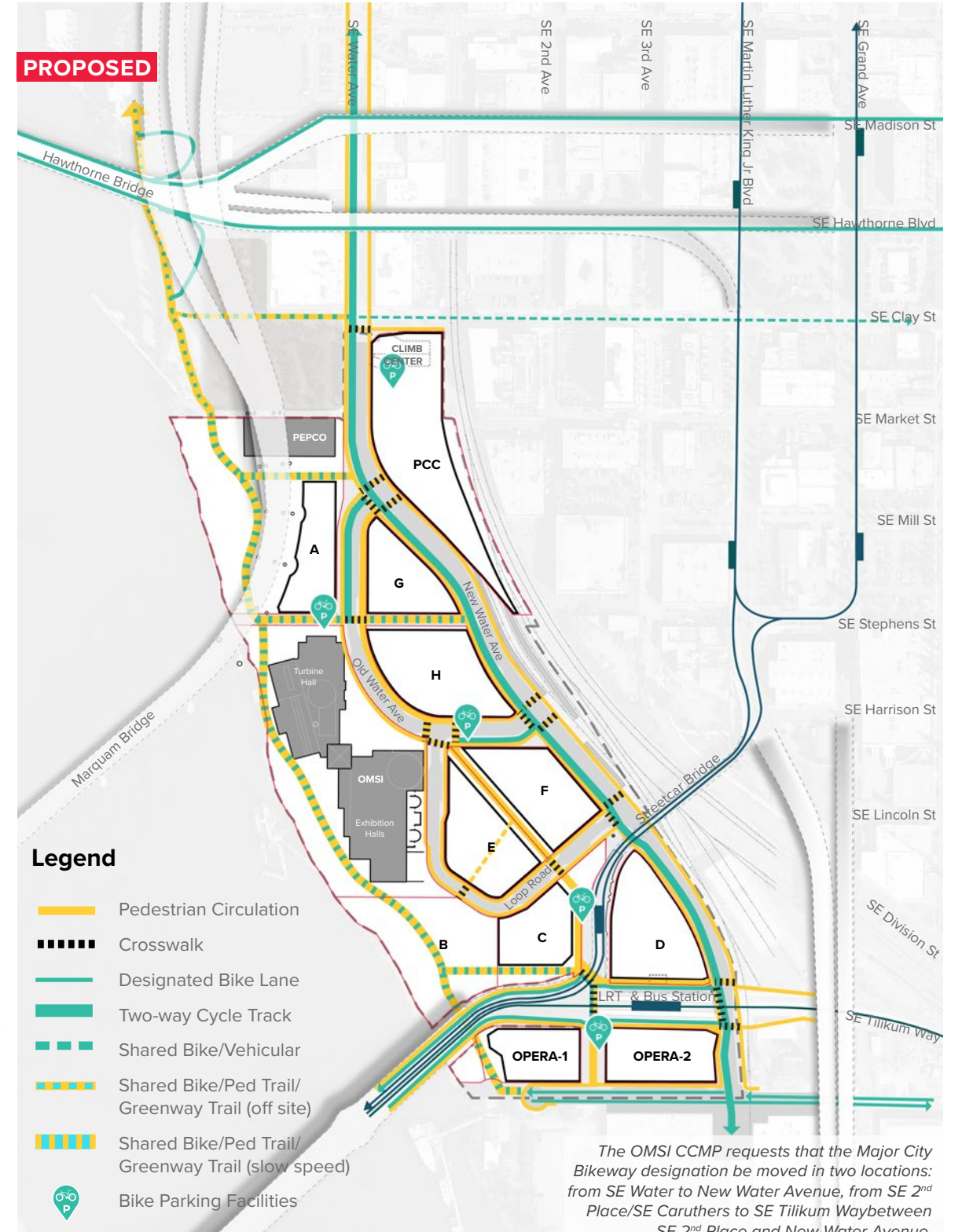
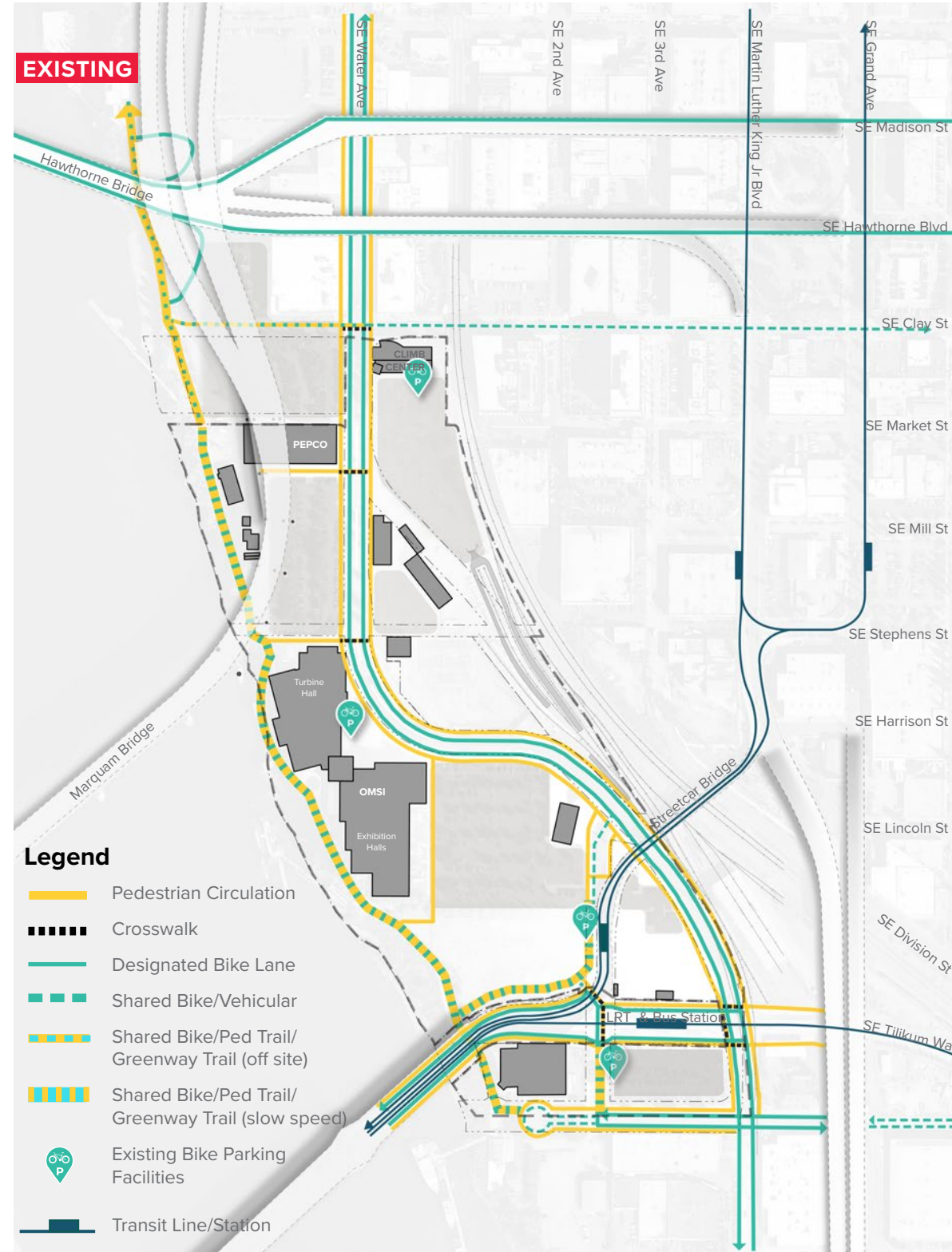
## Bicycle Network

A two-way cycle track is proposed on New Water Avenue to connect commuter cyclists with city bikeways heading in all directions. On Old Water Avenue, spurs of the cycle track will bring families in to OMSI's plaza, where they can dismount, park, and proceed to their destination on foot. At SE Caruthers Street, cyclists heading to the river will share the low-speed, low-traffic, westbound vehicular lane. No dedicated bike facilities are proposed along the Loop Road.

All off-street areas of the district will feature mixing of pedestrian and wheeled modes, including the greenway trail and SE 2<sup>nd</sup> Place. The current conditions in which pedestrian and wheeled modes mix on the greenway and at SE 2<sup>nd</sup> Place are perceived as unsafe, which will get worse when development increases. The CCMP addresses this issue with a two-part strategy: providing alternate, faster and more direct routes for both pedestrians and cyclists whose destinations are not the waterfront, and directives for future design elements within shared spaces that will encourage safe and enjoyable mixing of pedestrians and cyclists. More information about intentions regarding shared pedestrian/bicycle facilities is provided on page 18.

## Transit

The OMSI District is served well by multiple transit services including lightrail, streetcar, and bus lines. The Tilikum Crossing Bridge is the first transit-only bridge in the US, and it links the Central Eastside with the rest of the Central City and other Regional Corridors. SE Tilikum Way is designated as a Regional Transitway, a Major Pedestrian Street, and a Major City Bikeway. The OMSI Station provides a transit hub for the district, along with the Streetcar station to the north (a Major Transit Priority Street).



# Shared Use Pedestrian/Bicycle Facilities

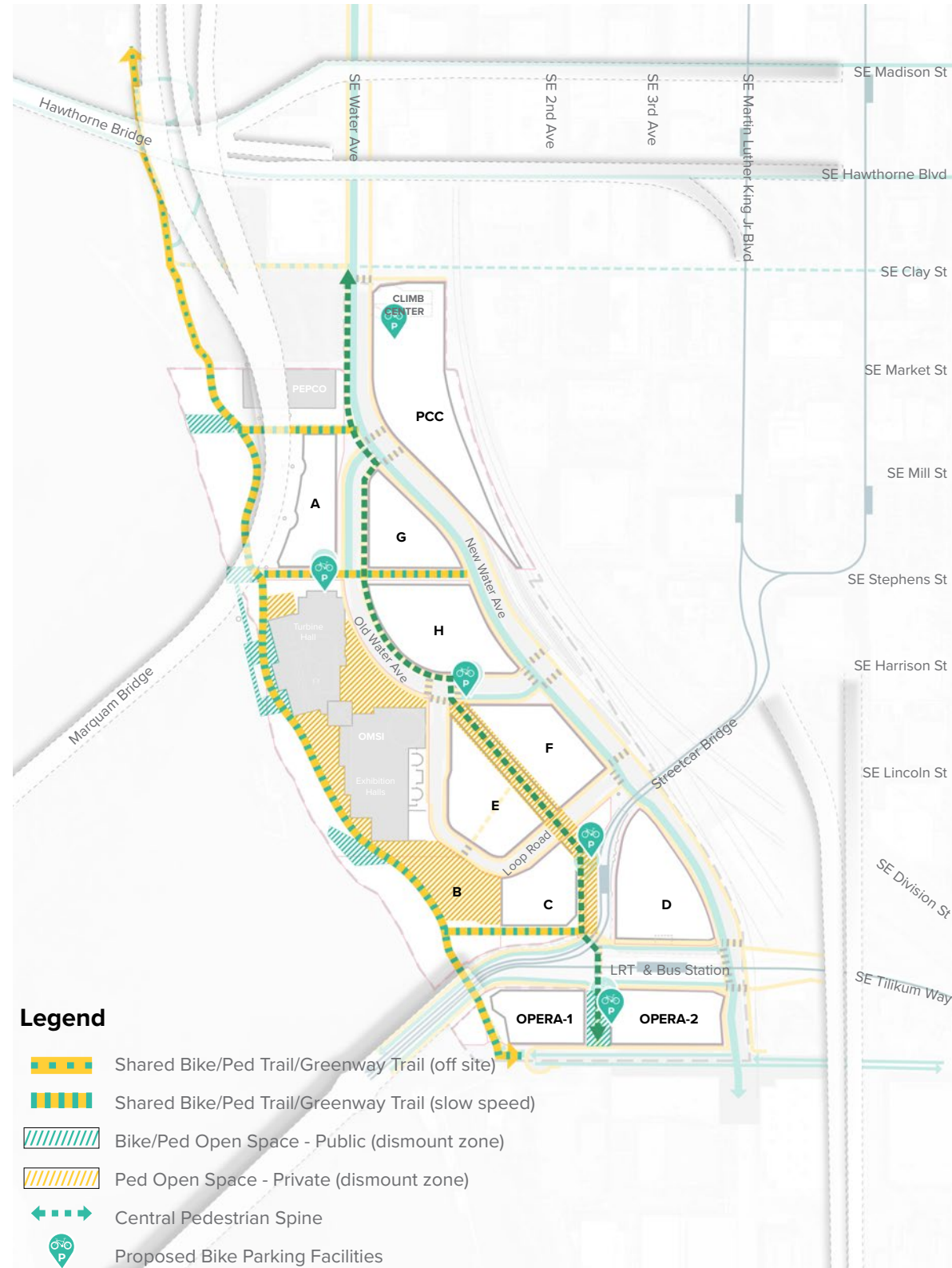
Active transportation systems and facilities have been further studied in relationship to the existing street system, circulation routes, public transit, OMSI, and development tracts. This diagram sets the framework for how the various modes intersect in order to create safe use zones for all modes.

A series of privately-owned, pedestrian-oriented outdoor spaces will encircle OMSI's existing buildings with links to development tracts and the transit station. Spaces include flexible, programmable plazas, classrooms, and event/dining areas. A privately-owned pedestrian spine between Tracts E and F enables transit riders to proceed to the front door of OMSI. Covered bike parking near the cycle track spurs on Tracts A and F encourage cyclists to dismount, and enter flexible use zones as pedestrians. At the site design level, furnishings, paving, signage, landscape elements, and other features will guide how and where the active modes interact.

The Willamette greenway trail is a shared-use pedestrian and bike trail, with a portion abutting the Tract B plaza. The general public, as pedestrians, will benefit from all users on wheeled devices riding at slower speeds. In order to support safety objectives of the public and OMSI's educational mission, family visitors, and children's classes, active transportation speeds must be compatible with pedestrian-oriented spaces.

A series of public interpretive viewpoints along the river will be key for providing ways to experience and connect to the river. In order to access this series of small but essential spaces, pedestrians will cross the greenway trail. These areas are planned to be designed with furnishings, changes of paving, grade changes, and signage as cues to encourage compatible behaviors.

Three shared east-west bike/pedestrian routes allow both pedestrians and cyclists to connect to the waterfront from SE Water Avenue or the OMSI Station: passages located at the north end of Tract A, the Bull Run right-of-way, and south of Tract C. Again, riders on wheels will need to ride compatibly with pedestrians. SE 2<sup>nd</sup> Place right-of-way is a shared pedestrian and bike plaza. Faster cyclists are encouraged to ride through on the existing bike lane in the transit station to the cycle track on New Water Avenue.



# 3.2 Open Space

## Open Area Requirement

A minimum of 20 percent of the master plan area must be devoted to open area. Open areas may include parks, outdoor recreation amenities, plazas, public fountains, or landscaped areas.

— 33.510 CENTRAL CITY PLAN DISTRICT, K.2

The highlighted green areas in the map to the right represent open space that makes up **21.3%** of the total OMSI master plan area. These open spaces are parks, recreation amenities, educational spaces, plazas, and landscaped areas that provide access to light and air, opportunities for outdoor activities including active and passive recreation, public gathering spaces, and visual relief from the built environment. They are at a scale that is compatible with the scale of development envisioned for the OMSI plan area and are planned to specifically serve its uses. More information about the character and use of these open spaces is included on pages 44-48.

While the plan area will have additional, smaller-scale open spaces to serve individual buildings, we show and seek to codify only the major open spaces that are essential to the urban design framework. This strategy ensures that those essential open spaces are developed and provides flexibility to future designers whose work is focused on individual sites.

### Open Area Requirement 33.510.255.K.2

OPEN AREA	O-1	O-2	O-3	O-4	O-5	O-6	TOTAL
	234,711 sf	14,318 sf	26,285 sf	28,413 sf	6,340 sf	5,464 sf	315,531 sf
MASTER PLAN AREA							1,479,568 sf
							<b>21.3%</b>

### Corresponding Codes and Requirements

CODE	REQUIREMENT	RESPONSE	MEETS CODE?
<b>33.510.K.3.a</b>	Area designed as parks or plazas 20,000 sf or 50% of open space, whichever is less. One park / plaza must be at least 50' x 50'.	Open area <b>O-1</b> contains both a park and a plaza. The plaza can fit a 50'x50' square.	<b>YES</b>
<b>33.510.K.3.b</b>	Bike and pedestrian accessways constitute less than 25% of the required open space.	Bike and pedestrian accessways constitute 18.2% of open area.	<b>YES</b>
<b>33.510.K.3.c</b>	Tree density must be minimum 1 tree per 1,000 sf if small canopy; 1 tree per 2,000 sf if medium or large canopy.	Tree placement will be determined during individual park design and will be required by design review at that time to meet these standards.	<b>YES</b>
<b>33.510.K.3.d</b>	Parks and plazas must be sited so that shadows from buildings cover no more than: <ul style="list-style-type: none"> <li>50% of the open space at 12pm on 3-21, 6-21 and 9-21</li> <li>75% of the open space at 12pm on 12-21, and at 3pm on 3-21, 6-21, and 9-21</li> </ul>	<b>O-1:</b> 12pm - shadows cover 2.1% on 3-21, 1.2% on 6-21, 1.7% on 9-21, and 3.7% on 12-21. 3pm - shadows cover 0.2% on 3-21, 0.2% on 6-21, and 0.2% on 9-21.	<b>YES</b>



# Open Area Requirement

North | O-1 (North) and O-2

**Open Area** Requirement 33.510.255.K.2

OPEN AREA	O-1 (North)	O-2
	74,457 sf	14,318 sf

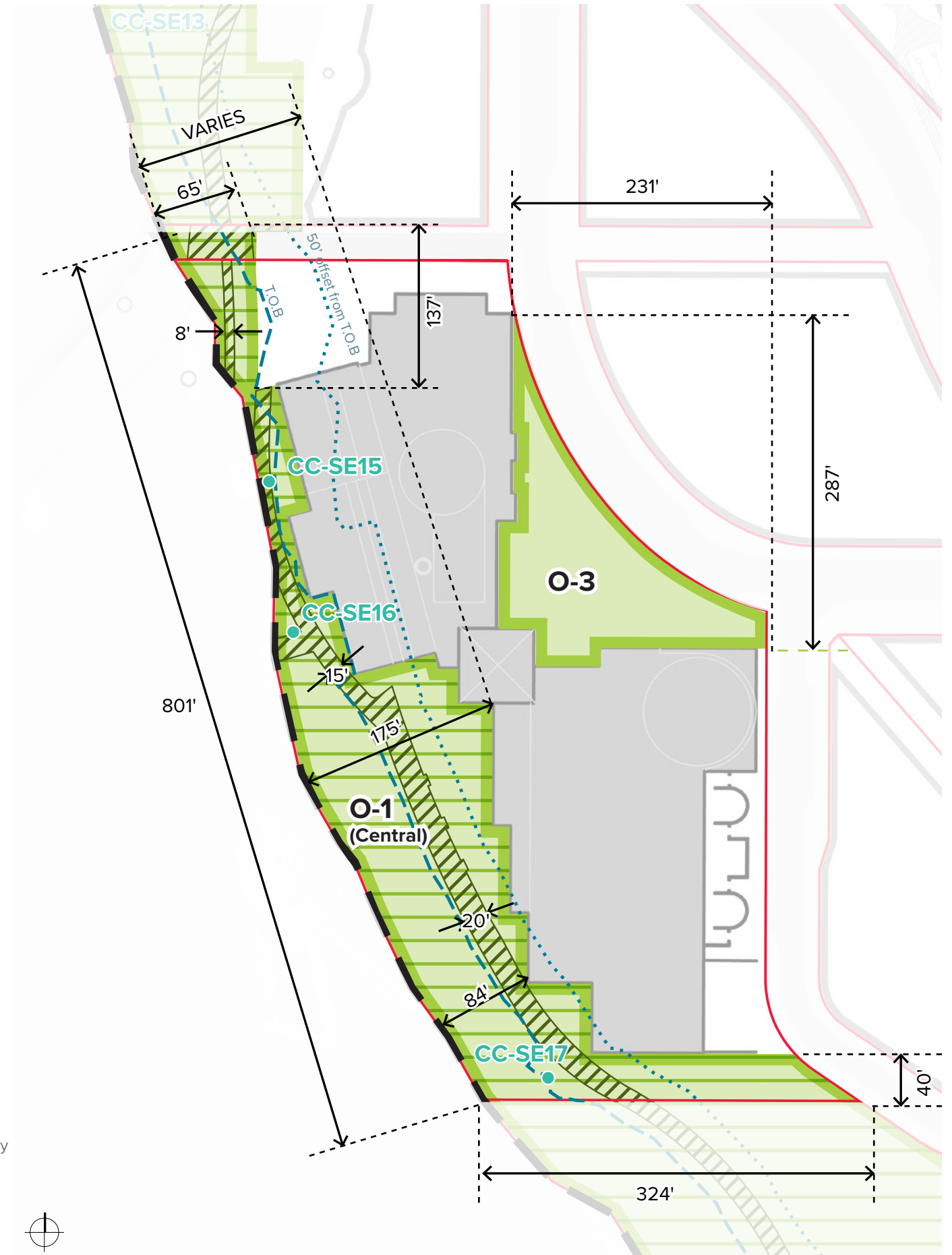


# Open Area Requirement

Central | O-1 (Central) and O-3

Open Area Requirement 33.510.255.K.2

OPEN AREA	O-1 (Central)	O-3
	76,214 sf	26,285 sf



- Legend**
- Master Plan Area
  - Tract Boundary
  - Entitled Open Area Boundary
  - Park/Plaza (O-1)
  - Bike/Pedestrian Accessway
  - Scenic Viewpoints
  - CC-SE#

# Open Area Requirement

**South I** O-1 (South), O-4, O-5, and O-6

**Open Area** Requirement 33.510.255.K.2

OPEN AREA	O-1 (South)	O-4	O-5	O-6
	84,040 sf	28,413 sf	6,340 sf	5,464 sf



### Legend

- Master Plan Area
- Tract Boundary
- Entitled Open Area Boundary
- Park/Plaza (O-1)
- Bike/Pedestrian Accessway
- Scenic Viewpoints

# River Overlay Zones

All improvements illustrated within the 50-foot setback are conceptual. All are proposed to be river-dependent or river-related, and open to the public. Future design will be fully assessed under the development standards in the PZC 33.475.440.

The View Corridor and Scenic Corridor standards under the PZC 33.480.040 will be fully assessed with specific development proposals.

The proposed greenway trail improvements will comply with the Major Public Trail standards in the PZC 33.272.050 and be fully assessed with a specific development proposal.

The zones in this area are:

