



Vancouver Waterfront Project

Creating Community Vision

Mark Leece, PE
Principal Engineer



Vancouver, Washington: In Context



Historical Northwest Port

Original Hudson's Bay Company
Post Established 1824

Responsible for
"outfitting Portland"



Working Waterfront



Port growth continued throughout the 1950s.

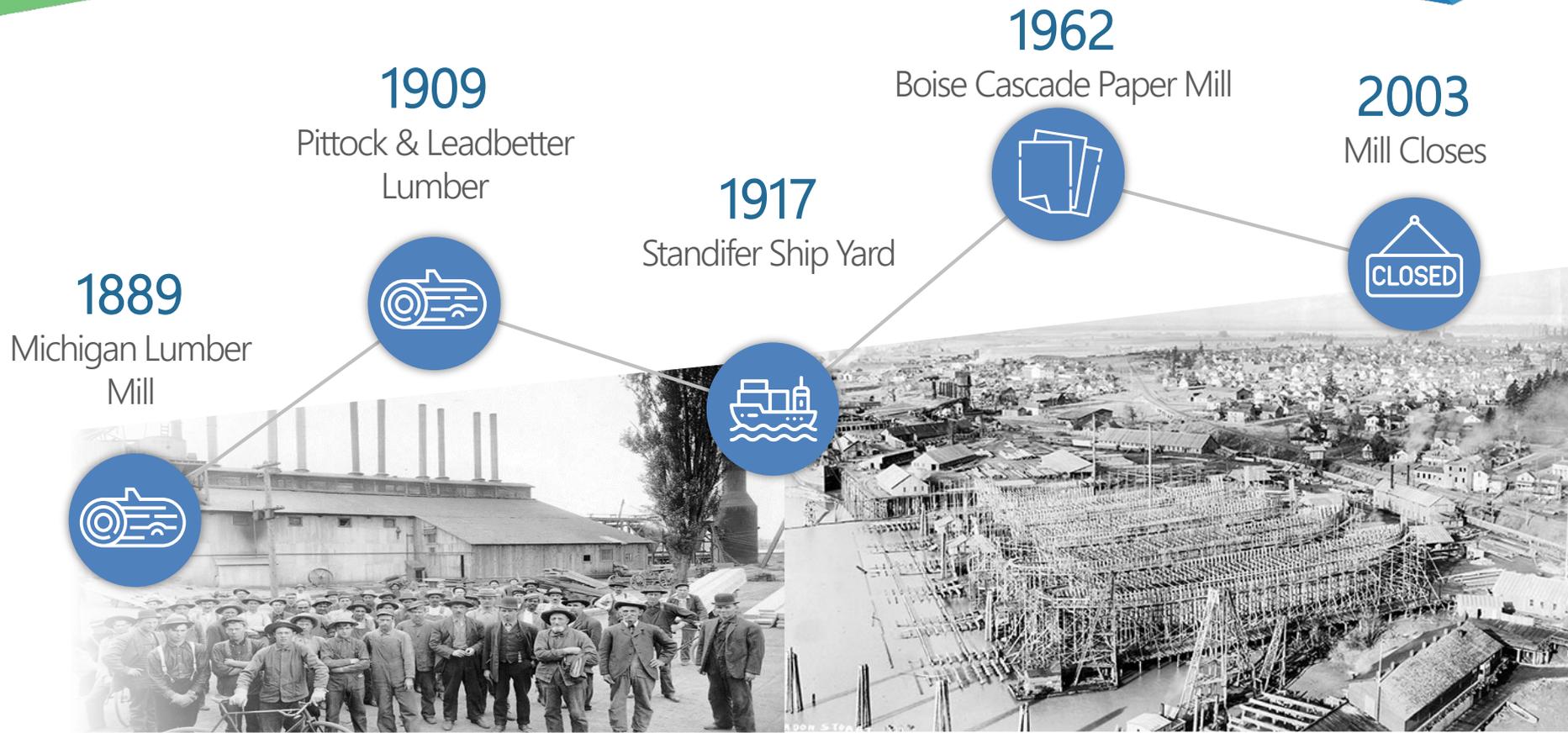


Al Kadow on the docks during Vinport flood, 1948

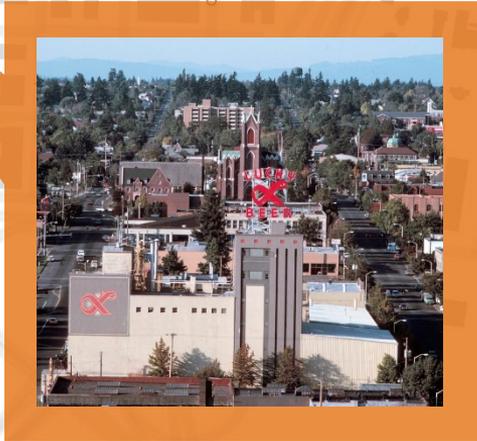
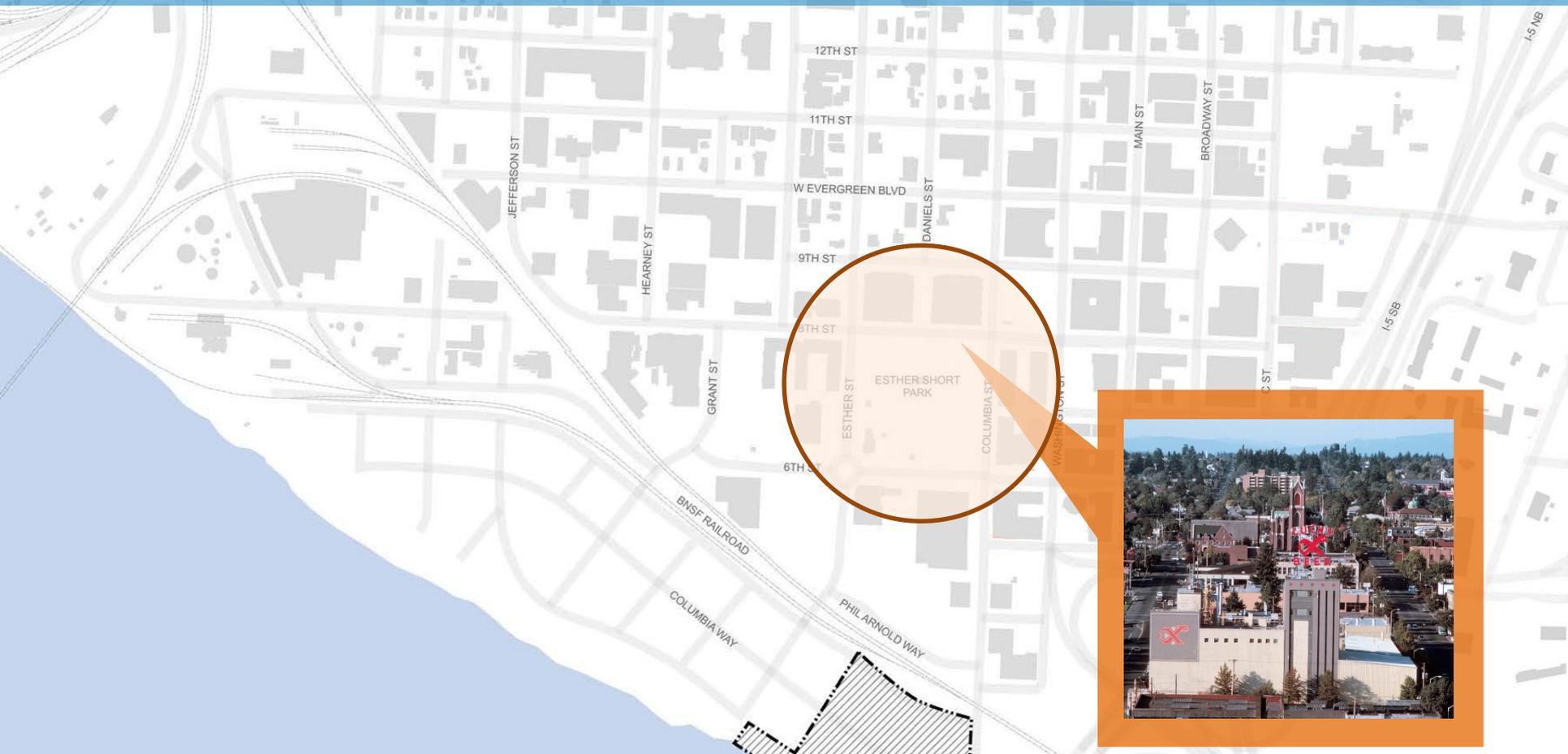


Final I waterfront, ca. 1930