- OSdeg\*
- OSdg\*
- EXdeg\*s
- EXdeg\*
- EXdg\*
- EXd
- IG1

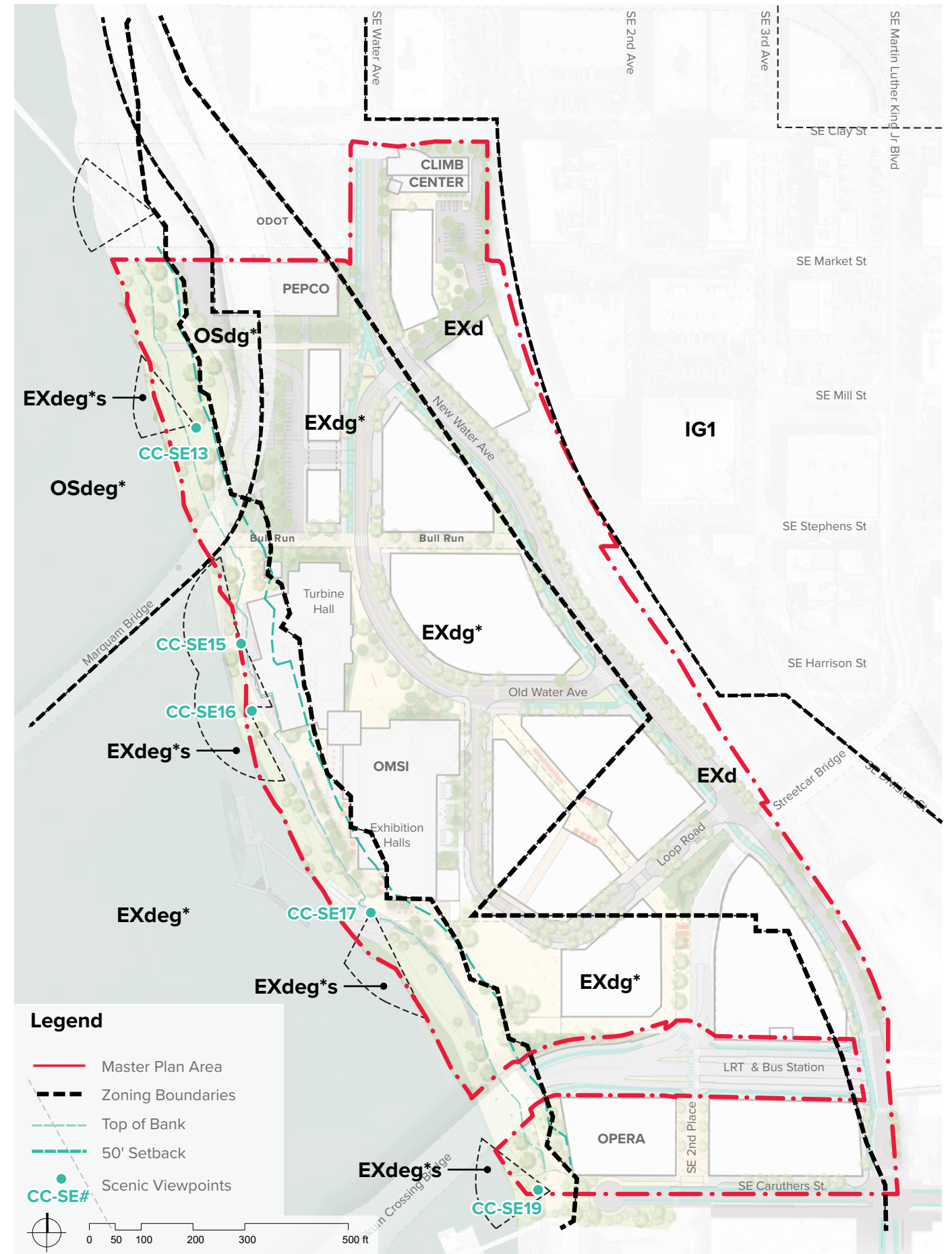
## Zoning Legend

### Base Zones

- EX Central Employment
- OS Open Space
- IG1 General Industrial 1

### Overlay Zones

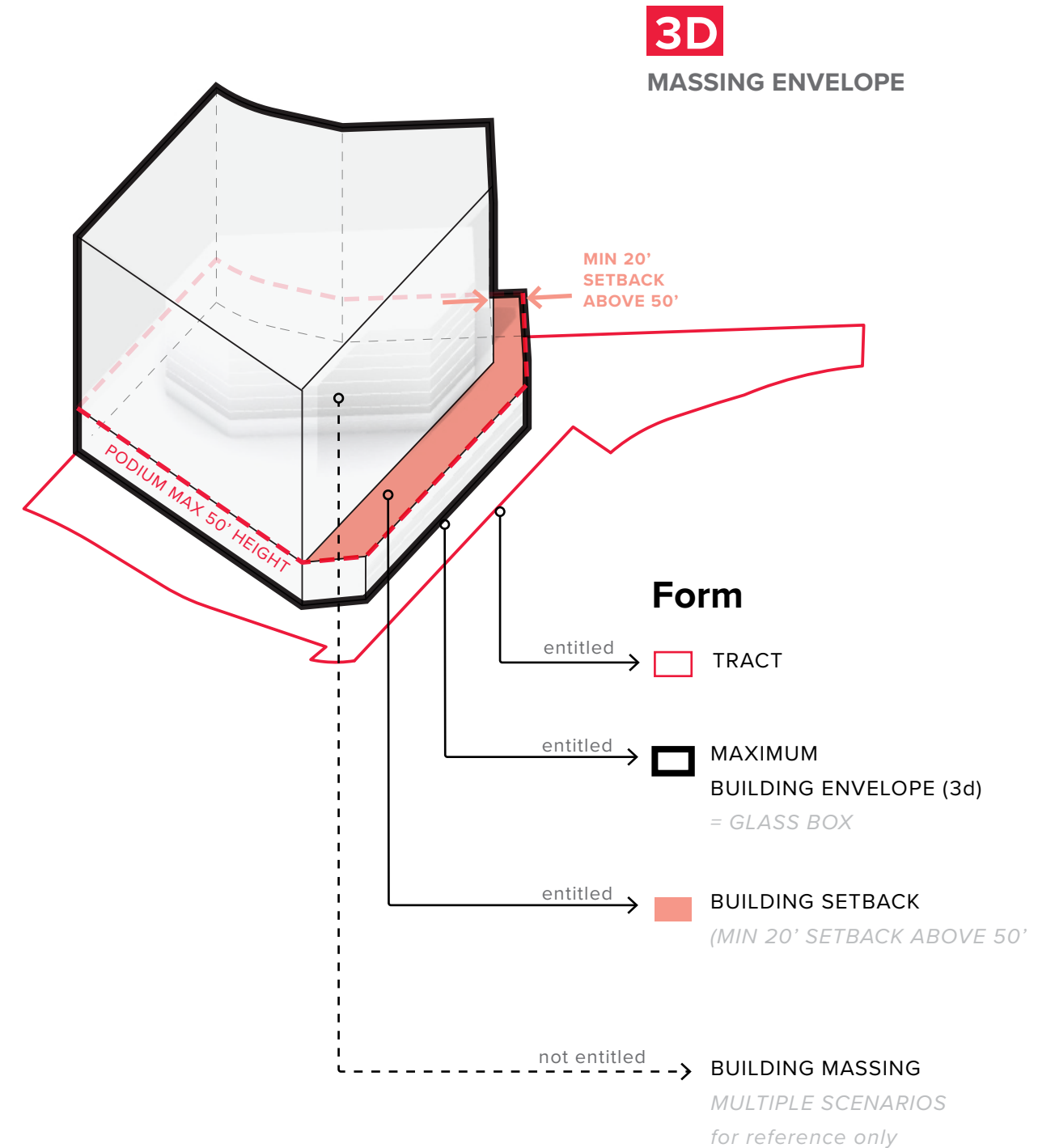
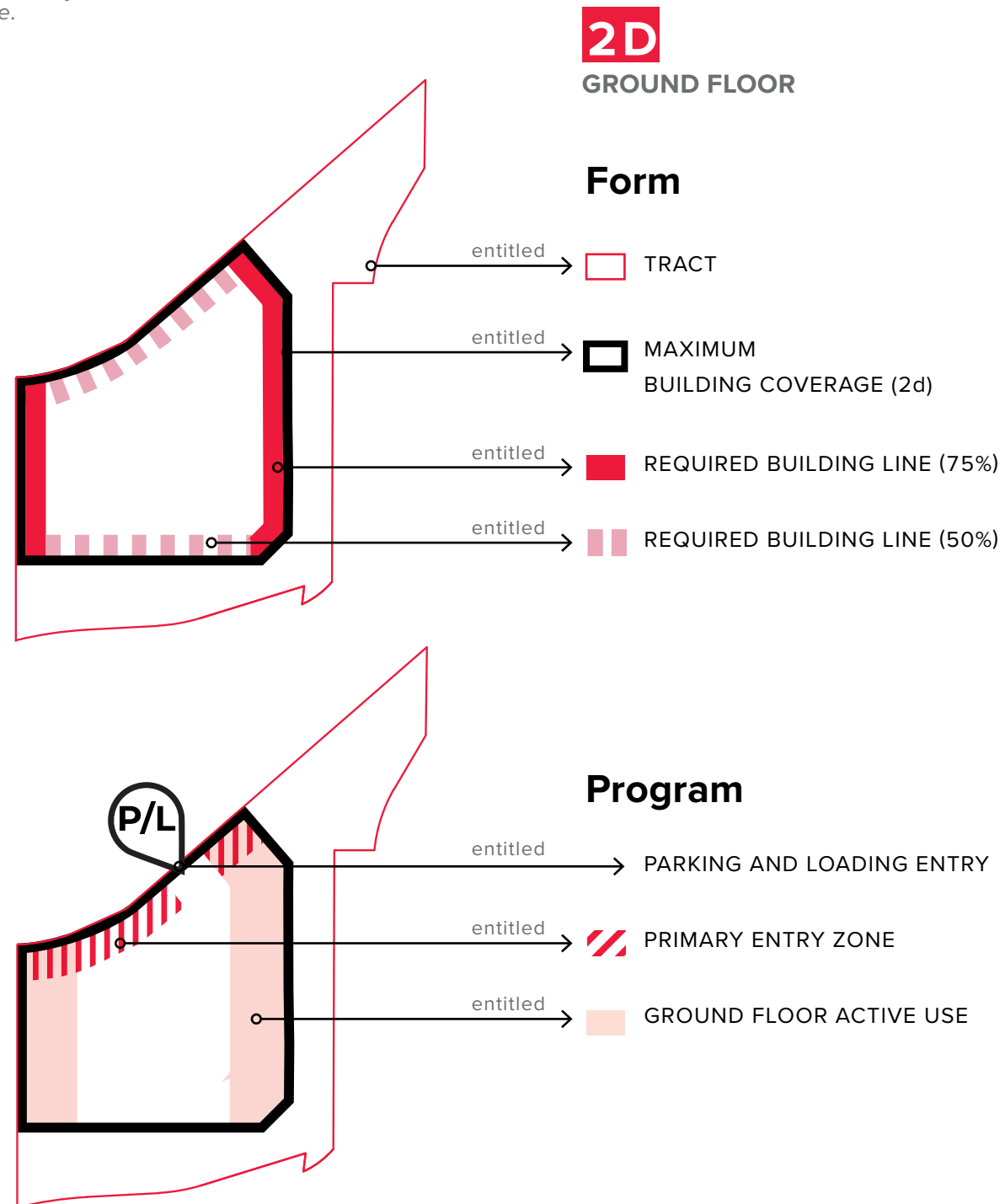
- (d) Design Overlay Zone
- (e) River Environmental Zone
- (g\*) River General Zone
- (s) Scenic Resource Zone



# 3.3 Buildings

## Glossary

NOTE: Illustrations are only for graphic reference.



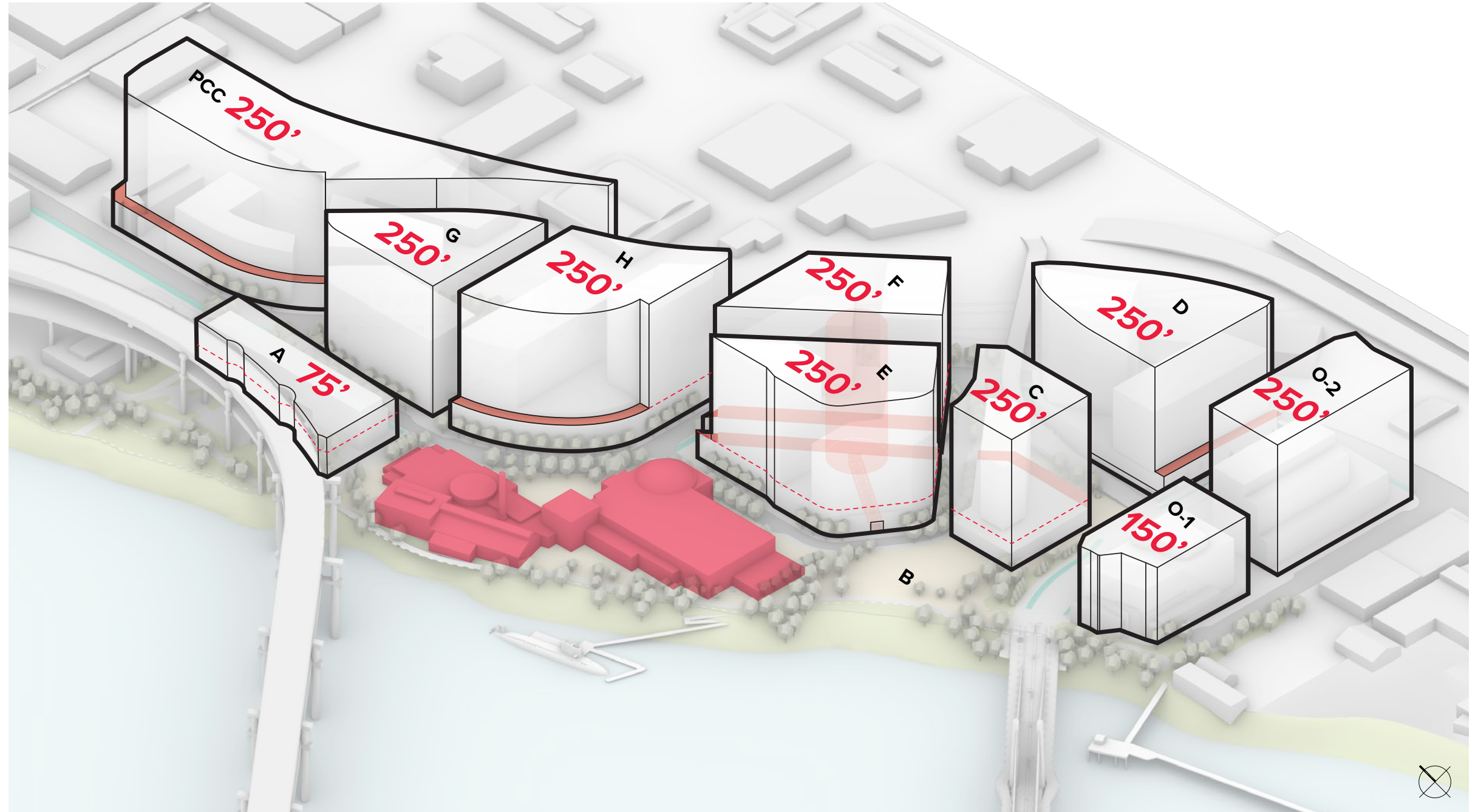


# Massing

## Maximum Building Envelope

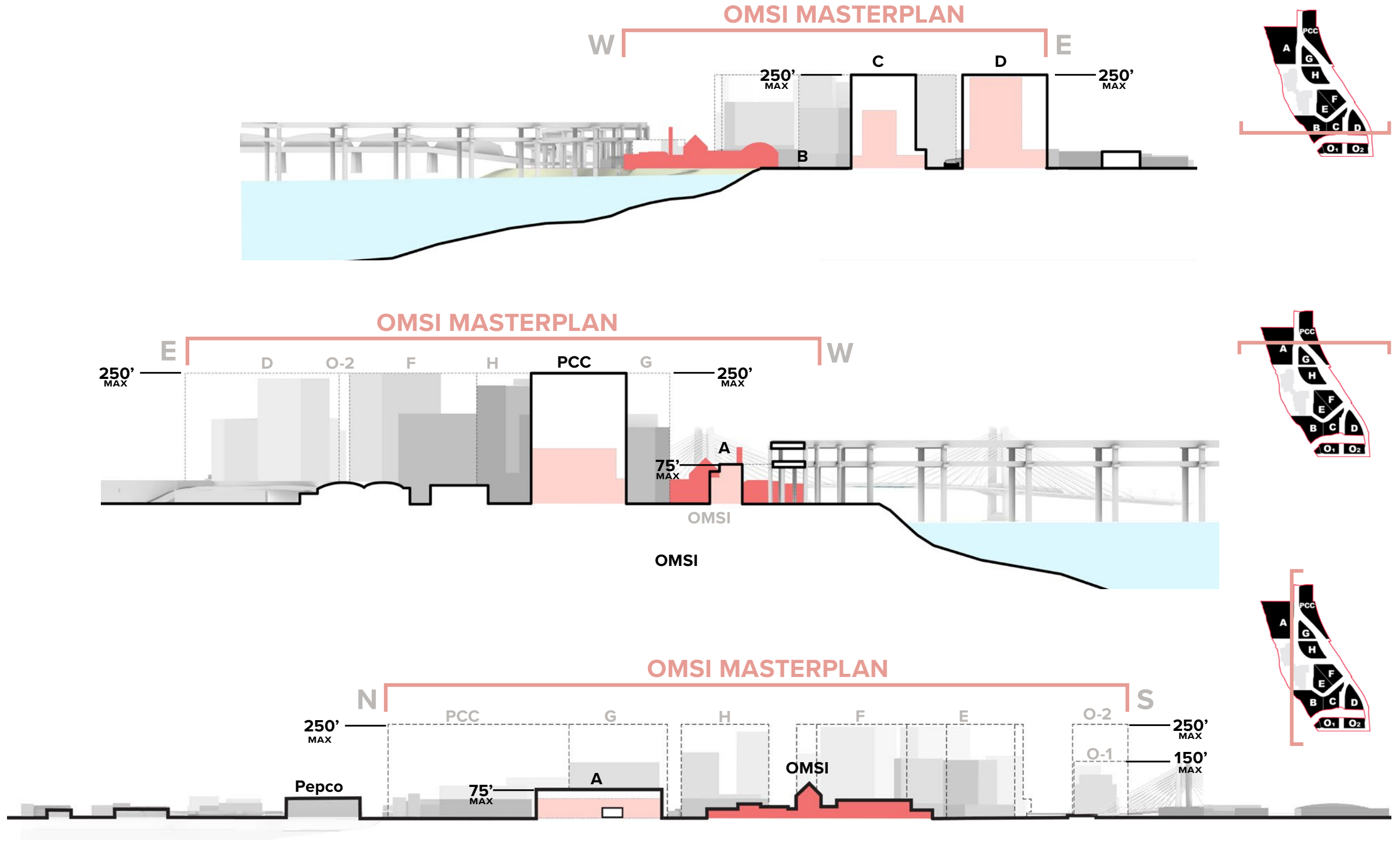
The diagram to the right represents the maximum heights of the building envelopes. The OMSI CCMP building massing is designed to support vibrant and active streets, enhance open space development, and create viable tracts that accommodate a variety of program typologies, while responding to the neighborhood adjacencies, and location on the river. The building envelope for each tract is described on pages 31-33.

Each building envelope must respond to overall height limits, setbacks, building lines, and easements. The envelope limits represent maximum and minimum limits, but do not indicate a building form. The allowable floor area ratio (FAR), building program, and design review criteria will influence potential design solutions.



# Massing

## Site Sections

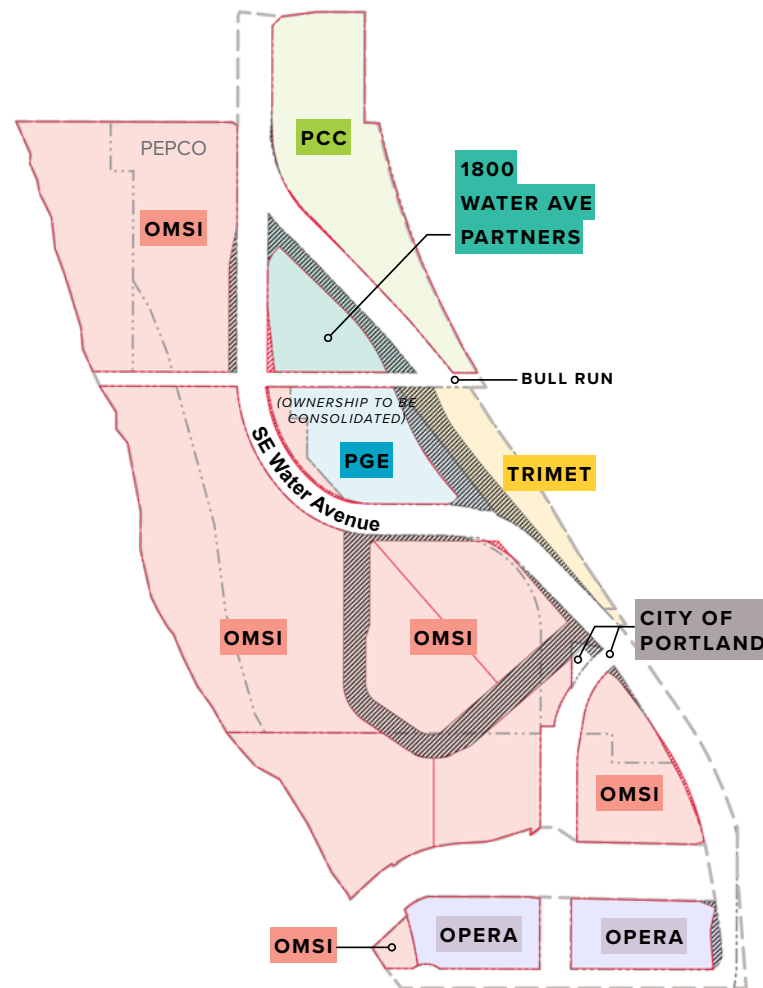


# Maximum Building Coverage

The diagram to the right illustrates the tract boundaries (in red) and the maximum building footprint (in black) for development at the ground plane. These building footprint areas are a result of existing setbacks and easements, and CCMP-required setbacks for future pedestrian circulation and gathering in the public realm (for example on Tract A, C, E and F, and Opera 1).

Each development footprint will be subject to additional height and setback requirements as shown on pages 25 and 28.

Required building lines, ground floor active use areas, and main entry zones are described on pages 29 and 30.



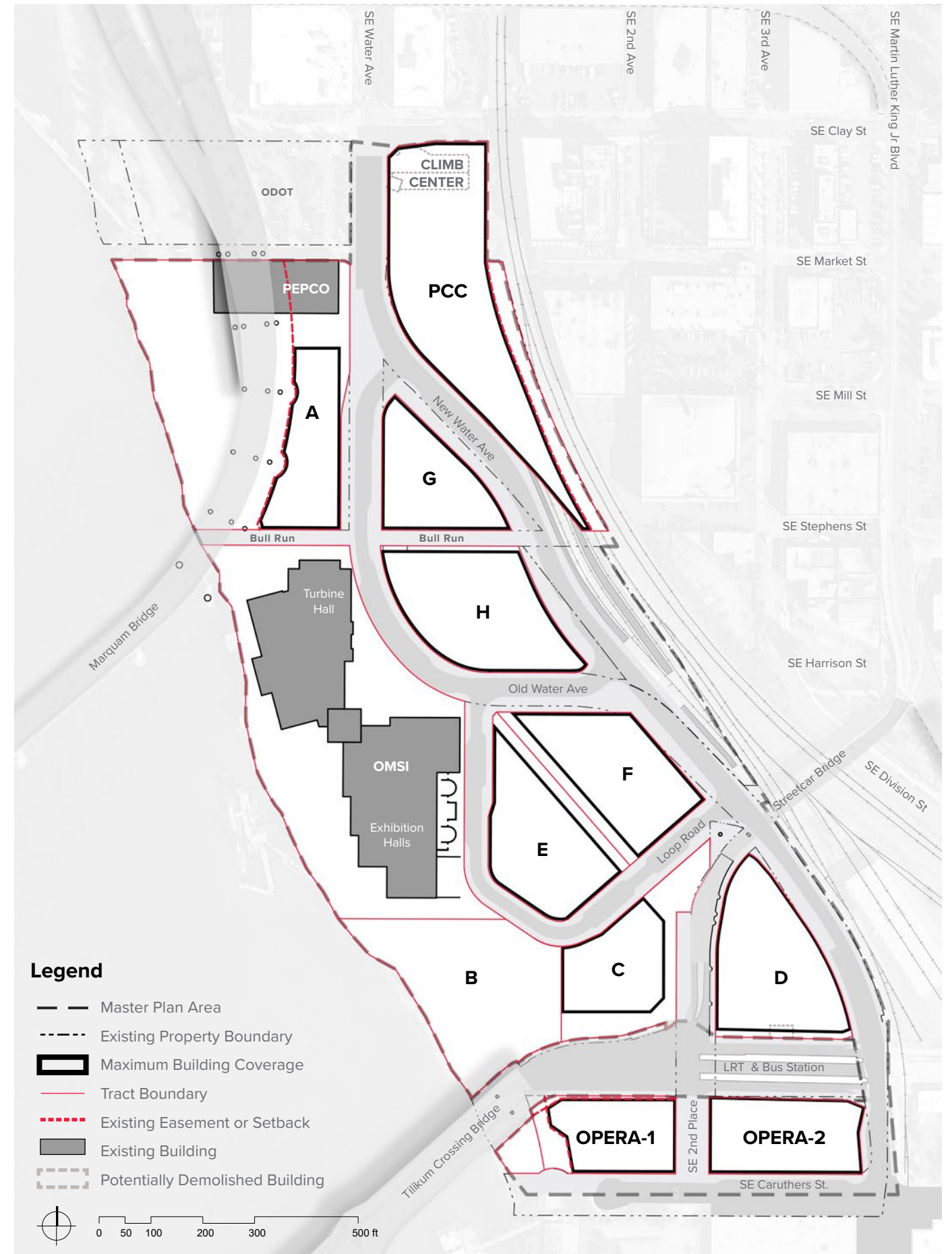
## DEVELOPMENT TRACTS + PROPOSED ROW

Developable tracts are formed out of a patchwork of remnant tracts from previous owners, and property transfers to be completed after CCMP approval.

The transfers of private land to public right-of-way, and public right-of-way to private land, are as shown in the diagram to the left with red and black hatches. Almost every tract has some minor adjustments to its boundaries, which affect public right-of-way.

### Legend

- Public ROW to Private (Proposed Tract)
- Privately-owned Property to Public ROW



# Building Setbacks

To define public open spaces and acknowledge the existing fabric and identity of the OMSI buildings, the CCMP requires upper-floor building setbacks above 50 feet in certain locations in the plan area. These are areas adjacent to OMSI, to support and reinforce the lower scale datum of the existing OMSI buildings, and along primary pedestrian areas. Upper-floor setback requirements are a minimum 20 feet deep at 50-foot height where indicated in the plan to the right.

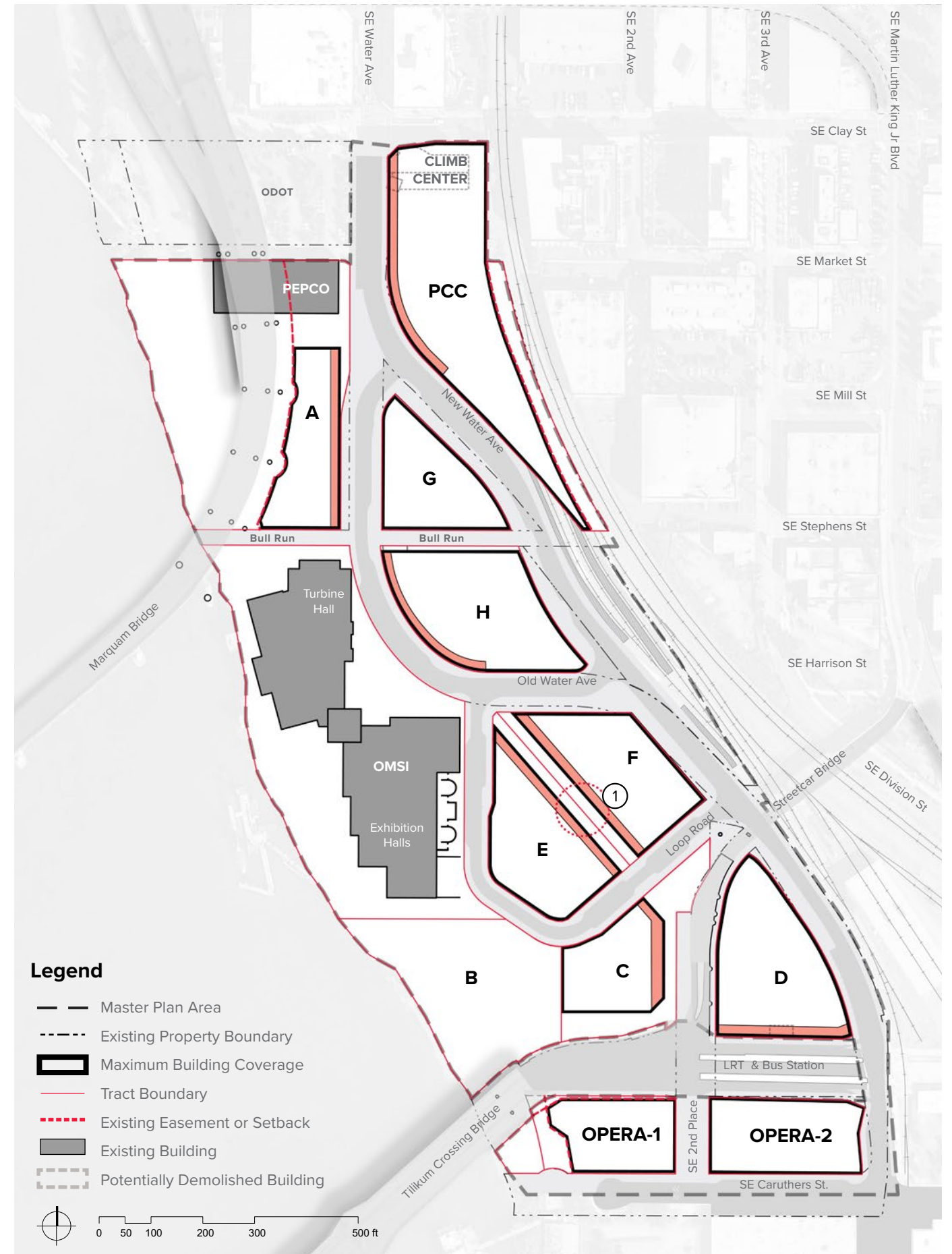
- ① Specific Plan Guideline: A minimum of a 70'x70' outdoor space should be provided near the midpoint of Tracts E and F on the Central Pedestrian Spine. This should be activated with ground-floor uses, providing public amenity seating space, vegetation, and space for gathering. This space will also be connected to an exterior or interior passageway through Tract E (see page 30).



A courtyard space is situated between buildings at NYU's Langone Medical Center campus in New York.



At Portland's South Waterfront neighborhood the building towers are setback from the lower podiums along the street.



# Required Building Lines

## GROUND FLOOR

Exterior walls of buildings must be at least 15 feet high measured from the finished sidewalk at the building's edge.

### REQUIRED BUILDING LINES - 75%

The building lines must meet the requirements of Title 33, PZC, 33.510.215.B.1.

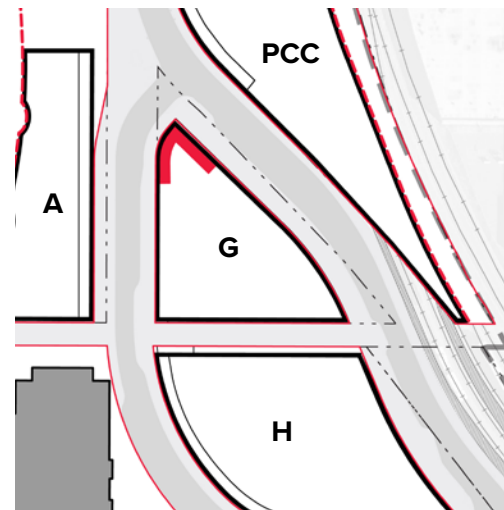
### REQUIRED BUILDING LINES - 50%

The building must extend to the maximum building coverage line along at least **50%** of the length of the ground level façade. All other requirements of PZC, 33.510.215.B.1.b. still apply.

### LANDSCAPE STANDARDS OPTION

The building must extend to the to the maximum building coverage line along at least 50% of the length of the ground level façade. All other requirements of PZC 33.510.215.B.2.b. still apply.

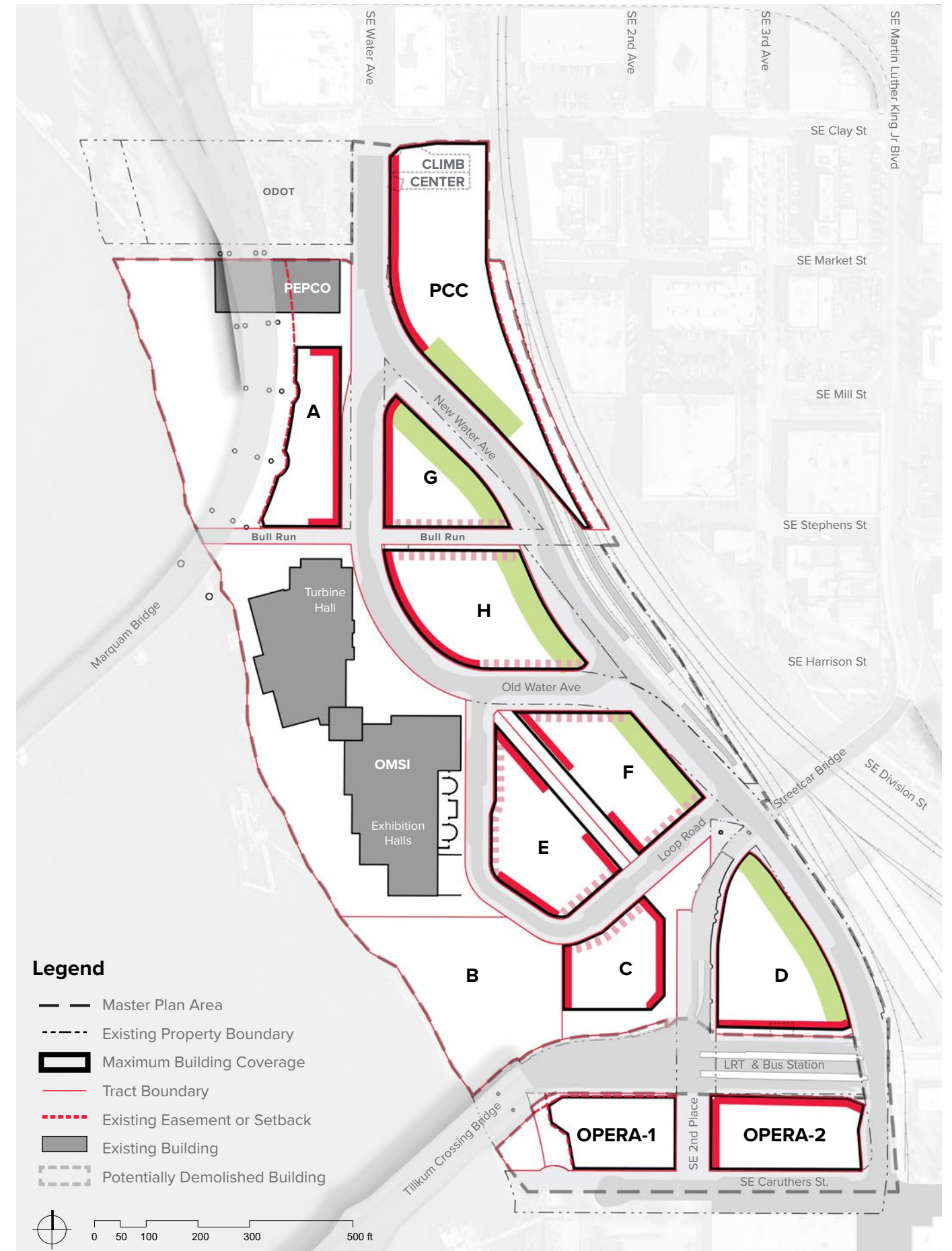
Where there is no building line designation on the plan, there is no building line requirement.



## UPPER FLOORS

### REQUIRED UPPER FLOORS BUILDING LINE

Exterior walls of buildings above the ground floor or above the required setback lines must extend to the maximum building coverage line along at least 75% of the length of the ground level façade; 25% of the building must extend to within 12 feet of the length of the ground level façade.



Adjustments to the Required Building Lines Standard 33.510.215.B is requested for all Tracts. Please see Appendix I.

# Ground Floor Active Use Areas

## ACTIVE USE FRONTAGES

Primary active frontage in new buildings will be focused on the Central Pedestrian Spine, plazas, and other public open spaces. This area requires that at least 50% of the length of the ground level façade include active uses.

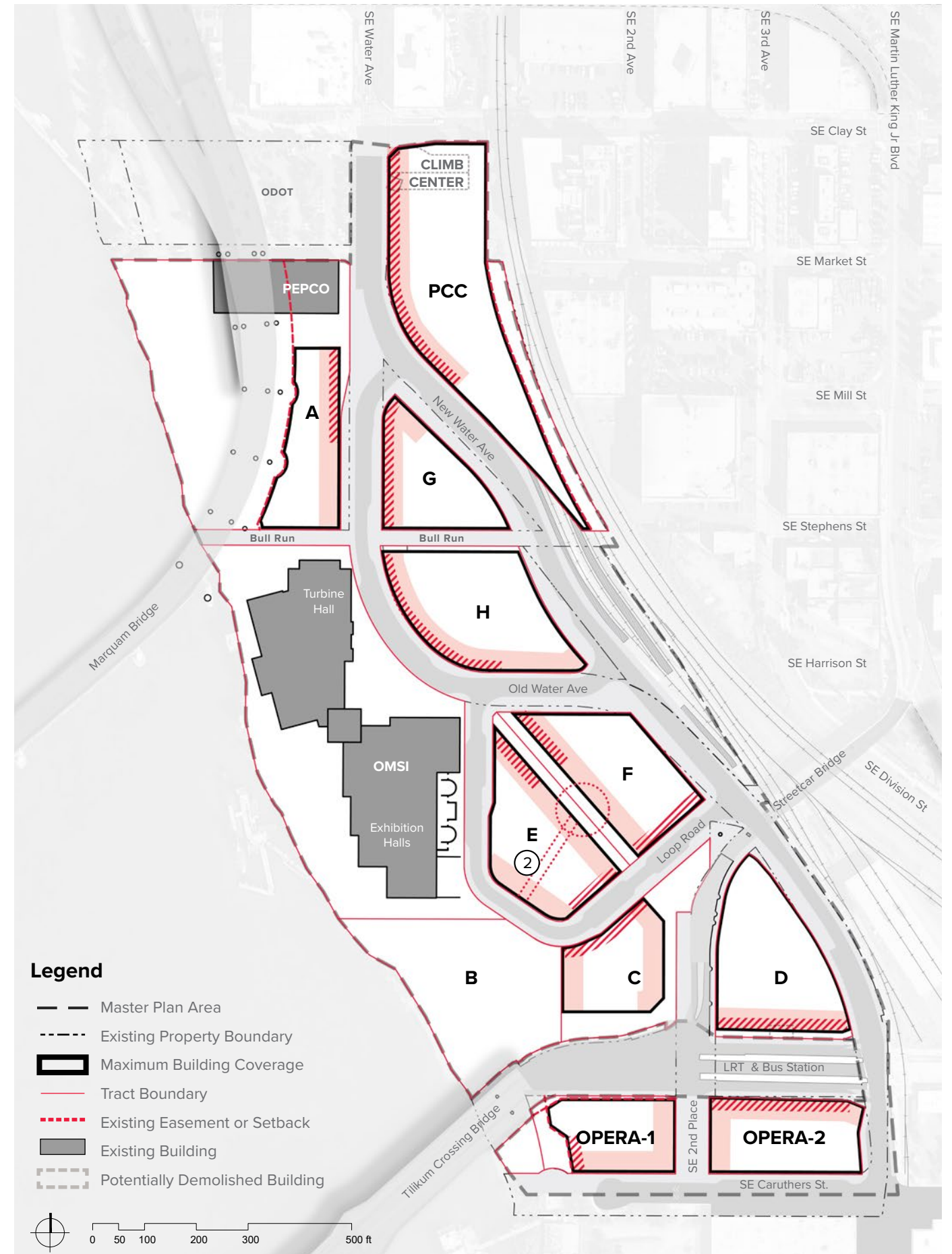
## PRIMARY ENTRY ZONES

Development of the OMSI master plan area is planned to prioritize pedestrian and bicycle movement; as such, primary entry zones are shown in areas focused on major pedestrian routes and gathering spaces. The primary entry can be located anywhere within the zone indicated on the plan to the right.

- ② Specific Plan Guideline: A minimum of a 20-foot wide by 15-foot height interior or exterior passageway should be provided through Tract E. This should be inviting, safe, activated, and articulated with architectural features so it is a prominent feature in the building façade.



The Davidson House in Reading, UK has an elegant public passageway that links the north and south entrances. The space is well lit, has activating glass walls and has warm natural materials including a timber fin ceiling structure throughout.

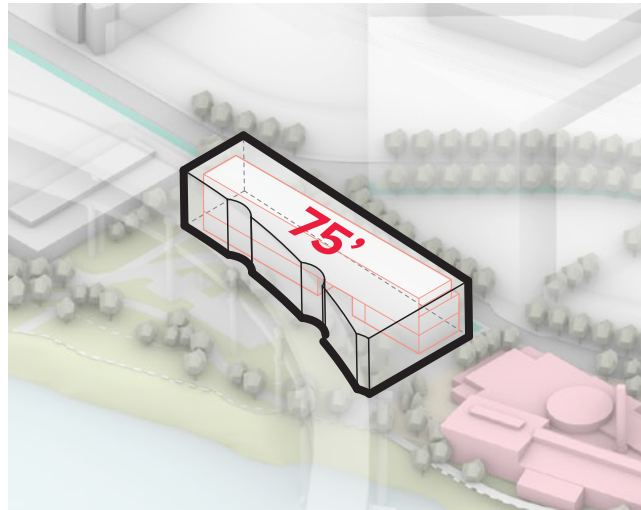


# Maximum Building Envelope

Building Envelopes Tracts A, G, and PCC

## A

GSF MIN: 39,000  
GSF MAX: 85,000



### Tract Summary:

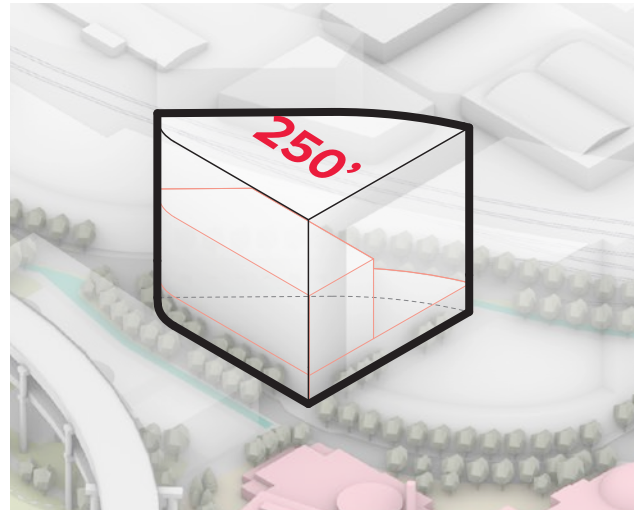
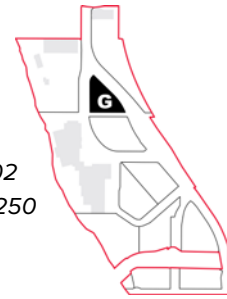
75' height limit

Upper floor setback along Old Water Avenue.

Development area constrained by ODOT Marquam Bridge easements.

## G

GSF MIN: 79,602  
GSF MAX: 315,250



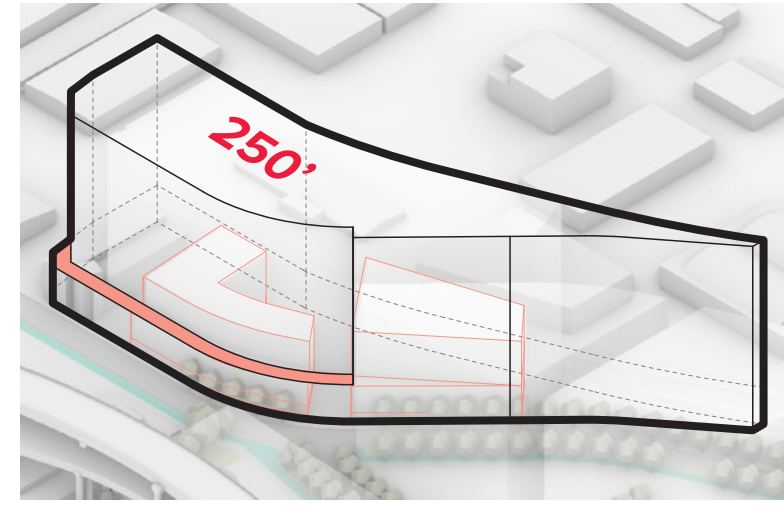
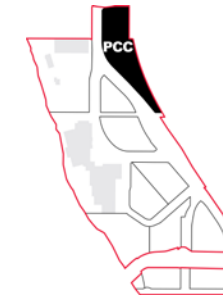
### Tract Summary:

250' height limit

Upper floor building line requirement on the northwest and northeast corner. See figure on page 25.

## PCC

GSF MIN: 243,208  
GSF MAX: 422,484

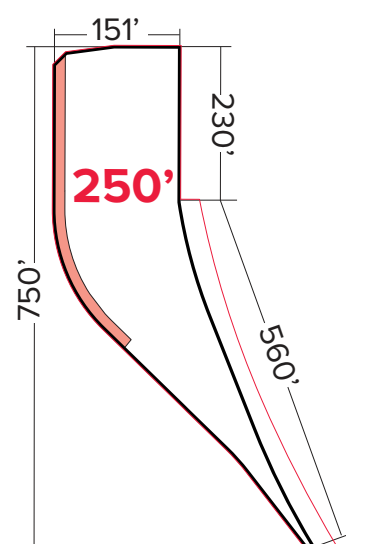
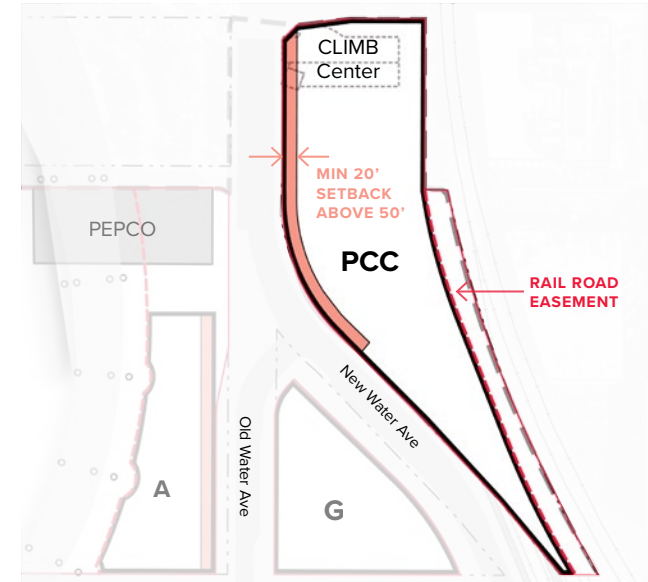
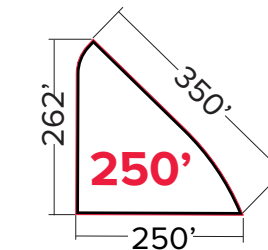
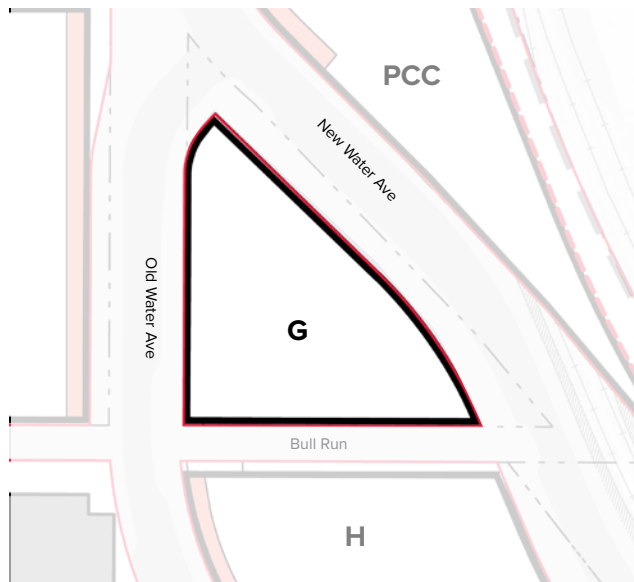
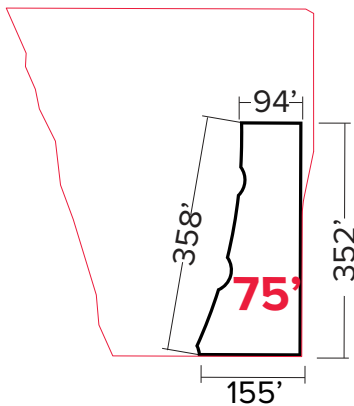
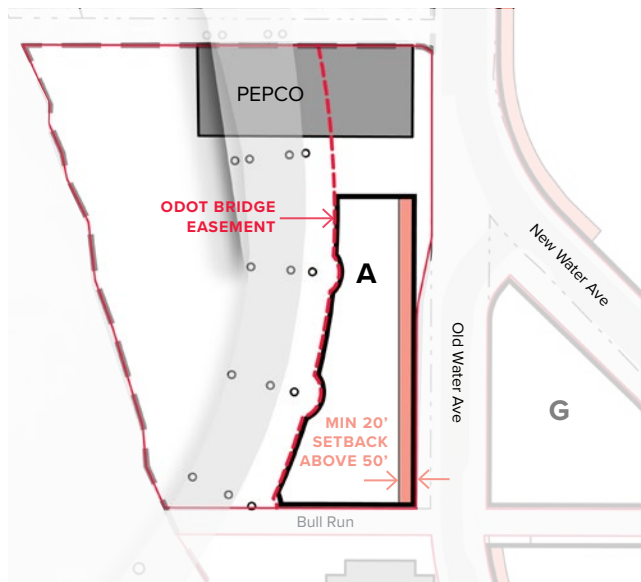


### Tract Summary:

250' height limit

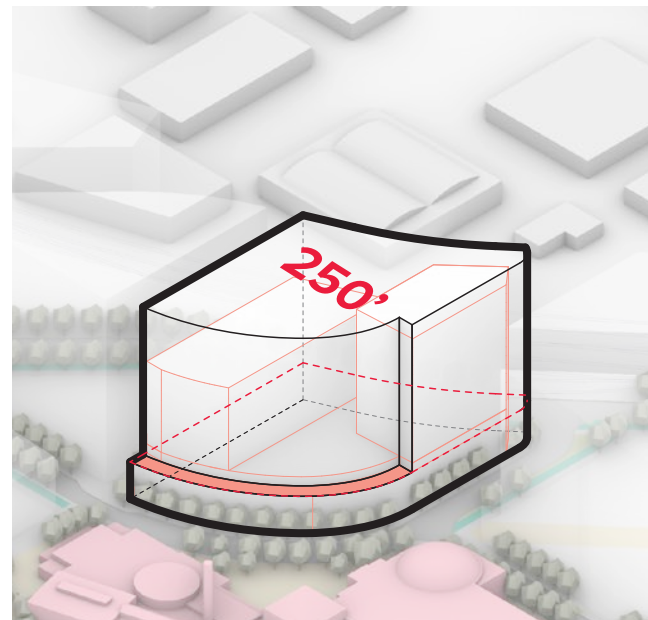
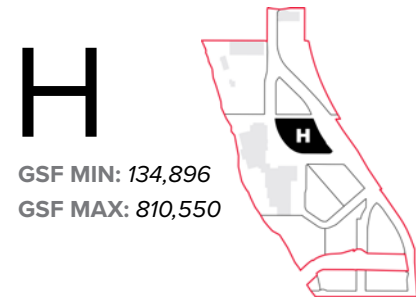
Upper floor setback along New Water Avenue.

Multiple buildings are permitted on PCC with maximum building façades up to 250' length.



# Maximum Building Envelope

Building Envelopes Tracts H, E + F, and C

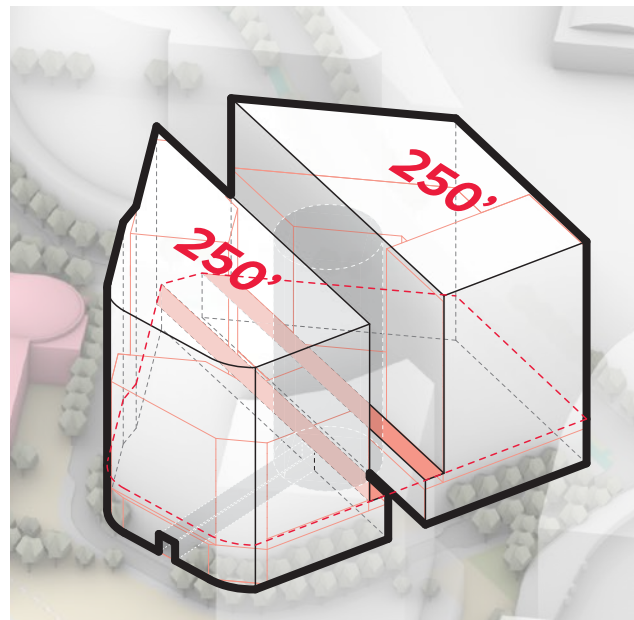
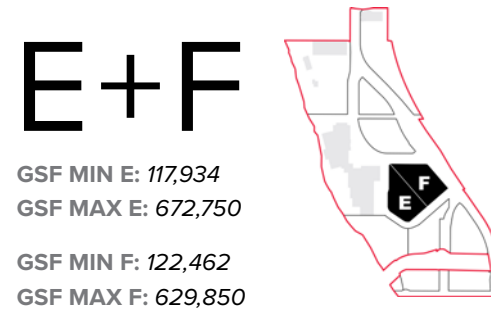
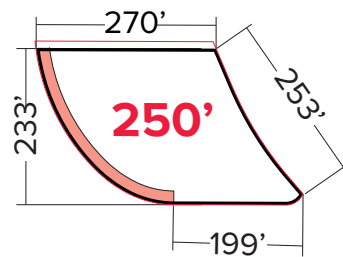
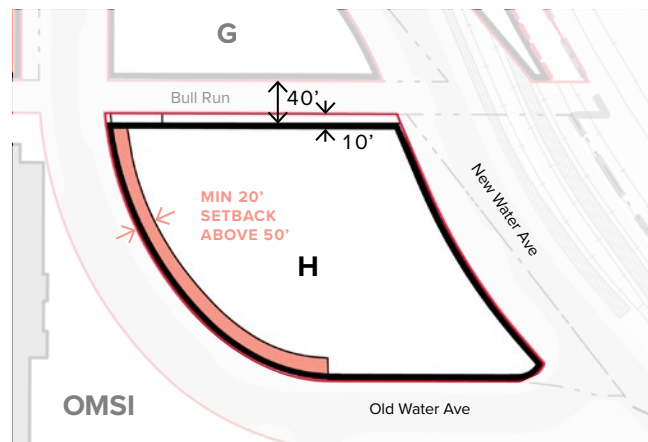


**Tract Summary:**

250' height limit

Upper floor setback above 50' along Old Water Avenue curve.

10' offset from north property line for additional space for pedestrians on Bull Run.



**Tract Summary:**

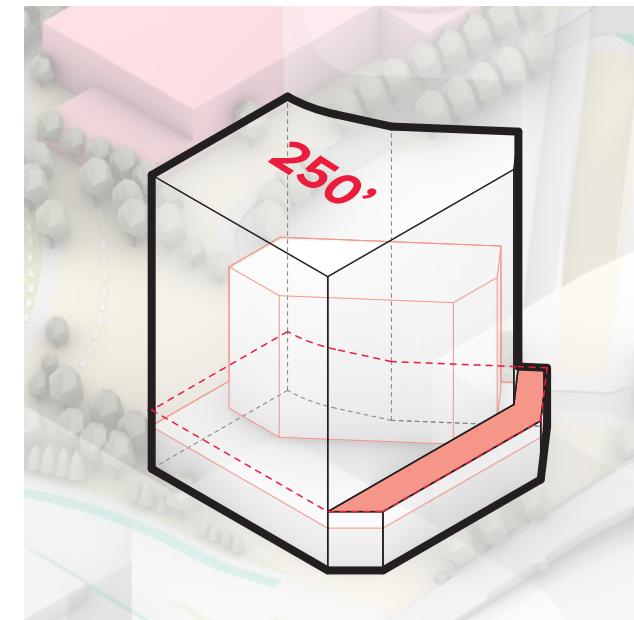
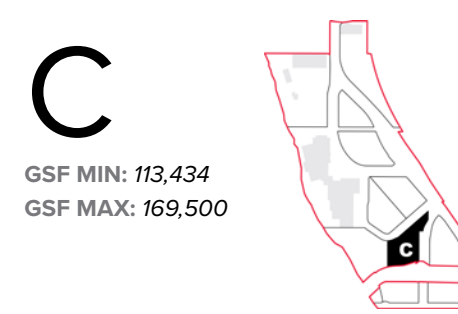
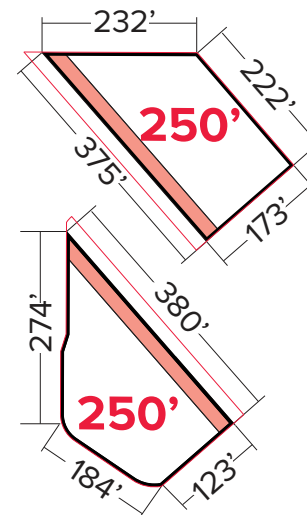
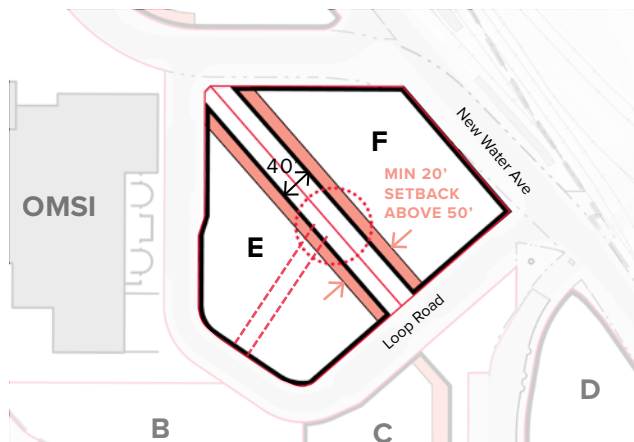
250' height limit

20' central offset (40' total) to each tract for Central Pedestrian Spine.

Upper floor setback along Central Pedestrian Spine.

These tracts have two specific plan guidelines:

- A minimum of a 20' wide by 15' tall passageway through Tract E
- A minimum 70'x70' outdoor space near the midpoint of Tracts E and F



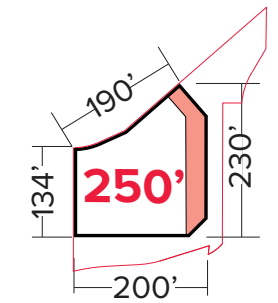
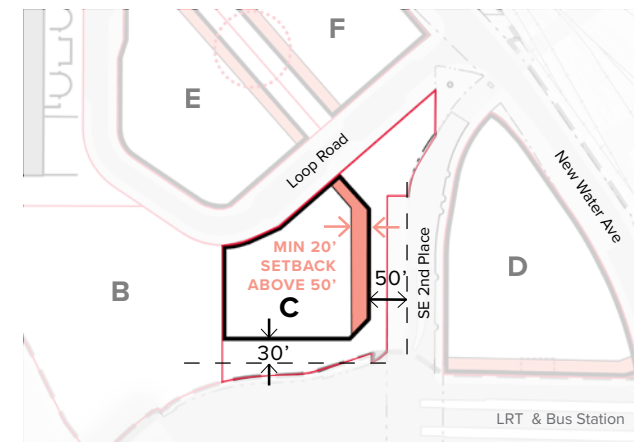
**Tract Summary:**

250' height limit

50' offset from existing streetcar bridge for Central Pedestrian Spine.

30' offset from existing pavement edge for pedestrian access to river.

Upper floor setback along Central Pedestrian Spine.



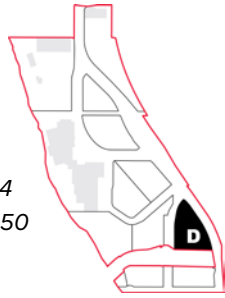


# Maximum Building Envelope

Building Envelopes Tracts D, Opera-1, and Opera-2

## D

GSF MIN: 123,434  
GSF MAX: 796,250

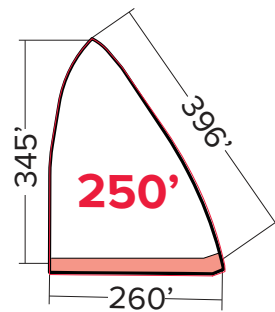
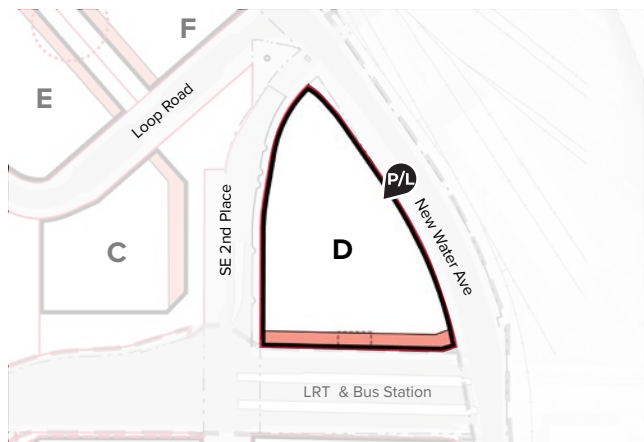


### Tract Summary:

250' height limit

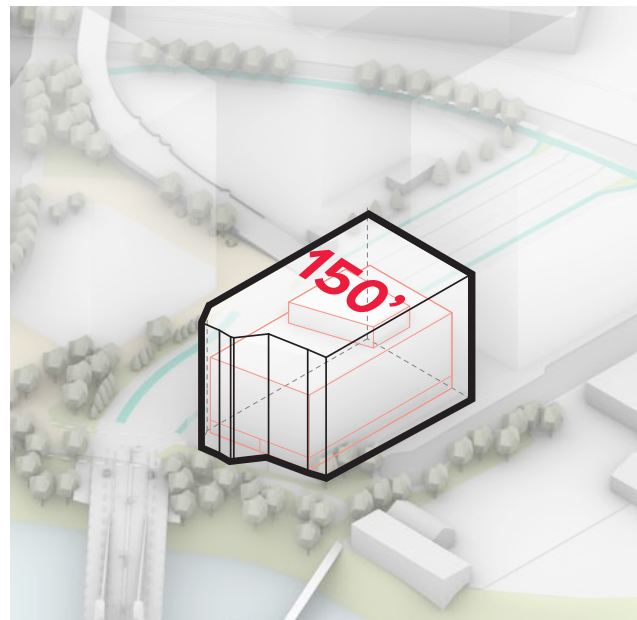
10' setback from property line at ground floor to allow for adequate pedestrian circulation, upper floor setback above 50'.

Provide off-street storage for a minimum of 3 vehicles, clear of back of walk, before parking / loading entry.



## O-1

GSF MIN: 78,498  
GSF MAX: 188,500



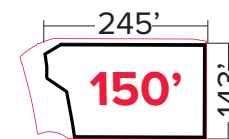
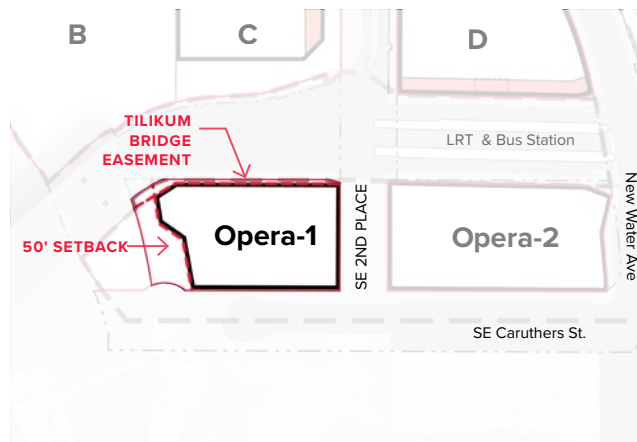
### Text summary here:

150' height limit

50' setback from top of bank.

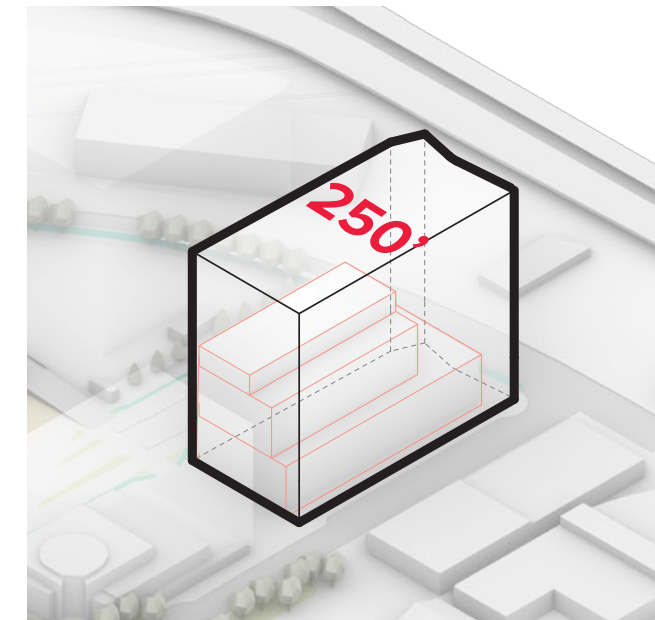
No massing envelope setbacks.

Maximum flexibility desired for landmark building.



## O-2

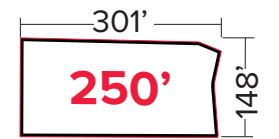
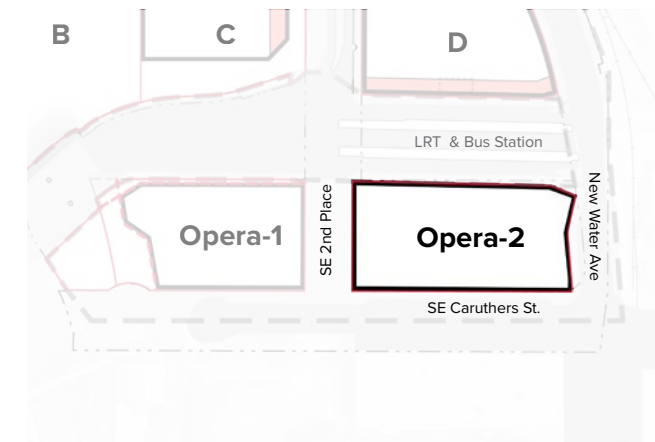
GSF MIN: 85,342  
GSF MAX: 282,263



### Text summary here:

250' height limit

No massing envelope setbacks.



# Development + Land Uses

Total area within the CCMP boundary is 1,479,568 SF, of which 250,613 is public rights-of-way. 94,495 SF is zoned Open Space (OS), which has no FAR allowance. Approximately 337,500 SF or 7.75 acres of the site is in surface parking use, while another 3.2 acres lies in undeveloped gravel or other impervious surface.

## Existing Land Uses

Existing uses within the plan area boundary are institutional, (OMSI and PCC), one structure with a mix of institutional and commercial use (Portland Opera), and open space along the river. Within 500 feet of the boundary are eight commercial buildings and nineteen industrial operations. Of the tracts in industrial use, nine are located across the heavy rail tracks at the top of the embankment, a significant geographic distance from any of the future improvements.

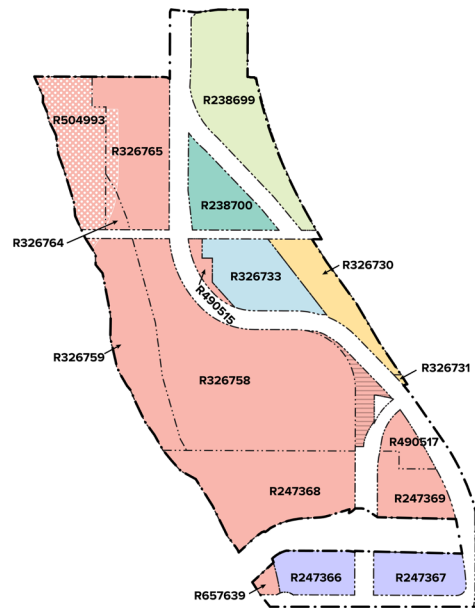
## Residential Use

The mixed uses anticipated for the plan area include up to 1,200 residential apartments. The base zone for the site, EX Central Employment, allows all the anticipated future uses, except that Residential Use must be approved within this CCMP by demonstrating how potential conflicts between proposed uses and existing industrial uses will be minimized.

Due to the isolation of the OMSI CCMP plan area from the historic Central Eastside industrial area by the freight rail tracks, the Highway 99 viaduct, and a tall embankment, there are only nineteen industrial businesses operating within 500 feet of the plan area boundary. Of these, nine are across the rail tracks. This geographic distance insulates both the industrial businesses and future residents of the OMSI District from each other.

For the freight trucks that must pass through the OMSI District on their way to Highway 99 or I-5, the CCMP proposes a new freight street, New Water Avenue, that bypasses the heart of the district and parallels the heavy rail line. A limited number of protected pedestrian crossings will support passage back and forth across this important corridor while coordinated signalization will facilitate through movement of trucks. New Water Avenue will feature wide sidewalks and street trees to moderate the energy of the street for pedestrians, and a protected, two-way cycle track and flex parking/loading lane to provide physical separation. To further reduce potential conflicts, no curb cuts are planned on New Water Avenue except at Tract D, for which there is no other option.

## DEVELOPABLE SITE AREA



### Legend

- Master Plan Area
- Existing Property Boundary based on R-lot Division (portlandmaps.com)
- Open Space Zoning Overlay
- OMSI-owned Property
- Trimet-owned Property
- 1800 WA-owned Property
- PGE-owned Property
- PCC-owned Property
- Opera-owned Property

## EXISTING USES WITHIN 500' OF PLAN AREA



### Legend

- Master Plan Area
- 500' Offset from Boundary
- Residential
- Office
- Commercial
- Open Spaces
- Institutional
- Industrial
- Parking Structure
- Surface Parking

OWNERSHIP	R-LOT	GROSS SF OF LOT	AREA ZONED OS	TOTAL EXISTING DEVELOPABLE SITE AREA **	EXISTING FLOOR AREA, BUILDINGS TO REMAIN	BASE FAR BY R-LOT @2:1
OMSI	R326765	107,158 SF	10,884 SF	96,274 SF	24,000 SF	163,548 SF
	R326764	8,273 SF	3,615 SF	4,658 SF	0	9,316 SF
	R504993	79,279 SF	79,279 SF	0	0	0
	R326758	305,356 SF	0	305,356 SF	208,000 SF	402,712 SF
	R326759	96,703 SF	717 SF	95,986 SF	0	191,972 SF
	R247368	131,551 SF	0	131,551 SF	0	263,102 SF
	Vacated of SE 2 <sup>nd</sup> Pl.	18,826 SF	0	18,826 SF	0	37,652 SF
	R490517	16,186 SF	0	16,186 SF	0	32,372 SF
	R247369	45,738 SF	0	45,738 SF	0	91,476 SF
	R657639	8,543 SF	0	8,543 SF	0	17,086 SF
1800 WA	R490515	8,820 SF	0	8,820 SF	0	17,640 SF
	R238700	51,401 SF	0	51,401 SF	0	102,802 SF
PGE	R326733	67,587 SF	0	67,587 SF	0	135,174 SF
PCC	R238699	125,453 SF	0	125,453 SF	35,646 SF	215,260 SF
OPERA	R247366	39,257 SF	0	39,257 SF	0	78,514 SF
	R247367	44,867 SF	0	44,867 SF	0	89,734 SF
TRIMET	R326730	48,352 SF	0	48,352 SF	0	96,703 SF
	R326731	659 SF	0	659 SF	0	1,318 SF
		<b>1,204,009 SF</b>	<b>94,495 SF</b>	<b>1,109,514 SF</b>	<b>267,646 SF</b>	<b>1,951,381 SF</b>

\* Vacation of SE 2<sup>nd</sup> Avenue is in process, so there is not an R-number yet. It will be completed prior to approval of the CCMP. Please see Appendix H for details.

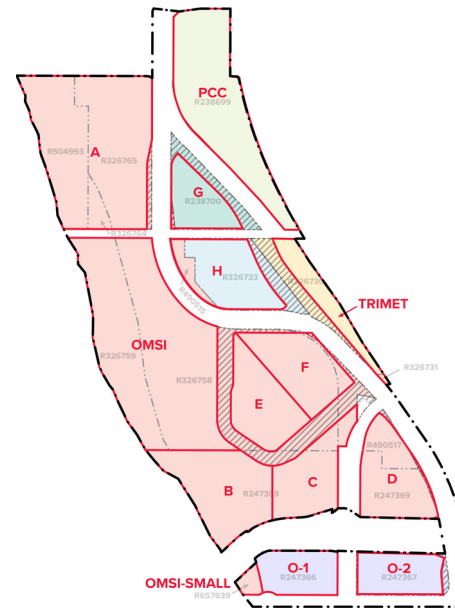
\*\* Exclusive of Rights of Way, City-owned properties, and Area Zoned Open Space

# Development + Land Uses

While new right-of-way dedications and the creation of legal lots are necessary for implementation of the OMSI master plan, these are subject to separate approval processes. The resulting minimum and maximum floor area ratio (FAR) allowances of these future legal lots will be consistent with the minimum and maximum gross square feet (GSF) allowances shown in the table at right. The resulting FARs will be calculated based on the ultimate site area for each tract, which may include area that is currently located in a right-of-way to be dedicated, or transferred from other tracts in the master plan area.

Each Land Use application for future buildings will include the total development GSF to be allocated to the applicable legal lot(s). A FAR tracking table will be included in each new land use application and will be recorded on the PortlandMaps website to tally the cumulative FAR earned and used within the plan area. The tracking table will include, at minimum: FAR contained in submitted and complete applications, FAR contained in approved applications, FAR contained in projects that have initiated building permits, FAR contained in projects with approved building permits, and constructed FAR.

## TRANSFERS: EXISTING TAX LOTS (R-LOT) TO DEVELOPMENT TRACTS



### Legend

- Master Plan Area
- Existing Property Boundary based on R-lot Division (portlandmaps.com)
- Proposed Tract Boundary
- OMSI-owned Property
- Trimet-owned Property
- 1800 WA-owned Property
- PGE-owned Property
- PCC-owned Property
- Opera-owned Property
- Public ROW to Proposed Tract
- Privately-owned to Public ROW

OWNERSHIP	R-LOT	GROSS SF OF LOT	to Tract A	to Tract B	to Tract C	to Tract D	to Tract E	to Tract F	to Tract G	to Tract H	to PCC	to O-1	to O-2	Retained on OMSI**	Retained on TriMet**	Estimated SF to ROW	
OMSI	R326765	107,158 SF	103,665 SF	0	0	0	0	0	0	0	0	0	0	0	0	3,493 SF	
	R326764	8,273 SF	8,273 SF	0	0	0	0	0	0	0	0	0	0	0	0	0	
	R504993	79,279 SF	79,279 SF	0	0	0	0	0	0	0	0	0	0	0	0	0	
	R326758	305,356 SF	0	0	5,845 SF	0	58,966 SF	54,838 SF	0	0	0	0	0	147,499 SF	0	38,208 SF	
	R326759	96,703 SF	0	0	0	0	0	0	0	0	0	0	0	96,703 SF	0	0	
	R247368	131,551 SF	0	84,016 SF	45,288 SF	0	0	0	0	0	0	0	0	0	0	2,247 SF	
	Vacated of SE 2 <sup>nd</sup> Pl.	18,826 SF	0	0	5,584 SF	0	0	4,889 SF	0	0	0	0	0	0	0	0	8,353 SF
	R490517	16,186 SF	0	0	0	15,366 SF	0	0	0	0	0	0	0	0	0	0	820 SF
	R247369	45,738 SF	0	0	0	45,738 SF	0	0	0	0	0	0	0	0	0	0	0
	R657639	8,543 SF	0	0	0	0	0	0	0	0	0	0	0	8,543 SF	0	0	
R490515	8,820 SF	0	0	0	0	0	0	0	8,820 SF	0	0	0	0	0	0		
1800 WA	R238700	51,401 SF	0	0	0	0	0	0	38,721 SF	0	0	0	0	0	0	12,680 SF	
PGE	R326733	67,587 SF	0	0	0	0	0	0	0	56,868 SF	0	0	0	0	0	10,719 SF	
PCC	R238699	125,453 SF	0	0	0	0	0	0	0	0	121,604 SF	0	0	0	0	3,849 SF	
OPERA	R247366	39,257 SF	0	0	0	0	0	0	0	0	0	39,257 SF	0	0	0	0	
	R247367	44,867 SF	0	0	0	0	0	0	0	0	0	0	42,681 SF	0	0	2,186 SF	
TRIMET	R326730	48,352 SF	0	0	0	0	0	0	0	0	0	0	0	0	30,626 SF	17,726 SF	
	R326731	659 SF	0	0	0	0	0	0	0	0	0	0	0	0	659 SF	0	
CITY	RIGHT-OF-WAY***	VARIABLES	0	0	0	2,511 SF	0	0	1,080 SF	1,760 SF	0	0	0	0	659 SF	0	
			<b>1,204,009 SF</b>	<b>191,217 SF</b>	<b>84,016 SF</b>	<b>63,615 SF</b>	<b>63,615 SF</b>	<b>58,966 SF</b>	<b>59,727 SF</b>	<b>39,801 SF</b>	<b>67,448 SF</b>	<b>121,604 SF</b>	<b>39,257 SF</b>	<b>42,681 SF</b>	<b>252,745 SF</b>	<b>31,285 SF</b>	<b>100,281 SF</b>

\* Vacation of SE 2<sup>nd</sup> Avenue is in process, so there is not an R-number yet. It will be completed prior to approval of the CCMP. Please see Appendix H for details.

\*\* OMSI museum and riverfront lots and TriMet lots have no new development planned.

\*\*\* Area of City Right-of-way is estimated.

# Development + Land Uses

## Future Uses

The CCMP plan area is planned for approximately 3.4 million square feet of new development.

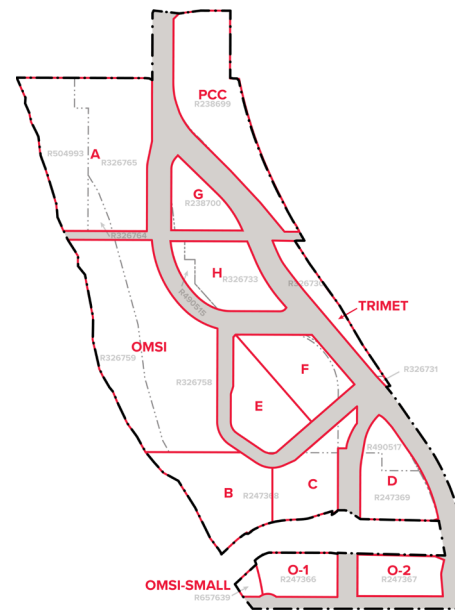
All three institutional partners, OMSI, PCC, and Portland Opera, intend to continue and expand their current programs within the plan area. Consistent with the underlying zoning, all the new development is intended to be mixed-use as outlined in the Proposed Uses table to the right, and will include institutional, commercial, retail, open space, and residential uses.

The Portland Opera is planning a performing arts center on its Opera 1 Tract, to be combined with other uses in support of its operations. Structured parking is planned to support the above uses, totaling up to 2,500 spaces.

The new development is not expected to significantly impact operation of the tracts in industrial use, due to the improvements in vehicular circulation through the OMSI District described on page 11, Vehicular Circulation, and page 12, Proposed Streets.

The range of gross square footages requested for each tract will allow development of a range of different future building sizes.

## DEVELOPMENT TRACTS



### Legend

- Master Plan Area
- - - Existing Property Boundary based on R-lot Division (portlandmaps.com)
- Proposed Tract Boundary
- Proposed ROW area

## PROPOSED NEW DEVELOPMENT RANGES

OWNERSHIP	DEVELOPMENT TRACT*	TRACT AREA	MINIMUM GSF**	MAXIMUM GSF**
OMSI	A	191,217 SF	39,000 GSF	85,000 GSF
	B	84,016 SF	0	0
	C	56,717 SF	113,434 GSF	169,500 GSF
	D	63,615 SF	123,434 GSF	796,250 GSF
	E	58,966 SF	117,934 GSF	672,750 GSF
	F	59,727 SF	122,462 GSF	629,850 GSF
	OMSI	239,649 SF	0	0
	OMSI-SMALL	6,340 SF	0	0
1800 WA	G	39,801 SF	79,602 GSF	315,250 GSF
PGE	H	67,448 SF	134,896 GSF	810,550 GSF
PCC	PCC	121,604 SF	243,208 GSF	422,484 GSF
OPERA	O-1	39,249 SF	78,498 GSF	188,500 GSF
	O-2	42,671 SF	85,342 GSF	282,263 GSF
TRIMET	TRIMET Lots	31,285 SF	N/A	N/A
		<b>1,101,305 SF</b>	<b>1,138,596 GSF</b>	<b>4,372,396 GSF</b>

Total site-wide development may not exceed **4,372,396 GSF**

\* Tract area reflects the maximum building coverage areas indicated on page 27.

\*\* The minimum and maximum values can vary +/- 15% without triggering a master plan amendment.

## PROPOSED USES

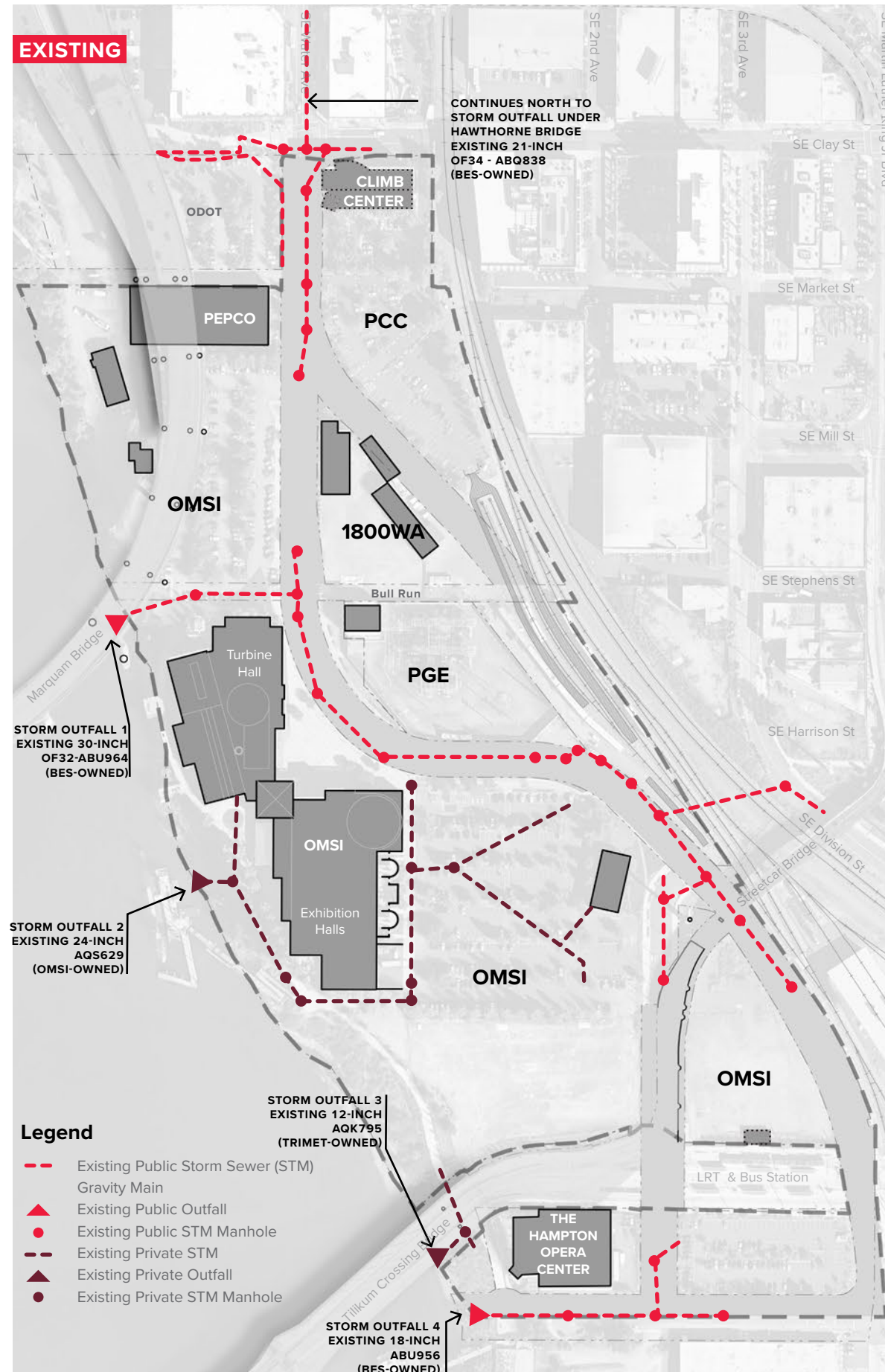
DEVELOPMENT TRACT	PRIMARY USE
A	MIXED-USE
B	OPEN SPACE
C	MIXED-USE INCL. RESIDENTIAL
D	MIXED-USE INCL. RESIDENTIAL
E	MIXED-USE INCL. RESIDENTIAL
F	MIXED-USE INCL. RESIDENTIAL
G	MIXED-USE INCL. RESIDENTIAL
H	MIXED-USE INCL. RESIDENTIAL
PCC	MIXED-USE INCL. RESIDENTIAL
O-1	MIXED-USE (PERFORMING ARTS CENTER LIKELY)
O-2	MIXED-USE INCL. RESIDENTIAL



# Infrastructure

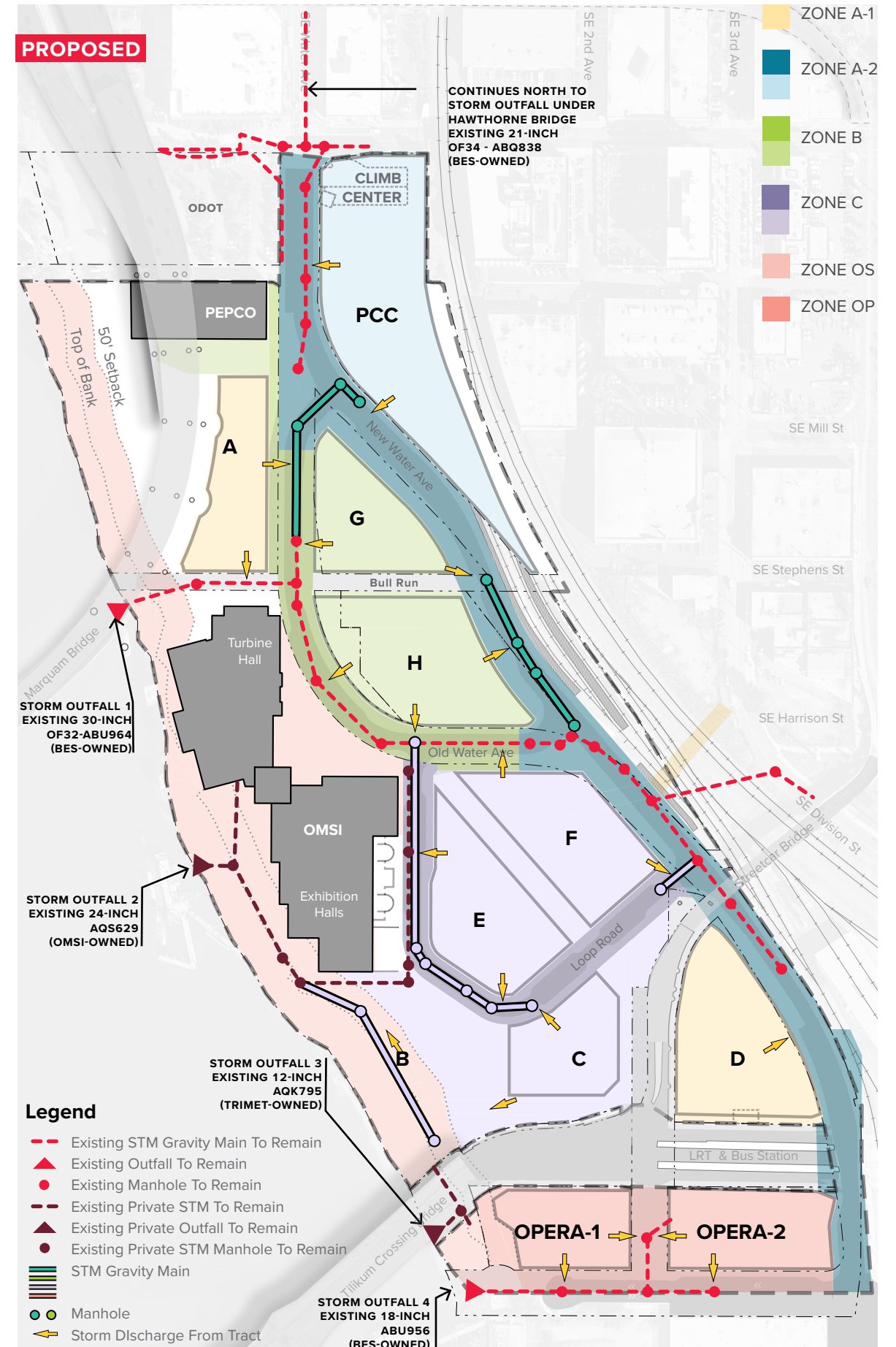
## Stormwater

- Existing public storm system along Old Water Avenue and in SE Caruthers Street to remain.
- New storm mains will be constructed along new roadways to collect and direct drainage to public outfalls.
- Phased development requires some cut & patch trenching in roadways that will be reconstructed with subsequent infrastructure zone.
- Runoff from the new plaza at Tract B will be directed to OMSI's private outfall.
- Runoff from public roadways will be treated in the right-of-way.
- Runoff from private parcels will be managed onsite prior to discharge to the public storm main.
- Potential storm discharge locations from each tract indicated with arrows on exhibit.
- Refer to Appendix E-6 for an illustration of the Zone A-1 storm improvements.



### Legend

- Existing Public Storm Sewer (STM) Gravity Main
- ▲ Existing Public Outfall
- Existing Public STM Manhole
- Existing Private STM
- ▲ Existing Private Outfall
- Existing Private STM Manhole



### Legend

- Existing STM Gravity Main To Remain
- ▲ Existing Outfall To Remain
- Existing Manhole To Remain
- Existing Private STM To Remain
- ▲ Existing Private Outfall To Remain
- Existing Private STM Manhole To Remain
- STM Gravity Main
- Manhole
- ▶ Storm Discharge From Tract

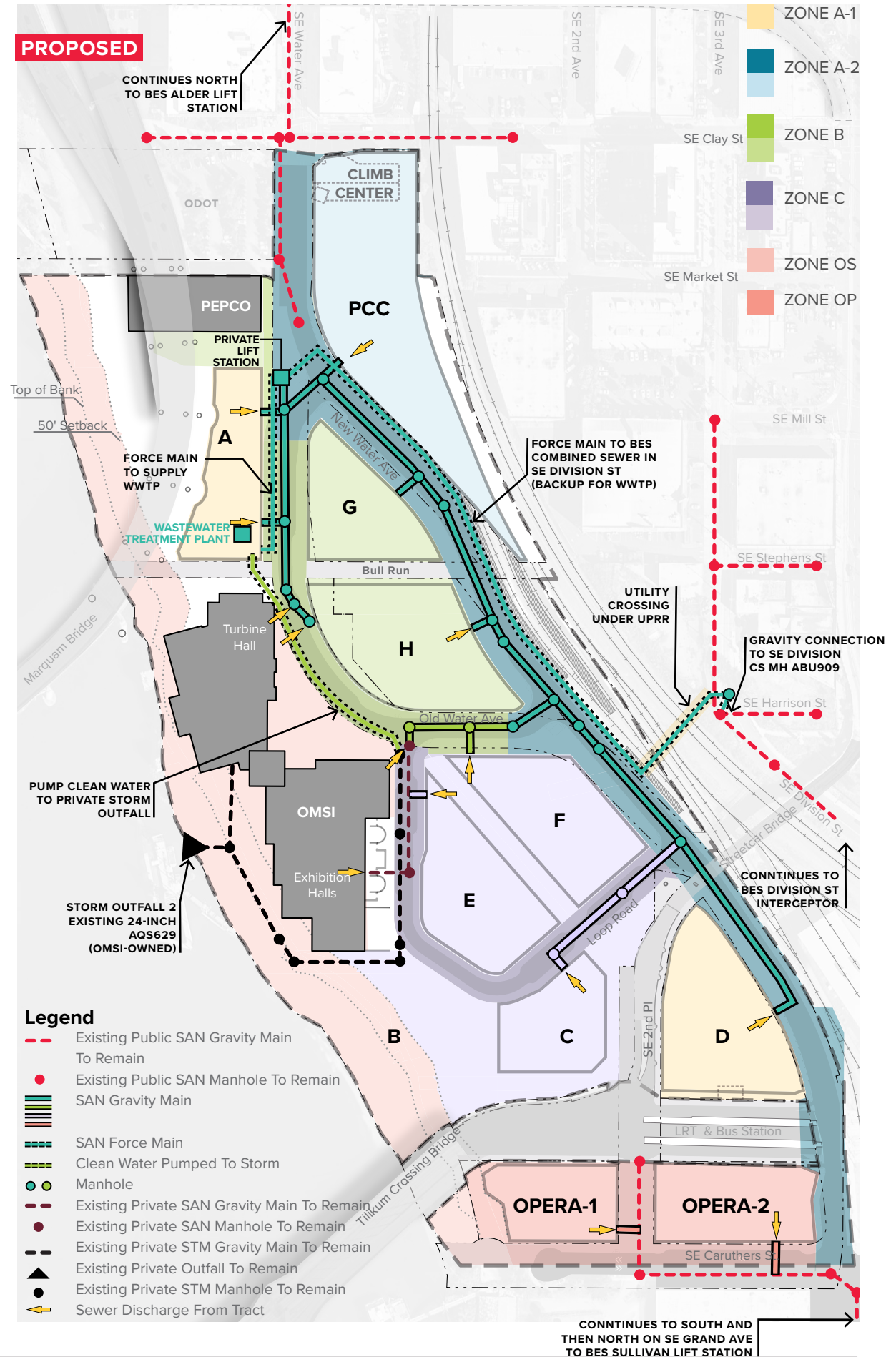
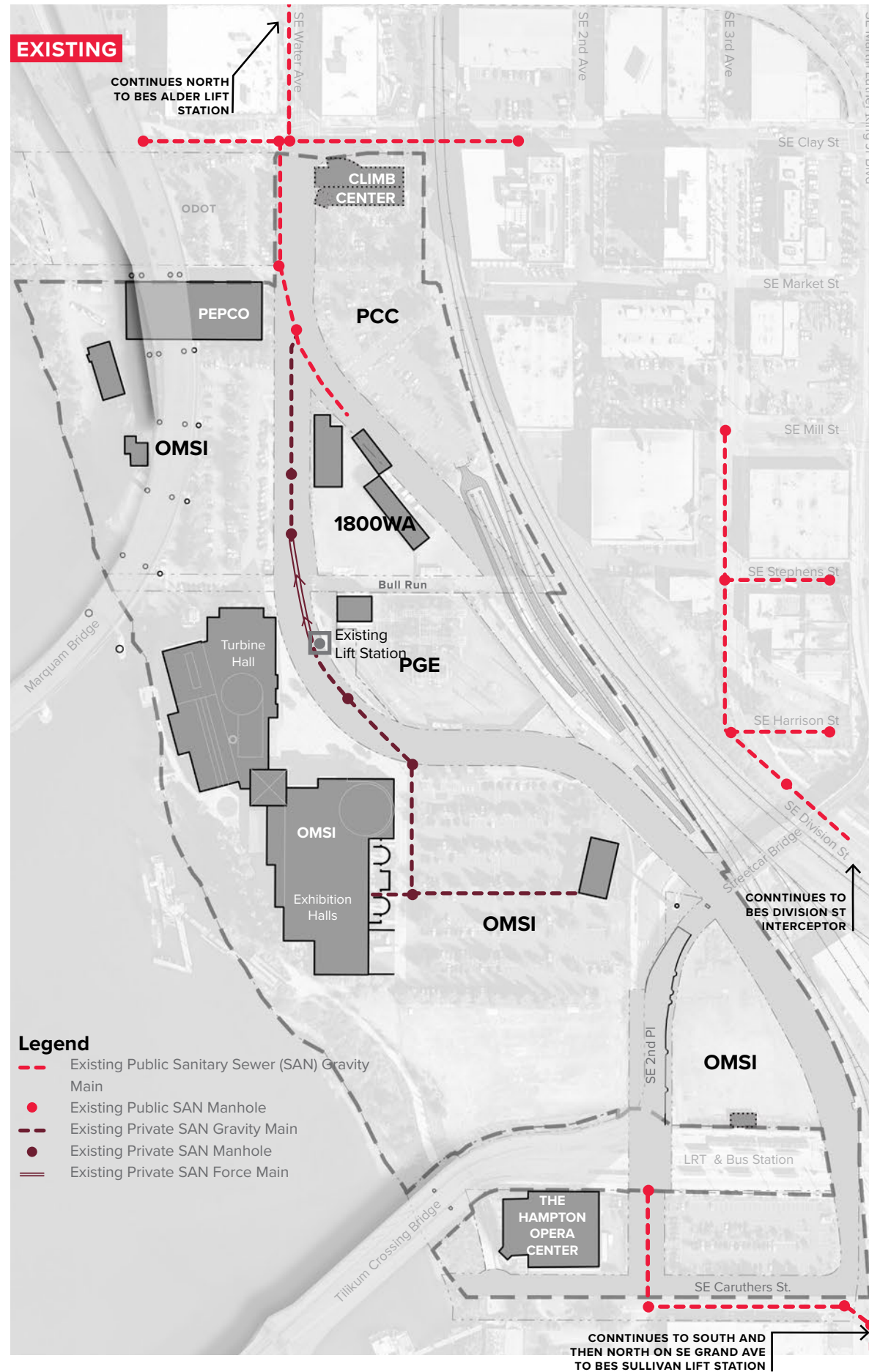
\*See Public Works Drawing For Complete Conceptual Design Implementation



# Infrastructure

## Sanitary Sewer

- Existing public sewer does not extend far enough or have adequate capacity to serve the entire district.
- New private sanitary mains will be constructed along roadways to serve development throughout the district.
- New service connections to private sanitary sewer main graphically indicated with laterals.
- A private WWTP and lift station will be constructed at the north end of the district in Tract A. The lift station will have two sets of pumps. One will send collected sewage in a force main under Old Water Avenue to the WWTP and the second will be pumped in a force main along New Water Avenue before crossing under the UPRR right-of-way to the public sewer main in SE Division Street.
- The existing OMSI service laterals will be incrementally transferred to the new private sanitary sewer main. The existing lift station serving OMSI can be decommissioned once the Zone A-2 improvements are complete and the new private lift station is operational.
- There will be a period of time after the completion of Zone A-2 improvements that sanitary sewer flows from the early development parcels will be pumped to the public sewer main in SE Division Street until the WWTP is fully operational with a clean water discharge line constructed as part of the Zone B improvements.
- Once the WWTP is fully operational, the second force main under New Water Avenue will only serve as a backup connection for the WWTP.
- The Portland Opera redevelopment will utilize existing public sewer in SE Caruthers Street.
- Refer to Appendix E-6 for an illustration of the Zone A-1 sanitary improvements.



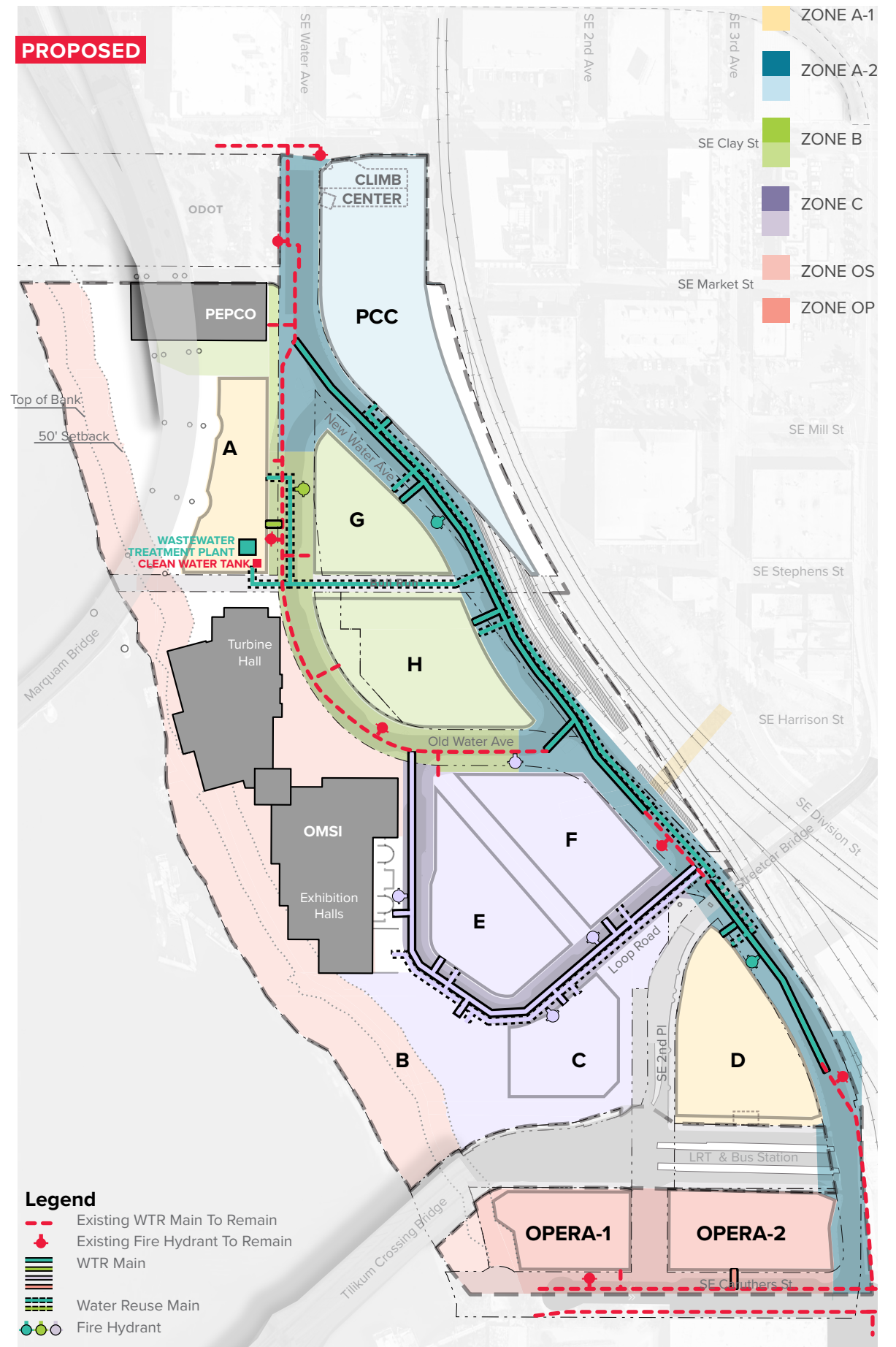
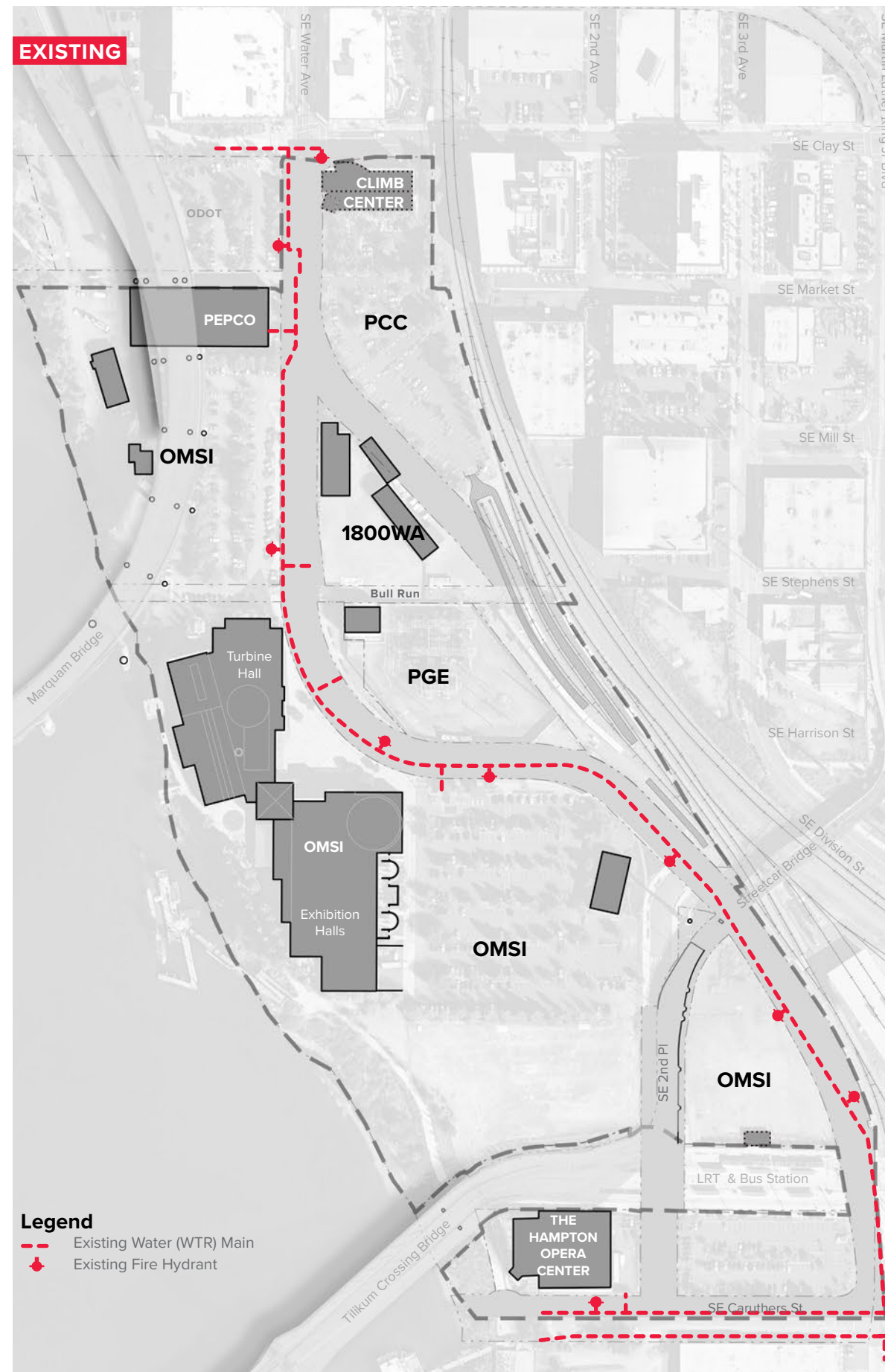
\*See Public Works Drawing For Complete Conceptual Design Implementation



# Infrastructure

## Water

- A majority of the existing 12" public water main in SE Water Avenue and existing mains in SE Caruthers Street to remain.
- New water mains shall be constructed along new roadways to serve development throughout the district.
- A separate graywater distribution main supplied by the WWTP will be extended to a portion of the district to serve non-potable demands.
- Fire hydrants will be added to provide fire safety.
- New service connections to domestic water and graywater mains graphically indicated with laterals.
- Refer to Appendix E-6 for an illustration of the Zone A-1 water improvements.



\*See Public Works Drawing For Complete Conceptual Design Implementation







# 4 Supportive Material



An artistic representation showing the development potential for the OMSI District master plan area. The Central Eastside is beyond.

# Master Plan Illustrative

At right is an illustration of one scenario of how the CCMP framework might be developed in the future. The improvements illustrated along the waterfront are conceptual only, as are the building footprints. However, the rights-of-way illustrated reflect the proposals in the conceptual public works plans.



# Open Space Network

The programming of open space is important in establishing the appropriate sizes and adjacencies within the plan area. The open spaces in this CCMP are intended to support a broad array of outdoor uses. The plan to the right lists some of the possible outdoor opportunities in support of this vibrant waterfront location.

A number of locations around and near OMSI can provide outdoor educational opportunities for children to play and learn, flexible spaces for events and gathering, public art exhibits, and interpretive and demonstration opportunities. The Central Spine links and strengthens the connections from Portland Opera and the OMSI Station transit hub north through the plan area to PCC, and into the Central Eastside. This linear open space can provide opportunities for seating, outdoor cafes, and small multi-purpose nodes in an activated pedestrian environment.

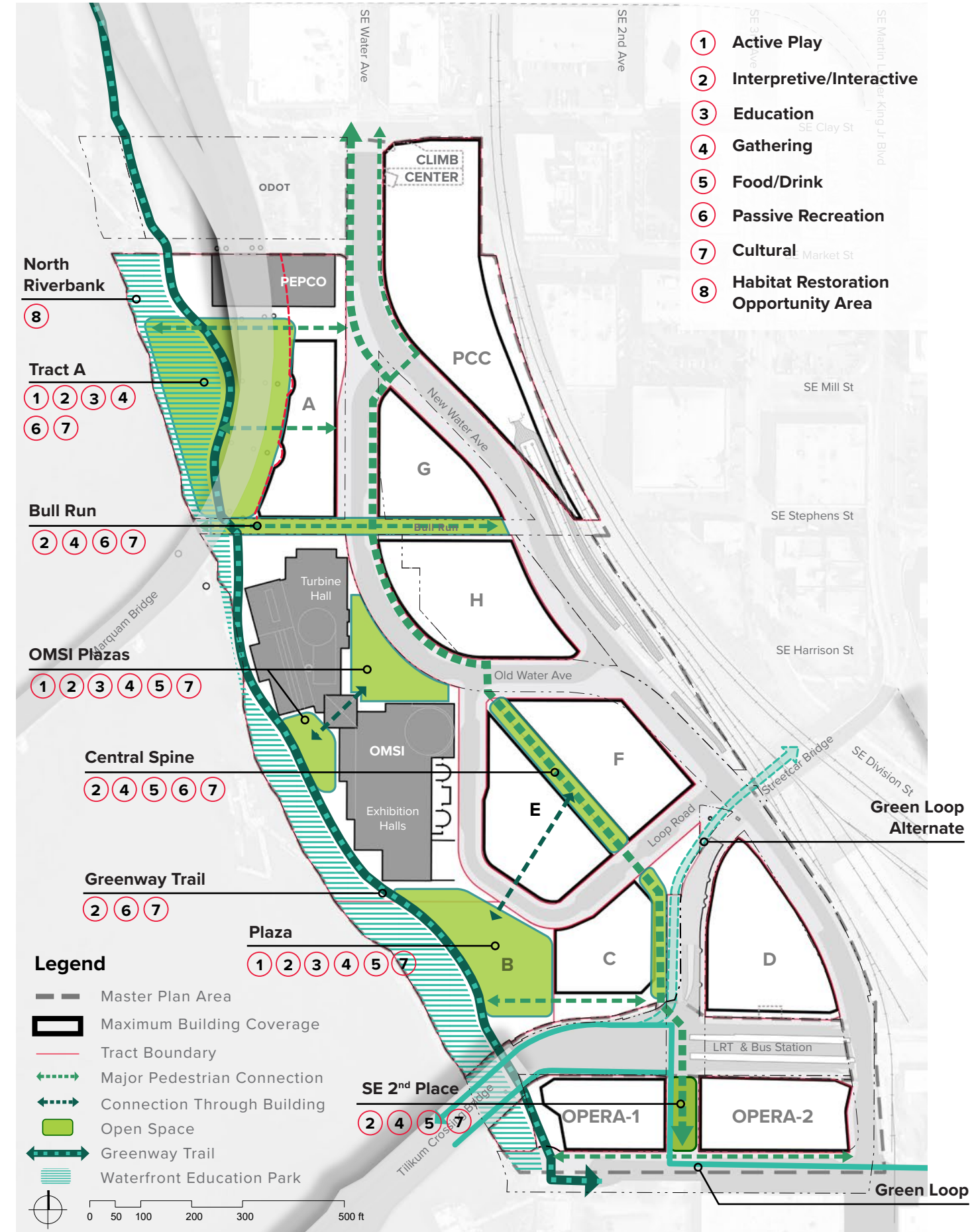
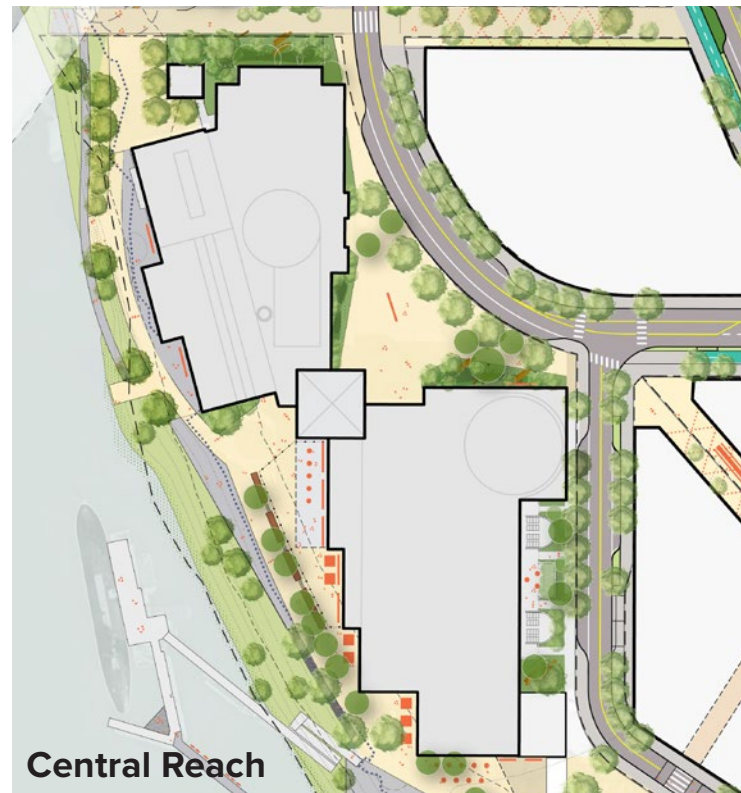
Given the location along the river, it is essential to connect the open space network along and to this incredible amenity. The major open spaces are organized along the river as the north reach (Tract A), OMSI plazas, and the south plaza spaces. The other smaller open spaces in the plan area are linked by the Central Pedestrian Spine and additional connections through buildings and major east-west axes. These are intended to interconnect the various spaces in this diverse plan area and provide recreational and interpretive value, while embracing the educational and cultural opportunities that will be programmed by OMSI and the waterfront education park. The riverfront is the most important natural feature in this plan area to be embraced, restored, and activated.

Examples of these features include:

**Active Education and Play:** interactive water feature, natural materials for climbing, learning landscapes for research and discovery, covered area for outdoor classroom.

**Interactive/Interpretive:** temporary and permanent interactive exhibits, sculptural elements integrating science/technology/art, upland and river habitat ecosystems information.

**Cultural:** outdoor performance and gathering spaces of various sizes and locations, diverse artwork/sculpture creations, food vendors and market-place celebrations.



# Open Space Character

## South OMSI Reach

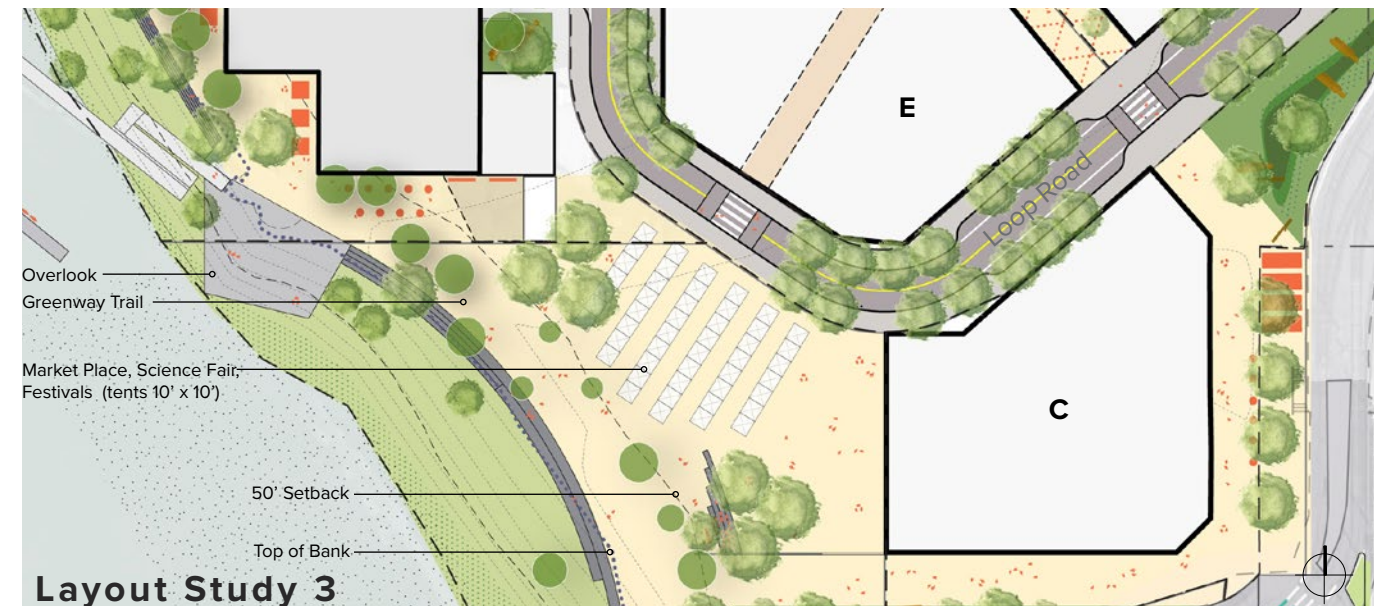
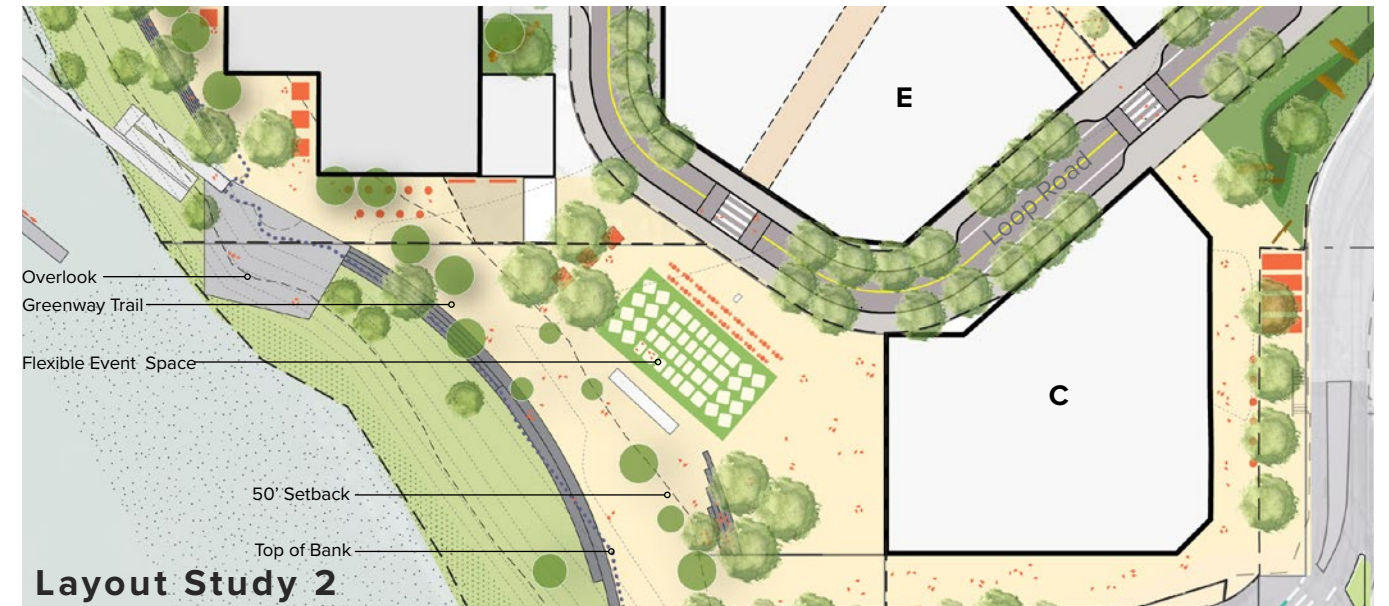
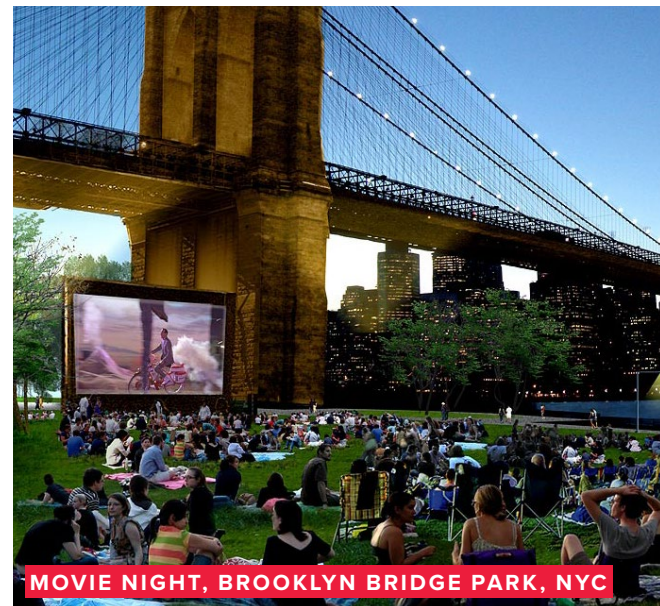
### Active Urban Waterfront

OMSI's vision is to create a series of vibrant, inviting plazas and urban spaces that host events, interpretive displays, public art, play opportunities and outdoor classrooms. Plazas will become multi-use flexible gathering places for programming events so that educational content can be exported outside the museum walls.

A key master plan feature is a flexible, programmable plaza south of the OMSI building and framed with new multi-story development with active ground floors and podiums. As part of the pedestrian zone of the campus, the plaza will host music, performances, market-place activities, and festivals. Examples are the Portland Winter Light Festival and the annual Makers Fair. Tented evening events, such as the OMSI Gala, will be relocated here.

Day-to-day opportunities include water play, outdoor classrooms, eating, and other types of informal gatherings. The open plaza adjacent to the greenway trail provides expansive river and Tilikum Crossing Bridge views. The greenway trail portion will have speed-calming design elements as it passes along the western edge of the plaza.

At the southwest corner of the plaza, an overlook is proposed to be expanded. This area links to the gangways and boat docks that will be used for Jet Boats, submarine tours, and an expanded programming dock for river discovery and water-related science experiment and measurement areas.



# Open Space Character

## Central OMSI Reach

River trail connections, plazas, outdoor classrooms, and event venues

The Central Reach is in a narrow part of the waterfront between the existing museum and top of the riverbank. OMSI's entry plaza on the east and west of the building flank the museum's pass-through lobby. Special events, celebrations, public art, and displays will be located in these spaces. Three semi-private covered spaces next to the building can be programmed as outdoor classrooms, nature play, gathering areas for day camps and cultural events, and "pop-up" play and display spaces. The existing Theory Eatery at OMSI will retain its outdoor terrace for dining.

Three overlooks (two existing) will enable people to engage more strongly with the river. The spaces that project out from the top of bank will be linked with an elevated pedestrian walkway constructed on a small viaduct. Interpretive materials, maps, and other artistic expressions may be integrated into the walkway and overlooks.

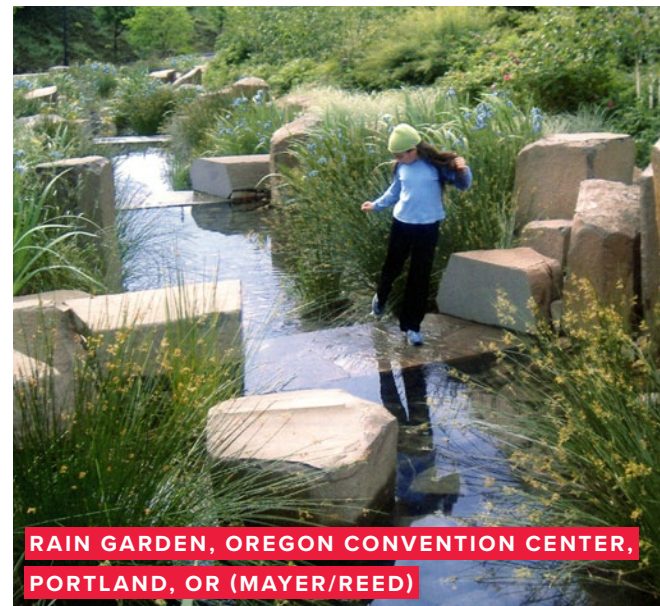
The greenway trail functions as a promenade and courteous, slow-speed cyclist connection through the Central Reach of the OMSI property. As a spine that connects the activities, overlooks, and use and/or event areas, it's critical that the trail transitions to a special safety zone where all modes can respectfully co-exist.



**CULTURAL CELEBRATION,  
OREGON CONVENTION CENTER, PORTLAND, OR**



**OUTDOOR EDUCATION,  
NEMO SCIENCE MUSEUM, AMSTERDAM**



**RAIN GARDEN, OREGON CONVENTION CENTER,  
PORTLAND, OR (MAYER/REED)**



# Open Space Character

## North OMSI Reach

Passive recreation, ecological restoration, and learning landscape

This Reach of the riverfront has an emphasis on passive uses and people within nature. This is a part of the site where humans' role in river health and stewardship of the environment will be explored and exemplified. An elevated walkway perpendicular to the greenway trail is proposed to provide an outlook over the river for a visual and sensory connection to the dynamic changes in the water without disturbing the native habitat below.

This area of the district can host nature play, outdoor educational spaces, and experimentation. Outside the Turbine Hall, an outdoor classroom will provide places for day camps and small-scale activities to take place.

OMSI's bioswales are known to be the birthplace of the green infrastructure movement that has spread across the country. Portions of the upland may be used for stormwater collection, treatment and demonstration rain gardens. These green spaces will support a variety of vegetation typologies and examples of Native American first foods. The landscape will extend from the river's edge into the uplands of the district.

Walking and appropriate use by slow-moving cyclists will be encouraged along the greenway trail that passes through this part of the site.

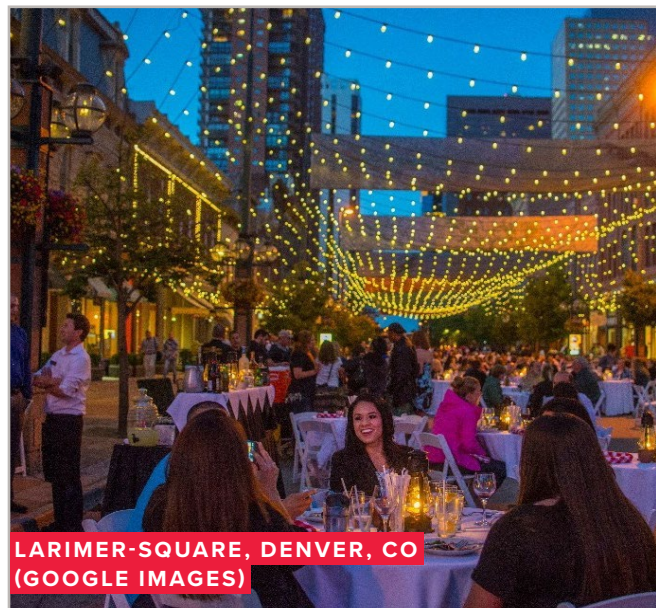


# Open Space Character

## Central Pedestrian Spine

Connectivity, Community, and Exploration

The Central Pedestrian Spine will link Portland Opera and OMSI Station with the heart of the OMSI District, PCC, and points north in the Central Eastside. The Central Spine will be at least 40 feet wide where it runs between buildings, and at least 15 feet wide along Old Water Avenue. Buildings along the Spine will address it with ground-floor active uses and upper-floor setbacks to enhance solar access. Residents, workers, and visitors to the district can comfortably walk to their destinations, exercise, or indulge in “la passeggiata” – the Italian art of the stroll for its own sake. There will be opportunities for interpretive or interactive exhibits, wayfinding, public art, small gathering spaces, food and drink, and cultural expression, in addition to passive recreation.





# Ecological Network

A holistic and cumulative approach to promote healthy active living through landscape and habitat restoration, tree preservation and enhancement, water conservation and river health awareness, and green buildings that form a district of discovery like no other in the city.

The OMSI District will demonstrate sustainability and a unique Pacific Northwest identity. It has ample opportunities to demonstrate scientific concepts within the urban context, becoming a remarkable ecological model for new and existing developments along the Willamette River. The fluid nature of the proposed streets and development blocks are informed by the existing riverbank, bluff, railroad, and the existing OMSI building. Departing from inner Portland's rigid 200' x 200' block layout, this district will be unlike any other in the city. In addition to the episodic riverfront, the upland tracts will have diverse shapes and landscape fragments that combine intriguing, informal pedestrian spaces to explore interspersed with pockets of rich, restorative landscapes that lend ecological value.

Connectivity of land and water will be evident in the landscape. Green spaces and vegetated areas that extend from the banks of the river into the upland will yield shade and wildlife habitat throughout the district. The understory vegetation, largely composed of a wide variety of native and adapted plants, will offer shade, food sources, and cover for a variety of birds and insects that feed the ecological food chain from uplands down to the Willamette greenway trail and water's edge.

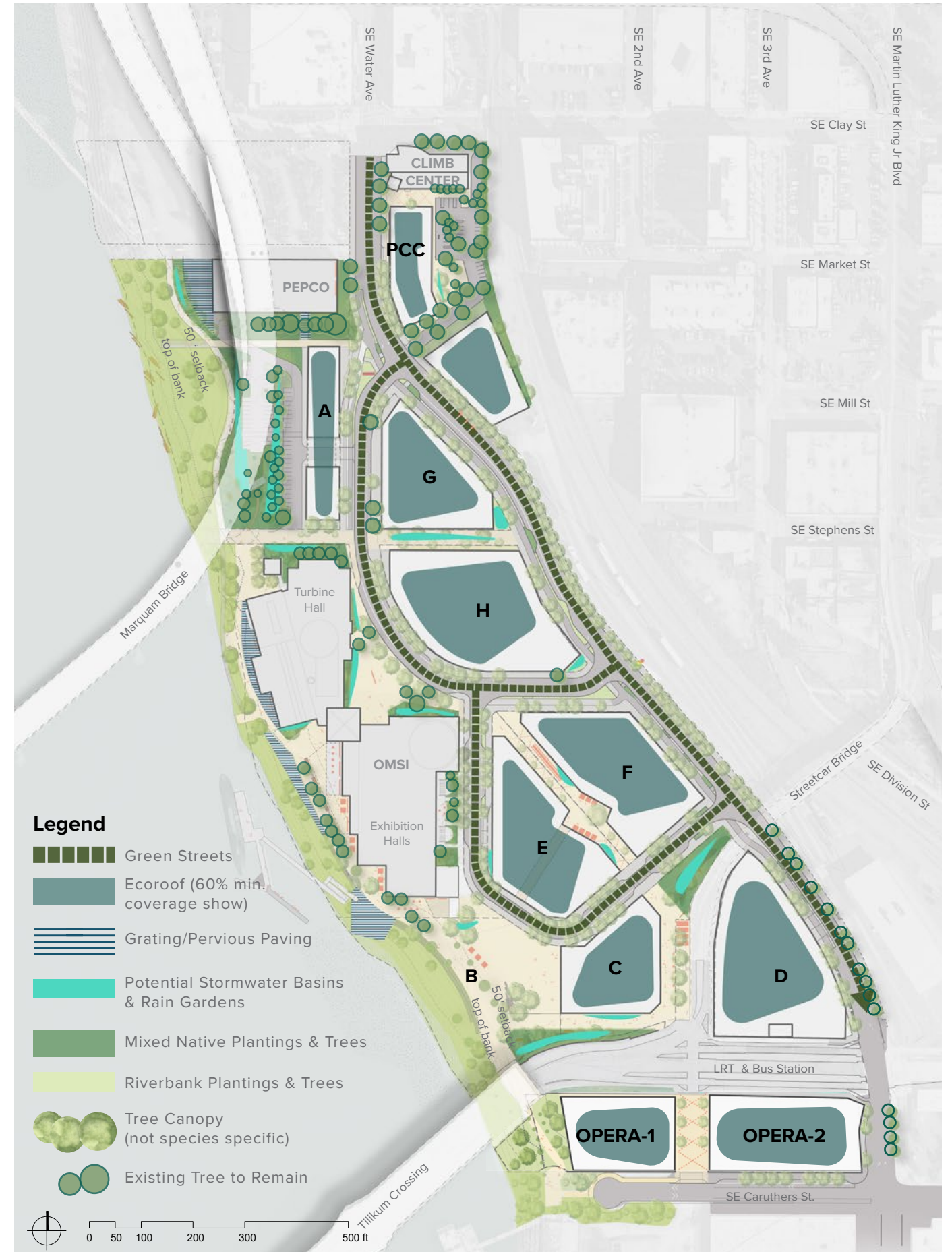
This ecological transect will be demonstrated through a variety of spaces and treatments. These components include riverbank restoration, upland plantings, and selective tree protection. Other contributing elements include street trees with a diversity of species and canopy sizes. This variety of trees will be a departure from the strict geometry of a monoculture lining the streets and pedestrian zones.

Portions of open spaces next to the two existing bridge abutments will yield opportunities for larger areas of plantings.

OMSI is the nationally recognized landmark site where the concepts of green infrastructure originated. Taking these early bioswales forward to today's regulatory environment and technologies, vegetated stormwater treatment systems will lace the district together while connecting to existing outflows at the river.

Within the open spaces, planted areas will become the fabric from which buildings emerge. The development tracts and buildings will offer landscape treatments at both ground and upper levels. While the CCMP allows flexibility for where buildings will be developed within the tracts, there will be small plazas, building entries, corners, and acutely shaped spaces that add to the on-grade opportunities for planting. More plantings will be incorporated in the amenity areas on the upper levels and podiums of buildings. In addition, 60% of the roof treatments will be intensive or extensive green roofs that provide shade and vegetated habitat on the buildings themselves (see PZC 33.510.243 Ecoroofs and Portland Ecoroof Guide).

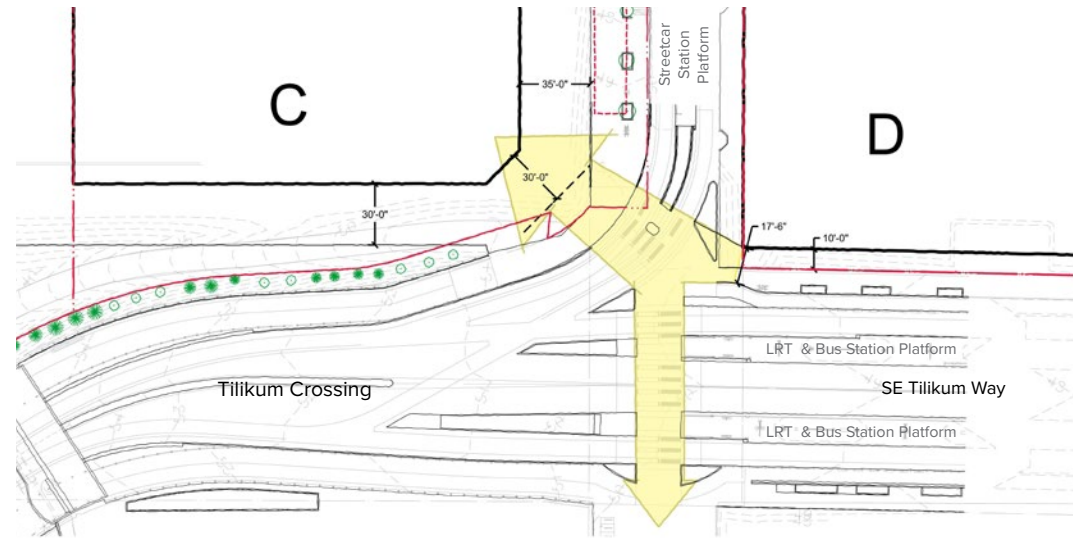
Overall, these many components of vegetation will result in collective benefits of a connected ecological network throughout the OMSI District, reinforcing the campus as a special place of science, sustainability, learning, and livability.



Tree Density will meet or exceed the requirements of 33.510.255.K.3.c

# Special Urban Design Considerations

## Tracts C and D: Gateway and Access



Access into the OMSI District from the transit station should be clearly defined in both the ground plane design and massing articulation. The sidewalk along Tract D has been widened by 10 feet to accommodate more pedestrian activity and open the view and access into the district to the north. The corner of Tract C has been chamfered to allow the building façade to respond to the pedestrian access point. Thirty feet along the south side and 50 feet on the east side of Tract C have been allocated for the public realm.



A view of the streetcar bridge, crossing the OMSI Station looking north into the district. Access into the district is between Tract C and the streetcar bridge, and down to the river to the left.

## Gateways

Buildings should respond to the public realm and integrate architectural features to create an urban form that will produce the perception of arrival or departure when passing through that location. The Streetcar Building in the Portland Pearl District features a large sign on a chamfered corner as you approach the district from the Broadway Bridge.



## Public Art

OMSI currently has public art around its buildings, and providing public art that reflects the aesthetics and themes created throughout the new master plan area is supported by all partners involved. Public art can be used for wayfinding, can be science-related and interactive, and can be representative of the identity of the district, its tribal heritage, and its connection to the river.

Public art can reinforce the Central Pedestrian Spine, recall the historic experiences of the district, and link to the transit center and to OMSI. SE 2<sup>nd</sup> Place would be a good site for an art piece related to the Portland Opera and performing arts.



# Special Urban Design Considerations

## Streetcar Bridge Abutment

An area needing additional design consideration is the streetcar bridge abutment. Existing conditions photo below. This large blank concrete wall should be integrated into the public realm design along the Central Pedestrian Spine and the Loop Road.

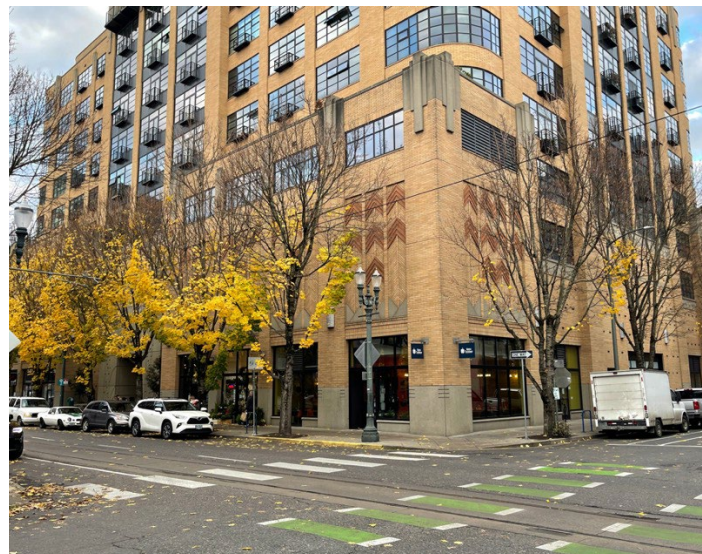
This area could have integrated seating, a mural, a green wall, or other artistic elements that minimize the visual impact of the wall.



## Above Grade Parking

Since the plan area has challenging subgrade conditions, above grade parking is most feasible for the majority of the tracts. This would occur on the second floors (and above) of the buildings and should be architecturally integrated into their façades. It is intended that above-grade parking will not be perceived by pedestrians.

The parking garage shown to the right is the Museum Garage in Miami, FL; it is an artistic and sculptural application to a parking structure. Alternatively, the photo to the far right is of the Gregory Building in the Portland Pearl District. This has structured parking on the second and third floors, while the ground floor is enhanced with active uses. The parking is hidden behind a brick façade that integrates into the overall building design.



## Opera-1

The new building on Opera-1 is envisioned to be a landmark building. The CCMP has provided ultimate flexibility in this tract to enable the future design vision to be mostly unhindered.

Examples below include the Institute of Contemporary Art in Boston, the Rose Wagner Performing Arts Center in Salt Lake City, and the Oslo Opera House in Oslo, Norway.



# 5 Approval Criteria

## Overview

Individual responses demonstrating how the 2021 OMSI Central City Master Plan meets the criteria of the relevant codes, subdistrict goals, and policies.

This 2021 OMSI CCMP is consistent with the applicable approval criteria listed below. This section lists criteria of the Central City Master Plan zoning code, the relevant subdistrict goals and policies, and an explanation as to how the 2021 OMSI CCMP corresponds to each. The OMSI CCMP responds to the four groups of criteria below:

- CC2035** Central City 2035 Plan Central Eastside District Policies
- CCFDG** Central City Fundamental Design Guidelines
- CEDG** Central Eastside Design Guidelines
- CCMP** Title 33.510.255.H

Responses are organized into these categories for clarity and to show how subject matter in the four plans listed above overlap.

1. LOCAL AND REGIONAL
2. HOUSING AND NEIGHBORHOODS
3. TRANSPORTATION
4. HEALTH AND ENVIRONMENT
5. URBAN DESIGN



The new OMSI District Central Pedestrian Spine, near Tract C looking north across the Loop Road.

# 1. Local and Regional

## CC2035 GOAL 1: REGIONAL CENTER, CENTRAL EASTSIDE POLICIES

**CE-1a Industrial Center:** Protect the Central Eastside as a centralized hub of industrial businesses and services that support the regional economy by serving other industrial districts and businesses located throughout the Portland metropolitan area.

**CE-1b Industrial Diversification:** Support growth of new industrial sectors, protect existing sectors, and protect the Central Eastside as a place where startups and incubators can transition to mature and established businesses and sectors.

**CE-3b Southern Triangle: OMSI Station Area:** Create a major and active riverfront station area that includes land- and water-based transportation, as well as educational and recreational opportunities. Promote visitor-service attractions, amenities, and retail, as well as a mix of high-density commercial office, institutional and industrial employment uses.

**CE-4 Workforce Development Institutions:** Support institutions such as Benson High School, Portland Community College's CLIMB Center, OMSI, and others in their unique roles associated with workforce development through programs and partnerships that prepare Portlanders at different education and skill levels for employment in Central Eastside industries.

**CE-5 Tourism, Retail and Entertainment:** Support river and riverfront uses and activities along the Eastbank Esplanade and near OMSI including active and passive recreation, ecological and maritime tourism, retail kiosks, restaurants and river transportation.

**A2-1** Recognize Transportation Modes, Produce, and Commerce as Primary Themes of East Portland

**H.4** The proposed uses will not have significant adverse effects on industrial firms or result in conflicts with industrial activities located within the plan boundary or within 500 feet of the plan boundary.

## CEDG

## CCMP

## RESPONSE

### CC2035

#### Goal 1 Regional Center, Central Eastside Policies

**CE-1a Industrial Center:** The OMSI CCMP will protect the important freight connection between the Central Eastside and access routes to Highway 99 and Interstate 5 (via the Ross Island Bridge) by creating New Water Avenue, a new freight corridor that bypasses the heart of the new development, and is proposed to carry the Priority Truck Street designation. The New Water Avenue alignment provides more efficient passage for large vehicles in the form of regularized and widened travel lanes. It establishes signalized protected crossings that improve safety for all modes and moves the truck through-traffic away from OMSI's student loading and unloading zones (see Vehicular Circulation, p. 11). A new two-way cycle track along New Water Avenue (see Pedestrian and Bicycle Circulation, p. 17), linking to the Major City Bikeway on the Tilikum Crossing Bridge and connecting the Eastbank Esplanade with the Springwater Corridor, will provide convenient alternative modes for commuters heading to or through the OMSI District from all directions.

Under PZC 33.510.252, certain uses in the Central Eastside will also, in compliance with the code, execute an Industrial Impacts Disclosure Statement and adhere to the Noise Insulation standards, ensuring protection of the industrial businesses and services in the Central Eastside.

**CE-1b Industrial Diversification:** The OMSI District will support the growth and establishment of new industrial sectors by providing a dense new commercial and institutional center surrounding a major transit hub and be supported by a robust bicycle and pedestrian network. A series of mixed-use buildings will provide both residential and commercial capacity into which startups and incubators can emerge and thrive, while the hierarchy of street types with on-street loading zones and wide sidewalks will support maker spaces and craft industrial operations. Existing sectors in the Central Eastside will benefit from the economic activity and from utilizing the regularized and safely designed New Water Avenue through street to connect to their market destinations and suppliers.

The district also contributes to the broader Innovation Quadrant, connecting emerging startup and incubator spaces in the Central Eastside to those in the South Waterfront near OHSU and providing close-in residential opportunities for the Innovation Quadrant workforce.

**CE-3b Southern Triangle:** Fundamentally, development of the OMSI District will convert surface parking into

mixed-use development surrounding three regionally significant, but relatively isolated, destinations: OMSI, Portland Opera, and PCC's CLIMB Center. The CCMP anticipates approximately 3.4 million GSF of mixed commercial, institutional, residential, and retail uses, which will complement these existing visitor-service attractions and educational institutions with retail, amenities, commercial office, and residential uses.

**CE-4 Workforce Development Institutions:** Providing for redevelopment of surface parking at OMSI and the PCC CLIMB Center will support the financial health of these institutions by maximizing the value of their real estate assets, and also by providing space for the growth of their own programs and partnerships. The OMSI District will support the workforce development activities of the PCC CLIMB Center and OMSI by providing capacity for new educational and institutional growth, increased access to a variety of multimodal transportation options, and an amenity-rich neighborhood that students will find attractive. The district surrounds the OMSI Station light rail and streetcar hub that will soon be joined by TriMet's Division Transit Project, which will provide high-capacity bus service to create a regional educational corridor linking Innovation Quadrant institutions such as PSU, OHSU, and the PCC CLIMB Center with PCC's SE Campus and Mount Hood Community College.

**CE-5 Tourism, Retail, and Entertainment:** The proposed waterfront education park will provide active and passive recreation opportunities in the form of an enhanced greenway trail and five scenic overlooks. The proposed park also includes the South Plaza, the largest gathering area on the east banks of the Willamette, a habitat restoration opportunity on the southern half of the Eastbank Crescent site, outdoor education spaces, and a variety of interpretive and cultural uses (see Open Space Network, p. 19). Ecological and maritime tourism, retail, and restaurant patronage opportunities can all be enhanced by this proposal. Redesign of the greenway trail is expected to improve safe visitor access to OMSI's existing submarine exhibit. The Portland Opera Association is planning a major community performing arts center on the only riverfront lot in the plan area boundary, an attraction of regional significance. Interior portions of the OMSI District will be connected to the waterfront via seven east-west connections that knit together the interior of the district to the river.

### CEDG

**A2-1:** The shape and layout of the OMSI District were formed by the two most important transportation modes that formed the Central Eastside: the river, which predates European colonization, and the railroad. The heavy rail tracks that form the eastern boundary of the new district are a rough offset of the riverbank. The alignment of the proposed New Water Avenue will repeat this form and funnel traffic alongside the Oregon Rail Heritage Center. East-west passages will link the major freight street, New Water Avenue, with the transportation corridor directly along the waterfront and the greenway trail. A new plaza will provide a public gathering space with prominent views of Portland's multi-modal, car-free Tilikum Crossing Bridge. The CCMP plan area surrounds a major transportation hub, OMSI Station, fulfilling the original vision of the station as the center of a dense mixed-use neighborhood on the east bank of the Willamette River. In this manner, the new district is a literal reflection of this primary theme.

### CCMP

**H.4:** The proposed uses will not have significant adverse effects on industrial firms or result in conflicts with industrial activities located within the plan boundary or within 500 feet of the plan boundary.

There are no existing industrial firms or activities within the CCMP boundary. Within 500 feet of the plan boundary, there are currently nineteen tracts in industrial use (see Development + Land Uses, p. 34), of which nine are severed from the OMSI District by the heavy rail tracks, the Highway 99 viaduct, and an embankment, a significant geographical distance. The increased density is not expected to significantly impact any of the nineteen industrial tracts due to the improvements in vehicular connections and the separation of pedestrian and bicycle modes of transportation: pedestrians onto Old Water Avenue and bicycles onto the protected two-way cycle track. In addition, signalization of the intersections on New Water Avenue, the Priority Truck Street, will be optimized for through traffic. Future residential buildings are likely to be oriented toward the river, so that the remaining industrial uses with 500 feet of the plan area boundary will not be front and center for residents.

Under PZC 33.510.252, residential uses in the Central Eastside will also, in compliance with the code, execute an Industrial Impacts Disclosure Statement and adhere to the Noise Insulation standards, ensuring protection of the industrial businesses and services in the Central Eastside.

## 2. Housing and Neighborhoods

### CC2035 GOAL 2. HOUSING & NEIGHBORHOODS, CENTRAL EASTSIDE POLICIES

**2.CE-1 Complete Neighborhoods:** Ensure access to essential public services such as parks and open spaces, schools, and community centers.

**2.CE-2 Compatible Development and Redevelopment:** Protect the existing industrial businesses and the livability of new employment and residential uses through development designed and constructed to insulate non-industrial uses from the characteristics common to industrial operations such as noise, fumes, and freight operations.

### CCMP

**H.14** Proposed residential uses are buffered from potential nuisance impacts from uses allowed by right in the zone.

**H.15** The master plan includes a design, landscape, and transportation plan that will limit conflict between residential, employment, and industrial uses.

## RESPONSE

### CC2035

#### Goal 2 Housing & Neighborhoods, Central Eastside Policies

**Policy 2.CE-1:** The OMSI CCMP area, located along the Willamette River greenway, provides abundant access to parks and open spaces connected to the greenway and the downtown loop, and the CCMP includes plans to expand this open space with the development of the waterfront education park and the new plaza adjacent to the Tilikum Crossing Bridge. The orientation of the CCMP area within the OMSI Station area provides exceptional bus, streetcar, and light rail access to many other essential public services throughout the Central City and the region. The plan area is also well connected to retail and other amenities in the SE Portland neighborhoods via multiple major bike facilities. The CCMP envisions development of up to 1,200 apartment residences. While this number is a significant increase from what is there now, it is not enough to support a traditional neighborhood school. Residents of the district will have access to Abernethy Elementary School and Hosford Middle School, both a short way east on SE Division Street and easily accessible via TriMet's Bus Route #2 or, in the future, the Division Bus Rapid Transit Line. Cleveland High School is also a short ride east on TriMet's Bus Route #9 from OMSI Station.

**Policy 2.CE-2:** See CCMP H.15 response.

### CCMP

**CCMP H.14:** See CCMP H.15 response.

**CCMP H.15:** Due to the isolation of the OMSI CCMP plan area from the historic Central Eastside industrial area by the freight rail tracks, the Highway 99 viaduct, and a tall embankment, there are only nineteen industrial businesses operating within 500 feet of the plan area boundary. Of these, nine are across the tracks. This geographic isolation insulates both the industrial businesses and future residents of the OMSI District from each other.

For the freight trucks that must pass through the OMSI District on their way to Highway 99 or I-5, the CCMP proposes a new freight street, New Water Avenue, that bypasses the heart of the district and parallels the heavy rail line. A limited number of protected pedestrian crossings will support passage back and forth across this important corridor while coordinated signalization will facilitate through movement of trucks. New Water Avenue will feature wide sidewalks and

street trees to moderate the energy of the street for pedestrians, and a protected, two-way cycle track and flex parking/loading lane to provide physical separation. To further reduce the conflicts, no curb cuts are planned on New Water Avenue except at Tract D, for which there is no other option.

As noted elsewhere in this narrative, the code considered residential uses in the OMSI master plan area and in the Central Eastside, and codifies appropriate buffering elements under PZC 33.510.252. Under this section, residential uses in the Central Eastside will also, in compliance with the code, execute an Industrial Impacts Disclosure Statement and adhere to the Noise Insulation standards, ensuring protection of the industrial businesses and services in the Central Eastside.

## 3. Transportation

### CC2035 GOAL 3. TRANSPORTATION, CENTRAL EASTSIDE POLICIES

**3.CE-1 Optimized Street Network:** Improve connectivity to and throughout the district for all modes by creating safe, accessible and convenient routes with improved signalization and clear signage to link landward portions of the district with major attractors and the riverfront.

**3.CE-2 Freight System:** Enhance freight movement in and through the district and maintain and improve access to and from the district and regional freeway system.

**3.CE-3 Green Streets:** Strategically support the enhancement of east-west city walkways and bikeways to serve the multiple objectives of travel, stormwater management, open space and recreation, and placemaking. Routes should also strengthen connections to the river and riverfront. Green Streets should be chosen to avoid significantly impacting freight movement as identified by Transportation System Plan freight designations.

**3.CE-4 Reduce trail conflicts:** Reduce bicycle and pedestrian conflicts on the Eastbank Esplanade and the Greenway Trail through design modifications like separating bicycle and pedestrian facilities, education, signage and other means.

### CCFDG

**A9 Strengthen Gateways:** Develop and/or strengthen gateway locations.

**B1 Reinforce and Enhance the Pedestrian System:** Maintain a convenient access route for pedestrian travel where a public right-of-way exists or has existed. Develop and define the different zones of a sidewalk: building frontage zone, street furniture zone, movement zone, and the curb. Develop pedestrian access routes to supplement the public right-of-way system through superblocks or other large blocks.

**B2 Protect the Pedestrian:** Protect the pedestrian from vehicular movement. Develop integrated identification, sign and sidewalk-oriented night-lighting systems that offer safety, interest, and diversity to the pedestrian. Incorporate building equipment, mechanical exhaust routing systems, and/or service areas in a manner that does not detract from the pedestrian environment.

**B3 Bridge Pedestrian Obstacles:** Bridge across barriers and obstacles to pedestrian movement by connecting the pedestrian system with innovative, well-marked crossings and consistent sidewalk designs.

### CEDG

**B3-1 Reduce Width of Pedestrian Crossings**

### CCMP

**H.6** The master plan demonstrates that easy and safe access will be provided to transit stations located within or immediately adjacent to the master plan boundary, and any buildings located immediately adjacent to a transit station include ground floor uses that create an active and safe pedestrian environment throughout the day, evening, and week.

**H.8** The transportation system is capable of supporting the proposed uses in addition to the existing uses in the plan area. Evaluation factors include street capacity, level of service, connectivity, transit availability, availability of pedestrian and bicycle networks, on-street parking impacts, access restrictions, neighborhood impacts, impacts on pedestrian, bicycle, and transit circulation, and safety. Evaluation factors may be balanced; a finding of failure in one or more factors may be acceptable if the failure is not a result of the proposed development, and any additional impacts on the system from the proposed development are mitigated.

**H.9** The proposed street plan must provide multi-modal street connections to support the surrounding street grid pattern.

**H.10** The plan ensures that there will be adequate and timely infrastructure capacity for the proposed development.

**H.11** The master plan demonstrates that, to the extent practical and feasible, inactive uses such as, but not limited to, parking and access, loading, and trash and recycling are shared or consolidated, with the goal of activating the pedestrian environment.

**H.12** The proposal will not have a significant adverse effect on truck and freight movement.

# RESPONSE

## CC2035

### CC2035, Goal 3 Transportation, Central Eastside Policies

**Policy 3.CE-1:** The street network proposed for the OMSI CCMP plan area is intended to improve access, safety, and function for users of all modes. See Vehicular Circulation, p. 11. The alignment of New Water Avenue separates the Traffic Access Street and Priority Truck Street from the pedestrian-focused center of the OMSI District and introduces a new two-way cycle track to provide a separated facility for cyclists moving to and through the area. This new high-quality bike facility will link to the Major City Bikeway on the Tilikum Crossing Bridge, and connect the Hawthorne Bridge with the Springwater Corridor Trail to provide a convenient alternative mode for commuters heading to new destinations in the OMSI District or passing through it to and from points east, west, north, and south. The concept also focuses access to most new development tracts along Old Water Avenue and the Loop Road, to minimize crossings of the two-way cycle track, and to improve the flow of New Water Avenue. Several pedestrian-only connections will provide access through the district, including the Spine, between OMSI Station and OMSI's main plaza, and seven east-west pathways that connect to the river. Two new signalized crossing opportunities of New Water Avenue will improve district-wide circulation and access, enhance safety, and reduce delay for all modes. These signals will be coordinated to optimize the flow of bicyclists along the cycle track in the peak direction. A third signalized crossing will be provided at the SE Caruthers Street intersection with SE Water Avenue to enhance the quality and safety of the frequent pedestrian and bicyclist crossings at this intersection.

**Policy 3.CE-2:** The CCMP will protect the important freight connection between the Central Eastside and access routes to Highway 99 and Interstate 5 (via the Ross Island Bridge) by creating New Water Avenue, a new Priority Truck Street that bypasses the heart of the new development. The New Water Avenue alignment provides more efficient passage for large vehicles using smoother curves and widened travel lanes where needed to facilitate freight movement from overcrossing into the opposing travel lane. Additionally, signalized and separated turning opportunities provide access to internal district freight destinations and loading areas, and offer an alignment that separates truck through-traffic from conflicting with on-street bike facilities and

areas with significant pedestrian activity, including OMSI's student loading and unloading zones (see Vehicular Circulation, p. 11). The Traffic Impact Study found that the New Water Avenue alignment would remove more than 600 trucks daily from internal areas of the district and instead accommodate them along the new route designed specifically for them. The traffic analysis is pending review by PBOT.

**Policy 3.CE-3:** All streets within the CCMP will feature stormwater treatment facilities and wide sidewalks to support street furnishings, street trees, and placemaking features in addition to pedestrian through zones. All east-west passageways are planned to have a mix of trees and native vegetation, to connect the riverbank ecosystem with the interior of the plan area. All streets have been designed to facilitate freight movement.

The City's proposed Green Loop linear park concept will enter the CCMP area via the Tilikum Crossing Bridge. The adopted alignment will connect to SE Caruthers Street via SE 2<sup>nd</sup> Place, where the CCMP proposes a pedestrian-oriented plaza. The plaza will support the Green Loop concept via stormwater planters that are envisioned to take up grade, provide seating, and treat stormwater from the bridge. The CCMP also leaves room for the possible northern alignment on Tract C, along the Streetcar Bridge, which could also contain green street features, should that alignment be selected.

**Policy 3.CE-4:** The greenway trail is a shared-use pedestrian and bicycle trail that experiences congestion and conflicts between fast moving cyclists (and other wheeled modes) and slow-moving pedestrians. Due to OMSI's riverfront location with adjacent educational and recreational activities, frequent trail crossings occur, particularly for OMSI's student-aged visitors. The greenway trail itself will be widened to 16 feet in all feasible locations. To further relieve pressure in the most restricted segments of the greenway trail adjacent to the museum, a new parallel pedestrian-only walkway is proposed to extend out over the riverbank, connecting the two existing overlooks and a new overlook at Bull Run. This will allow some pedestrians to bypass the greenway trail entirely at the Turbine Hall. In addition, an enhanced overlook is planned for the southern "pinch point" outside Theory Restaurant to provide more room for pedestrians in that location.

Cyclists passing through the district will be offered an attractive, efficient alternative to the greenway trail in the form of the protected two-way cycle

track along New Water Avenue. Bike lanes on the Tilikum Crossing Bridge will be connected directly with the cycle track in an enhanced intersection at SE Tilikum Way and SE Water Avenue. By implementing design strategies such as a non-linear alignment, grade changes, furnishings, landscape elements, and signage, cyclists and other wheeled modes who otherwise wish to ride the greenway trail will be encouraged to dismount or ride slowly through this shared section.

## CCFDG

**A9:** The CCMP proposes massing requirements on key tracts (see Required Building Lines, p. 29) that will create a northern gateway at the intersection of New Water and Old Water Avenues, where the "prow" form of Tract G will, with Tract A, frame up a long view of the museum's distinctive glass pyramid or, with the PCC building, a long view down the New Water Avenue boulevard of trees. In the southern plan area, transit riders will enter a gateway formed by the Tract D and Opera 2 buildings on either side of OMSI Station, with massing concentrated at the station. There is no specified gateway location per the 1988 Central City Plan map within the plan area boundaries.

**B1:** The OMSI CCMP intends to prioritize pedestrian movement throughout the entire district. Two new streets have been added to the one existing street, and a Central Pedestrian Spine composed of plazas, plaza-like open spaces, or wide sidewalks will run the length of the plan area, connecting SE Caruthers Street to SE Clay Street. The streets have minimum 12-foot-wide sidewalks, and the section of the Spine on Old Water Avenue will have 15-foot-wide sidewalks. The pedestrian through zone on all sidewalks is a minimum of eight feet wide. Four new east-west passageways have been established as well, for a total of seven, knitting the interior of the district to the waterfront.

**B2:** The street network has been designed using best practices in intersection design to protect pedestrians with narrower cross sections and pedestrian refuge areas at both bicycle and vehicle crossings. Where the Central Pedestrian Spine crosses the Loop Road and Old Water Avenue, raised crosswalk "speed tables" are proposed for vehicular travel lanes to prioritize pedestrians. Where the Bull Run pedestrian way crosses Old Water Avenue, a raised pedestrian crossing has been provided as well. Two new signalized intersections will provide safe crossing

opportunities for pedestrians across New Water Avenue, where daily traffic volumes are expected to approach 10,000 by 2040. A third signalized crossing opportunity will be provided at the SE Caruthers Street intersection with SE Water Avenue to enhance the quality and safety of the frequent pedestrian crossings that occur at this intersection between the Major City Walkway routes in each direction.

In shared-use pedestrian-bicycle areas such as the greenway trail, SE 2<sup>nd</sup> Place, and the plazas (see p. 18), signage will be used to guide how the active modes interact, and to encourage cyclists with local destinations to park their bikes at one of the bike corrals and walk to their destination.

**B3:** Sidewalks in the CCMP are all twelve feet wide, except the portion of Old Water Avenue that carries the Central Pedestrian Spine, where they are 15 and 20 feet. Where the Central Pedestrian Spine crosses the Loop Road and Old Water Avenue, and where the Bull Run pedestrian way crosses Old Water Avenue, raised crosswalk "speed tables" are proposed for vehicular travel lanes to prioritize pedestrians. In addition, best practices in intersection design to protect pedestrians have been utilized, including narrower cross-sections and pedestrian refuge areas at both bicycle and vehicle crossings.

## CEDG

**B3-1:** The street network has been designed using narrower cross-sections and pedestrian refuge areas at both bicycle and vehicle crossings.

## CCMP

**H.6:** Access to OMSI Station and the streetcar station will be provided for pedestrians via the Central Pedestrian Spine and the greenway trail (via the Tract C passage and SE Caruthers Street), in addition to wide sidewalks along New Water Avenue. Tracts D and Opera 2 both abut OMSI Station, and at least 50% of the frontage of each will be required to be active use.

**H.8:** The Traffic Impact Study found that with the recommended improvements, the transportation system will be capable of safely supporting development of the OMSI CCMP area, in addition to accommodating the existing uses. The street network proposed for the OMSI CCMP area is intended to improve access, safety, and function for users of all modes. The alignment of New Water Avenue separates the Traffic Access Street and Priority Truck

Street from the pedestrian-focused center of the OMSI District and introduces a new two-way cycle track to provide a separated facility for cyclists moving to and through the area. This new high-quality bike facility will link to the Major City Bikeway on the Tilikum Crossing Bridge, and connect the Hawthorne Bridge with the Springwater Corridor Trail to provide a convenient alternate mode for commuters heading to the new opportunities in the OMSI District or passing through it to and from all directions. The concept also focuses access to most new development tracts along Old Water Avenue and the Loop Road, to minimize crossings of the two-way cycle track, and to improve the flow of New Water Avenue. Several pedestrian-only connections will provide access through the district, including the Spine, between OMSI Station and OMSI's main plaza, and seven east-west pathways that connect to the river. Two new signalized crossing opportunities of New Water Avenue will be provided to improve districtwide circulation and access, enhance safety, and reduce delay for all modes. These signals will be coordinated to optimize the flow of bicyclists along the cycle track in the peak direction. A third signalized crossing opportunity will be provided at the SE Caruthers Street intersection with SE Water Avenue to enhance the quality and safety of the frequent pedestrian and bicyclist crossings that occur at this intersection between the Major City Walkway and Bikeway routes in each direction. Key improvements are also recommended at off-site intersections to address existing and expected intersection capacity constraints. The traffic analysis is pending review by PBOT.

**H.9:** The street network proposed for the OMSI CCMP area is intended to improve access, safety, and function for users of all modes. Due to the location of the plan area between the Willamette River and the railroad tracks, there is very little surrounding street grid with which to make connections. Today the plan area has one street, SE Water Avenue, connecting it through one intersection at the north with SE Clay Street, and one at the south with SE Caruthers Street. We will maintain the connection at the north, and improve the connection at the south, to better facilitate pedestrian, bicycle, and vehicular trips. The alignment of New Water Avenue separates the Traffic Access Street and Priority Truck Street from the pedestrian-focused center of the OMSI District and introduces a new two-way cycle track to provide a separated facility for cyclists moving to and through the area. This new high-quality bike facility will link to the Major City Bikeway on the Tilikum Crossing Bridge, and connect the Hawthorne Bridge with the Springwater Corridor Trail to provide a convenient alternate mode for commuters heading



## RESPONSE CONTINUED

to the new opportunities in the OMSI District or passing through it to and from all directions.

**H.10:** The infrastructure for the CCMP area at OMSI will be phased in a way that meets the CCMP requirement for adequate and timely infrastructure to support new buildings. Implementation of the OMSI CCMP development has been divided into four infrastructure zones. Zones A (1 and 2), B, C and OP. The narrative below and the utility illustrations that follow clarify how utilities and road improvements can be phased to serve each potential tract of development. While there is already substantial power, stormwater and water infrastructure within the existing roadways that can be extended or modified in phases to serve new development, BES has indicated that sewer capacity is limited and cannot simply be extended to serve the district. As a result, providing sanitary service is one of the primary factors for defining these zones as well as providing street access for parking and loading at each tract.

Infrastructure Zones A, B, and C north of SE Tilikum Way will be dependent upon sanitary sewer capacity provided by the third-party sewer collection system and wastewater treatment plant (WWTP), while the two Opera tracts south of SE Tilikum Way in Zone OP are depended upon sanitary sewer capacity provided by the City's sanitary sewer system. The other utility improvements required including water, stormwater and power infrastructure, that will be implemented in phases to support development.

Within each infrastructure zone, the individual tracts can develop at any time after the associated roadway and utility infrastructure is in place; however, there are dependencies that prevent development of Zone B until the infrastructure in Zone A is in place, and in turn Zone C cannot proceed until the infrastructure in Zone B is in place. Development within Zone OP is dependent upon the City implementing a capital improvement project to increase sewer capacity in the public main and can occur independently from the northern zones.

Each of the infrastructure zones are discussed in more detail below.

**Zone A-1** is comprised of Tracts A and D where new buildings would be constructed with temporary frontage improvements but set to accommodate future ROW improvements. These two tracts are attractive for early development since utility service connections for sewer, storm water and power are readily available from existing infrastructure. The sanitary service connections would be temporary until they can be redirected to the new third-party

sewer main once the system is built with Zone A-2 improvements. Other utility service connections would also be redirected to new infrastructure constructed in subsequent phases to provide continued service to the new buildings. The utilities serving the OMSI building and the PCC Climb Center would be maintained with this phase of development.

BES has indicated there could be adequate capacity in the public sewer main flowing north under SE Water Avenue for a temporary connection from Tract A. This will be reviewed again as part of the building permit once the size of the project is confirmed. The temporary sewer service would be redirected to the new sewer main built with the next phase. Sanitary sewer service for Tract D will be provided via a temporary private lift station on Tract D and a temporary force main under the existing SE Water Avenue ROW. The initial development of Tract D would include construction of the permanent third-party sanitary sewer force main connection under the Union Pacific Railroad (UPRR) tracks to the Division Street interceptor. The next phase of development under Zone A-2 would connect to this permanent force main with the new infrastructure and the private district lift station, at which time the force main from Tract D could be decommissioned. Refer to Appendix E-6 Temporary Utility Infrastructure Zone A-1 for a conceptual illustration of these interim improvements.

Temporary frontage improvements would connect both tracts to SE Water Avenue, and bicycle facilities on SE Water Avenue would remain in the existing configuration. Both the Tract A and Tract D projects would develop their frontage improvements on Old Water Avenue (Zone B – see below) and New Water Avenue (Zone A-2 - see below), respectively, within a time frame acceptable to the City. At that time, the temporary improvements would be replaced with permanent improvements described below.

**Zone A-2** adds New Water Avenue and the PCC Tract to Zone A-1. The third-party sewer collection system will be constructed under New Water Avenue and extend south under Old Water Avenue with a cut-and-patch trench, and the WWTP and associated lift station will be constructed on Tract A. The lift station will have two separate pump systems. One new force main will be built under the New Water Avenue, connecting to the Division Street interceptor via the UPRR crossing constructed as part of infrastructure Zone A-1 and the other force main will be built under Old Water Avenue with a cut-and-patch trench to deliver wastewater to the new WWTP. The existing private lift station that currently serves OMSI can be decommissioned once the new district lift station is

operational. Sewer flows collected by gravity from new development on the PCC parcel and Tracts A and D will be pumped to the public sewer until the WWTP is fully operational and has the clean water discharge line built with Infrastructure Zone B improvements. The entire length of New Water Avenue, including the cycle track, the intersections with Old Water Avenue and SE Caruthers Street, and the new water main, underground power, and storm lines under New Water Avenue will be constructed as one project concurrent with the WWTP. At this time the street frontage along Old Water Avenue in front of Tract A will remain in an interim state with new driveways and sidewalks, but not be fully reconstructed. The existing PCC Climb Center will maintain service connections to the public infrastructure in SE Clay Street and SE Water Avenue, and the southern part of the PCC parcel can be developed.

The signal installations at the New Water Avenue/Old Water Avenue/PCC and SE Water Avenue-4<sup>th</sup> Avenue/SE Caruthers Street intersections are included within Zone A-2. This zone also includes the restriping of SE 4<sup>th</sup> Avenue to extend the cycle track from SE Caruthers Street to the Springwater Corridor Trail, and the installation of queue warning signs on the off ramp from OR 99E approaching the SE 6<sup>th</sup> Avenue/SE Woodward Street intersection.

**Zone B:** Old Water Avenue and the utilities underneath the road make up infrastructure Zone B and will allow Tracts G and H to develop. The underground utilities include a short extension of the gravity sewer in front of Tract F, underground power, and the new clean water discharge line from the WWTP that connects to the private OMSI storm network that outfalls to the Willamette River west of Turbine Hall. These tracts are reliant on the WWTP being operational and need Old Water Avenue to be reconstructed for parking and loading access to the buildings. Old Water Avenue will be reconstructed, including the postponed frontage improvements and cycle track spur along Tract A, the southern cycle track spur along Tract F, and the small codified open area (O-2) north of the Tract A building. Zone B must be concurrent with or follow Zone A because these tracts require the WWTP, the changes to the street cross-section, and that the New Water Avenue cycle track already be in place.

The signal installation at the New Water Avenue/Old Water Avenue south intersection is triggered with any single parcel development in Zone B or Zone C.

**Zone C:** Infrastructure Zone C includes the new Loop Road and the utilities beneath it, and will

allow Tracts B, C, E and F to develop. The utilities include storm main extensions under the new road and along the greenway, a gravity sewer extension in front of Tract C, a looped water main, and underground power to complete a looped power grid for the district. The tracts are again reliant on the WWTP being operational and need the Loop Road constructed for parking and loading access to the buildings. Construction of the Loop Road, the South Plaza on Tract B (part of codified open area O-1), and the open area south and east of Tract C (O-4) can also be developed at this time. Zone C must follow Zone A because these tracts require the WWTP, and it must be concurrent with or follow Zone B because the Loop Road intersections tie into Old and New Water Avenue.

The signal installation at the New Water Avenue/Old Water Avenue south intersection is triggered with any single parcel development in Zone B or Zone C.

**Zone OP:** Opera 1 and 2 are dependent upon a City capital project to increase sanitary sewer capacity in the public main south of SE Tilikum Way. While Opera 2 has frontage along SE Water Avenue, it is expected that the Opera 2 tract could develop before or after New Water Avenue is in place, so it is not tied to the New Water Avenue project built with Zone A-2. However, Opera 1 and 2 are dependent upon the improvements to SE 2<sup>nd</sup> Place and SE Caruthers Street. The codified open area O-6 would be developed with Opera 1.

The improvement to the corners where the bike lanes on Tilikum Way intersect with the cycle track along New Water Avenue are also triggered with Zone OP.

**Zone OS:** The redevelopment of OMSI Plaza (O-3) and the waterfront portions of O-1 are not dependent upon any particular piece of infrastructure, so they are independent projects and can develop at any time. These are shown as Zone OS at right. Open spaces O-2, -4 and -6, and the upland portions of the plaza on Tract B will develop with the adjacent development projects as shown. No change to O-5 is intended.

**H.11:** Inactive uses have been consolidated to have as minimal a presence as possible on the street. Designated parking and loading access areas have been sited away from the primary pedestrian areas along the OMSI Station, the Spine, the Waterfront, and the main OMSI Plaza. Where possible, parking and loading access is combined into one access point; back-of-house functions can share this access, subject to future design and evaluation. In cases where the service access shares the frontage or plaza with the Spine or possible Green

Loop alignment, the generous pedestrian zone will allow thoughtful future design strategies to be implemented in order to minimize conflicts.

**H.12:** The CCMP will protect the important freight connection between the Central Eastside and access routes to Highway 99 and Interstate 5 (via the Ross Island Bridge) by creating New Water Avenue, a new Priority Truck Street that bypasses the heart of the new development. The New Water Avenue alignment provides more efficient passage for large vehicles using smoother curves and widened travel lanes where needed to facilitate freight movement from overcrossing into the opposing travel lane; signalized and separated turning opportunities to access internal district freight destinations and loading areas; and an alignment that separates truck through-traffic from conflicting with on-street bike facilities and areas with significant pedestrian activity, including OMSI's student loading and unloading zones (see Vehicular Circulation, p. 11). Only one parking and loading dock access drive is proposed along New Water Avenue, for Tract D, to limit impacts to primary freight movement. The Traffic Impact Study found that the New Water Avenue alignment would remove more than 600 trucks daily from internal areas of the district and instead accommodate them along the new route designed specifically for them.

## 4. Health and Environment

### CC2035 GOAL 4. WILLAMETTE RIVER CENTRAL EASTSIDE POLICIES

**4.CE-1 River Economy:** Leverage the Willamette River as an important component of the Central Eastside's local economy by supporting river-dependent and river-related commercial and mixed uses that bring more people to and on the river.

**4.CE-2 Southeast Riverfront:** Improve the physical relationship between buildings, activities and the Willamette River. Utilize building design, active ground floor facing the river, new uses, open areas and connection that encourage people's enjoyment of the river in both public and private spaces.

**4.CE-3 Watershed Health and Native Species Recovery:** Enhance in-water and riparian habitat from the Burnside Bridge to the Ross Island Bridge by replacing invasive and non-native plants with native plants and trees and creating complexity in shallow water areas. Restore in-water, riparian and upland habitat and increase flood capacity at the Eastbank Crescent.

**6.CE-1 Freight-compatible Green Infrastructure:** Plan for the development of green infrastructure, in the public right-of-way and on private property, taking into account freight street hierarchy by prioritizing city walkways and bikeways and mixed-use corridors for improvements such as trees and living walls throughout the district. Support the industrial area's functional relationship to the river.

**6.CE-2 Strategic Tree Canopy Enhancement:** Promote planting, district-wide, and especially along mixed-use commercial corridors with higher employment densities and residential uses, and along pedestrian and bike corridors. Select trees and locations that provide adequate clearance for freight movement on streets prioritized for freight mobility.

### GOAL 6. HEALTH AND ENVIRONMENT CENTRAL EASTSIDE POLICIES

### CCFDG

**A1 Integrate the River**

**B4 Provide Stopping and Viewing Places:** Provide safe, comfortable places where people can stop, view, socialize, and rest. Ensure that these places do not conflict with other sidewalk uses.

**B7 Integrate Barrier-Free Design:** Integrate access systems for all people with the building's overall design concept.

### CCMP

**H.3** Development on lots with river frontage incorporates elements that activate the riverfront, such as open areas, trails, accessways, and active land uses that encourage public use and enjoyment of the riverfront.

## RESPONSE

### CC2035

#### Goal 4 Willamette River

**Policy 4.CE-1:** The entire OMSI CCMP was intentionally designed to bring more people to the river. River-dependent commercial activity, including the proposed expansion of the platforms at the Blueback Submarine dock, which provides an educational experience that literally brings people on and into the river, is proposed as part of the waterfront education park.

The proposed waterfront education park, including the greenway trail, walkways, habitat restoration, scenic overlooks, and public viewing areas, will prioritize public access to the river. All these features will be considered a public park and are thus river-related. The design of the OMSI District circulation system highlights the river as the focal point of interest and includes multiple east-west passages intended to bring more people to and on the river.

This mix of uses, including recreational, educational, residential, and commercial, will certainly invite and accommodate more people coming to and celebrating the river.

**Policy 4.CE-2:** The Opera 1 tract is intended to be a performing arts center oriented to the river. The South Plaza on Tract B will be privately-owned and managed, but open to the public when not hosting an event. The South Plaza will be enlivened by active uses in the building façades of Tracts C and E, and OMSI intends to activate the south façade of its Exhibition Hall with seasonal outdoor education activities. It, and the proposed waterfront education park, will allow OMSI to continue and expand its programming of science-based activities focused on the river.

**Policy 4.CE-3:** The OMSI CCMP includes a habitat restoration opportunity area on Tract A that coincides with the southern half of the Eastbank Crescent Restoration Project. The project would include a bank layback to allow for increased floodplain and riparian habitat functions including: increased flood storage capacity; restoration of shallow water and complex off-channel habitat for native salmonids and other aquatic species; native riparian revegetation for wildlife habitat and improvement of water quality; and an overlook to facilitate interpretation of the restoration for visitors. Installation of the remainder of the proposed waterfront education park would comply with River Environmental zone requirements for mitigation, landscaping, and/or resource enhancement.

#### Goal 6 Health and Environment

**Policy 6.CE-1:** Development and infrastructure projects in the OMSI CCMP will treat stormwater on site in compliance with the requirements of the City's Stormwater Manual. Stormwater planters, street trees in a diversity of species and canopy sizes that comply with Title 11, and Ecoroofs on private development will be used to create habitat and mitigate urban heat. Plantings of trees and native vegetation will be used in private open spaces, such as the two large plazas and the Central Pedestrian Spine, to unite smaller fragments of open space on the irregularly-shaped tracts and the street plantings with the greenery along the river in the waterfront education park. The effect will be a reduction in impervious area within the plan area boundary compared to the impervious surface area that exists today. (See Ecological Network, p. 49)

All tracts within the CCMP north of SE Tilikum Way will utilize a privately constructed WWTP that utilizes innovative membrane bioreactor (MBR) technology to create cleaned effluent that can be reused on site. This plant will be constructed on Tract A from which underground graywater reuse lines are proposed to serve non-potable water needs on all participating tracts, and possibly also irrigation needs in the open spaces (see infrastructure, pp 38-41).

**Policy 6.CE-2:** Greater than 20% of the plan area will be in open space, and the tree density will meet or exceed the requirements stated in 33.510.255.K.3.c. (See Ecological Network, p. 49.) Street trees in a diversity of species and canopy sizes will comply with Title 11. On New Water Avenue, street trees will be separated from travel lanes on the west side of the street by a 16-foot-wide cycle track, a 4-foot landscape buffer, and, in some places, an 8-foot parking lane. This separation will allow for trees with large canopies. The east side of New Water Avenue will be lined with street trees, the species of which will be selected for a form and branching pattern that will be compatible with freight movement. (See Appendix E, Concept Public Works Plans.)

### CCFDG

**A1:** Portland Opera is planning to develop a performing arts center on Opera 1, which they would orient to the water. The primary entrance zone has been located on the west façade to emphasize this orientation. Tract C will have active uses fronting the South Plaza and the waterfront, while Tract E will have ground-floor pedestrian passage that connects the Central Spine with the South Plaza and the river.

The OMSI CCMP proposes the waterfront education park, a public park to extend the entire riverfront within the plan area, which will be connected to interior portions of the development by seven east-west passageways. The tree canopy and native vegetation of the park are proposed to extend into the interior along these passageways to create habitat corridors that bring the river experience into the interior of the district.

**B4:** All rights of way in the OMSI CCMP plan area are proposed to have at minimum 12-foot-wide sidewalks, except the portion of Old Water Avenue that carries the Central Pedestrian Spine, which is proposed to have 15-foot-wide sidewalks. Allowing eight feet for a pedestrian through zone, this allows between four and seven feet for a furnishing zone that can be used to stop, socialize, and rest.

The waterfront education park is proposed to have five scenic overlooks and a variety of other stopping places along the top of bank west of the south plaza and outside the west façades of their two buildings.

The south plaza, over an acre in size, will be the largest gathering space on the east side of the Willamette. This multifunctional space will be programmed for educational, interpretive, cultural and performing events, and play opportunities. It abuts the greenway trail, and during design of the plaza and trail, OMSI will develop a vegetation management plan for the riverbank in that location, so that views west to the bridge and downtown from the plaza will always be available. The boundary between the trail and the edge of the plaza will be visible, so that plaza and trail users will be able to distinguish between the two spaces.

**B7:** All public streets and spaces will be built to standards that will allow people of all abilities to circulate throughout the site.

### CCMP

**H.3:** The CCMP proposes a public park, the waterfront education park, to extend the entire length of the riverfront within the plan area and incorporating the greenway trail and five scenic overlooks. Additional viewing areas are proposed at the western edge of Tract B and just outside OMSI's two buildings. The South Plaza proposed for Tract B will be activated by the developments on Tracts C and E, as well as a flexible outdoor education space located outside the southern façade of the Exhibition Hall.

# 5. Urban Design

**CC2035**  
**GOAL 5.**  
**URBAN DESIGN**  
**CENTRAL**  
**EASTSIDE**  
**POLICIES**

**5.CE-2 OMSI Station Area:** Create an urban form at the OMSI Station area that facilitates public access from the streetcar and light rail stations to the Greenway Trail and riverfront, PCC, OMSI, Portland Opera, Portland Spirit, and the Oregon Rail Heritage Foundation sites, through public realm enhancements and ground floor active uses that create a safe and vibrant environment.

**5.CE-4 Urban Form on Large Blocks:** Use building massing and orientation, accessways, and open spaces in the development of large blocks and sites to establish an urban form and block configuration consistent with the rest of the Central Eastside.

**5.CE-5 Open Space Network:** Increase public parks, open space, and recreation opportunities in the district, especially in areas zoned for high density, mixed-use development. Broaden the number and range of available recreation opportunities.

**5.CE-7a Industrial Character:** Promote the historic industrial character of the Central Eastside through the preservation and enhancement of historic buildings and infrastructure that reflect past uses and architectural styles while serving existing and emerging industrial employment uses.

**5.CE-6 Street hierarchy and development character:** Support the retail/commercial character of East Burnside, NE Sandy, SE Grand, SE Division, SE Hawthorne, and SE Morrison; the boulevard character of SE Stark, NE Couch, SE 11<sup>th</sup> and SE 12<sup>th</sup>; and the flexible character of SE Ankeny, SE Salmon, SE Clay, SE 7<sup>th</sup> and SE Caruthers Street. Create transitions between industrial and mixed-use areas.

**CCFDG**

**A3 Respect the Portland Block Structures**

**A4 Use Unifying Elements**

**A5 Enhance, Embellish, and Identify Areas**

**A6 Reuse / Rehabilitate / Restore Buildings**

**A7 Establish and Maintain a Sense of Urban Enclosure**

**A8 Contribute to a Vibrant Streetscape.** Integrate building setbacks with adjacent sidewalks to increase the space for potential public use. Develop visual and physical connections into building' active interior spaces from adjacent sidewalks. Use architectural elements such as atriums, grand entries, and large ground-level windows to reveal important interior spaces and activities.

**B5 Make Plazas, Parks and Open Space Successful**

**C1 Enhance View Opportunities**

**C9 Develop Flexible Sidewalk-level Spaces**

**CEDG**

**A5-3 Plan for or Incorporate Underground Utility Service.** Plan for or incorporate underground utility service to development projects.

**A5-4 Incorporate Works of Art**

**A5-5 Incorporate Water Features**

**C1-1 Integrate Parking**

**CCMP**

**H.5** The master plan demonstrates that development within the plan boundary will establish an overall building orientation through massing, the location of entrances, and the location of ground floor uses that result in an edge that embraces adjacent public parks rather than creating an abrupt edge between the plan area and parks, and ensures that development within the plan boundary will not excessively shade the adjacent park.

**H.7** Internal open areas are accessible within and distributed throughout the master plan area and have connections to the surrounding neighborhood and to any adjacent open space. Internal open areas enhance visual permeability through the site, especially on sites near the Willamette River. The size and location of each open area must be adequate to accommodate the intended use of the space.

**H.13** City-designated scenic resources are preserved.

# RESPONSE

## CC2035

### Goal 5 Urban Design, Central Eastside Policies

**Policy 5.CE-2:** The OMSI CCMP creates seven connections to and from the greenway trail, two of which connect directly or indirectly to the OMSI transit station. The pathway adjacent to the north side of the Tilikum Crossing Bridge will remain and be enhanced to strengthen the connection between OMSI Station and the greenway trail.

The center of the district is focused around the Central Pedestrian Spine, which runs north from SE 2<sup>nd</sup> Place through the station, between Tracts C and D, then between Tracts E and F, along Old Water Avenue to New Water Avenue, and then north past the PCC Tract. It provides a dedicated and vital pedestrian link between the station and Portland Opera, OMSI, PCC, and all tracts in the CCMP. SE 2<sup>nd</sup> and SE Tilikum Way will continue to provide access to Portland Spirit, and the Oregon Rail Heritage Foundation, outside the boundary of the CCMP.

OMSI Station will be supported by Tracts D and Opera 2, which abut the station on its north and south respectively. The CCMP requires that 75% of the ground level façade of each future building meets the station (see Required Building Lines, p. 29), along with the primary entrance, and that ground-floor active uses are incorporated on at least 50% of the façade that faces the station (see Ground Floor Active Use Areas, p. 30).

**Policy 5.CE-4:** There are a variety of factors that separate the OMSI CCMP plan area from the regular form and block configuration of the rest of the Central Eastside. It is disconnected from Portland's standard block configuration by the heavy rail line, the Highway 99 viaduct, and an embankment. The plan area is shaped by the existing riverbank, UPRR tracks, curving Old Water Avenue, and the existing OMSI museum buildings. As a result of this historic urban form, the tracts are larger than the standard blocks in the adjacent portions of the Central Eastside, so the CCMP proposes massing guidelines (see Design Tenets for Massing, p. 10) to ensure that future building envelopes are reasonably consistent in scale with other buildings in the Central City and with regard to the experience of the public realm. Building setbacks will be required to support public open spaces and acknowledge the existing OMSI buildings (see Building Setbacks, p. 28). Lower height maximums will be required for the two tracts on the riverbank, Tracts A and Opera 1. A minimum of 50

feet must be provided between towers (see Maximum Building Envelopes, pp 31-33) in order to provide permeability in the overall massing of the district.

**5.CE-5 Open Space Network:** The CCMP proposes two new significant open spaces (the waterfront education park, and the plaza on Tract B) and several new connective open space passages. The proposed waterfront education park will be available to the public and will provide active and passive recreation opportunities via the greenway trail, scenic overlooks and other view and interpretive opportunities. The east-west passages on Tract A, Bull Run, Tract C, and SE Caruthers Street will also be public. The Central Pedestrian Spine will also be public, as will the passage through Tract E connecting the Spine with the South Plaza. The South Plaza and OMSI Plaza will be public spaces, although OMSI may close them from time to time for events. Both are intended to be designed for flexible programming, which may include recreational activities. New Water Avenue will be designed to include a two-way cycle track, which will provide a dedicated alternative for recreational cyclists. Finally, the CCMP anticipates incorporation of the Green Loop, a linear park connecting the OMSI District to the rest of the Central City and providing a range of open space and recreational amenities.

**5.CE-6:** The mixed uses proposed for the Opera Tracts will complement the diverse array of commercial enterprises (river transportation and tourism operation, light industrial facilities, brew pub, public storage facilities) on SE Caruthers Street. At the foot of the street, Portland Opera is planning a performing arts center oriented to the river and greenway trail which could complement future expansion of Portland Spirit's operations.

The massing of Opera 2 will be oriented toward OMSI Station, allowing its southern massing to react to its light industrial context. The Opera 1 building will be oriented toward the river, with a secondary emphasis on the station.

**5.CE-7a:** Consistent with this policy, the proposed CCMP will retain the historic Turbine Hall and Pepco Buildings. The PGE Stephens Substation building cannot be preserved because of contamination levels, and PGE is planning to demolish it prior to development. Pepco and the Turbine Hall are significant reminders of past uses and architectural style in the CCMP area and will be integrated with the emerging mix of uses contemplated by the code and the CCMP.

## CCFDG

**A3 Respect the Portland Block Structures:** The CCMP plan area is located between the Willamette River to the west and the parallel UPRR tracks to the east, and the traditional 200-block pattern was never implemented. Because it does not exist north, east, south, or west of the site, configuring development tracts this way would result in considerable cost and limited new grid. The proposed development tracts are sized at a similar scale to the traditional Portland block, and care has been taken to provide space between buildings and a regular pattern of pedestrian connectivity between the tracts.

**A4 Use Unifying Elements:** Several urban design strategies are included in the CCMP to ensure consistency of experience in key areas of the plan area. Along the Central Pedestrian Spine, buildings will have a maximum podium height of 50 feet to be consistent with the datum established by the main OMSI buildings at the center of the plan area, with the exception of Tract G, the massing of which is performing an important gateway function. All the sidewalks are at least 12 feet wide, and all the ground floors of the buildings will be at least 15 feet high. The north-south circulation routes, the greenway trail, the Central Pedestrian Spine, and New Water Avenue unify the district from north to south, while the seven east-west passageways link the north-south routes to the river in a ladder configuration (see Urban Design Framework + Design Tenets, p. 10). Each east-west passage will be planted with trees and native vegetation and/or provide a view of the river from the interior, creating a unified wayfinding framework.

**A5 Enhance, Embellish, and Identify Areas:** The OMSI CCMP plan area is characterized by its industrial history, its relationship to the Willamette River, and the presence of OMSI, Portland Opera, and PCC. In addition to the orientation of buildings, pathways, and open spaces toward the river and the connectivity of these institutions along the Central Spine, industrial, educational and cultural themes will be reinforced through wayfinding and public art within the right-of-way. This is a continuation and expansion of how OMSI has animated the public spaces adjacent to its existing facility with educational installations, industrial public art, and institutional branding.

**A6 Reuse / Rehabilitate / Restore Buildings:** The OMSI District will retain the existing museum and Pepco buildings. While the current layout of the PCC CLIMB Center does not adequately provide for

an evolving and flexible approach to educational delivery methods, PCC's preference is to retain the building and modify it in the future. Portland Opera's Hampton Center is undersized for the future program and will likely be redeveloped.

**A7 Establish and Maintain a Sense of Urban Enclosure:** Key frontages along Old Water Avenue will be required to meet Required Building Lines to create a sense of urban enclosure along the Central Pedestrian Spine. In these zones (see Required Building Lines, p. 29), 75% of the ground level façade must meet the Maximum Building Coverage Line and the remaining 25% must be located within twelve feet of it. The remaining sides of the buildings on New Water Avenue or the Loop Road must locate 50% of the ground level façade on the Maximum Building Coverage Line, with the remainder within twelve feet of it. This will create a significant building wall and sense of urban enclosure along those streets and allow more flexibility in providing pedestrian-oriented spaces adjacent to the sidewalks.

The Opera 1 Tract is intended to have a landmark building, a performing arts center oriented to the river. Rather than attempt to prescribe where the ground floor building lines should be on such a structure at the district master planning scale, we propose to await the Design Review of the future building to discuss its response to the Central City Fundamental Design guidelines, and to potential future development plans on the tract to the south.

**A8 Contribute to a Vibrant Streetscape:** While this guideline is most effectively addressed during Design Review for future building proposals, the OMSI CCMP does require active uses be focused on the key pedestrian areas: the Central Pedestrian Spine and OMSI Station, as well as the greenway trail at the Opera 1 Tract.

**B5 Make Plazas, Parks and Open Space Successful:** Primary Entry Zones have been located to make plazas and open spaces successful to the degree possible (see Ground Floor Active Uses, p. 30). The primary entry for Tract H will be located across from the OMSI entry plaza; for Tracts E and F on the Central Pedestrian Spine; for Tracts D and Opera 2 at OMSI Station; and for Opera 1 facing the greenway trail. For Tract A and the PCC Tract, the primary entrance will support the upper end of the Central Pedestrian Spine, where Old Water Avenue meets New Water Avenue. While the area of Tract A is very large, due to the easements associated with the viaduct above, the developable area is very narrow.

Orienting the primary entrance toward the space under the freeway would be a challenge to make successful and could detract from the responsibility to activate the Central Pedestrian Spine. The open space will be activated by the greenway trail, the overlook, and various interpretive opportunities. The south plaza on Tract B will be supported from all directions: by the primary entry zone on Tract C, by active uses on Tracts E and C, the outlet of the passageway in Tract E, which connects to the Central Pedestrian Spine, the greenway trail on its western edge, and the outlet of the OMSI Station passageway south of Tract C. In addition, OMSI intends to program this space with educational and cultural activities.

**C1 Enhance View Opportunities:** View opportunities are retained and enhanced within the proposed waterfront education park, with five scenic overlooks and multiple other view opportunities planned, outside the OMSI buildings and west of the South Plaza.

The massing of certain buildings must be set back at least twenty feet at the 50' height to define public open spaces and acknowledge the central presence of the OMSI museum buildings. (See Building Setbacks, p. 28.) These setbacks create opportunities for outdoor viewpoints.

**C9 Develop Flexible Sidewalk-level Spaces:** While this guideline is most effectively addressed during Design Review for future building proposals, the OMSI CCMP proposes flexibility in Required Building Lines (see p. 29) to leave room for flexible spaces at the sidewalk level of buildings, and indicates areas of ground floor active uses and primary entry zones (see p. 30) that will support and complement this guideline.

## RESPONSE CONTINUED

### CEDG

**A5-3:** All new utility services are planned to be underground.

**A5-4:** Due to the unusual geometry of the plan area, the open space network includes many open areas in a variety of shapes and sizes ideal for art and interpretive features (see Open Space Network, p. 38). OMSI intends to take advantage of this to expand its current program of placing interpretive, cultural, and educational displays outside its walls.

**A5-5:** The emphasis in the OMSI CCMP is on connecting the OMSI District with its frontage along the Willamette River, the original water feature. It accomplishes this using east-west passageways to connect the interior to the river, providing five scenic overlooks and many more viewing opportunities along the waterfront, and by providing a large open plaza on Tract B, from which views of the river will be kept open.

**C1-1:** Structured parking is planned in support of the mixed-use program of most tracts, with most of that above ground due to a high seasonal water table. Parking is intended to be shared among uses to increase the efficiency of parking use and to reduce overall parking ratios. To the extent practical and feasible, access for service functions, including parking entries, has been combined and placed to support the pedestrian environment (see Proposed Streets, p. 12). The intent is that future design of buildings with above-ground structured parking will use exterior architectural screening so that the parking will not be perceived by pedestrians.

On Tract A, a segment of the existing parking lot is proposed to be preserved to serve the Pepco Building and a future Tract A building. On the PCC Tract, if the PCC CLIMB Center is retained, the existing ADA spaces are proposed to remain.

A limited amount of on-street parking is planned in the district to support retail. The space is flexible and can be converted to pickup/drop off or on-street loading should demand for on-street parking decline in the future.

### CCMP

**H.5:** There are no public parks located within or adjacent to the plan area. However, the OMSI CCMP meets the intent of this criteria by establishing lower building heights for buildings adjacent to the waterfront and greenway trail (see Design Tenets for Massing, p. 10) and by requiring ground floor active uses on building façades adjacent to open areas (see Ground Floor Active Use Areas, p. 26). A shadow study has been performed (see Appendix B) that demonstrates that shadows from development within the plan boundary will not exceed the limits prescribed in PZC 33.510.255.K.2.

**H.7:** The OMSI CCMP effectively distributes open areas throughout the plan area. The seven east-west corridors tie the interior to the waterfront education park, which extends the entire length of the western boundary. The greenway trail connects the waterfront education park, and by extension the interior open areas, to locations to the north. Connections are blocked to the east by the railroad tracks and embankment. Connections to the west can be made via the Tilikum Crossing Bridge, and should the Green Loop linear park concept be realized, that park-like feature will extend along its adopted alignment to the east along SE Caruthers Street. An alternative alignment is under consideration, which would extend to the east via a future Green Loop bridge that would touch down in an undetermined location close to the SE 6<sup>th</sup> Avenue alignment (see Open Space Network p. 38.)

**H.13:** There are five scenic viewpoints, CC-SE13, 15, 16, 17, and 19, located within the plan area, all on the Willamette riverbank looking west. All five will be preserved and/or enhanced when the waterfront is redeveloped. The CCMP proposes to move Viewpoint CC-SE13 to a location approximately 200 feet south to the end of the Bull Run pedestrian connection (see 3.2 Open Space, p. 19). This location is still on the greenway trail in the northern reach of OMSI's waterfront, and it is directly connected to the interior of the district via the Bull Run passage, so access will be improved. It preserves views of the river and the downtown skyline and provides an opportunity for interpretive, interactive, and/or cultural gathering space (see Open Space Network p. 38.) Secondary focal features of the West Hills, the Hawthorne Bridge, Riverplace Marina, and the South Downtown/University District skyline are preserved.



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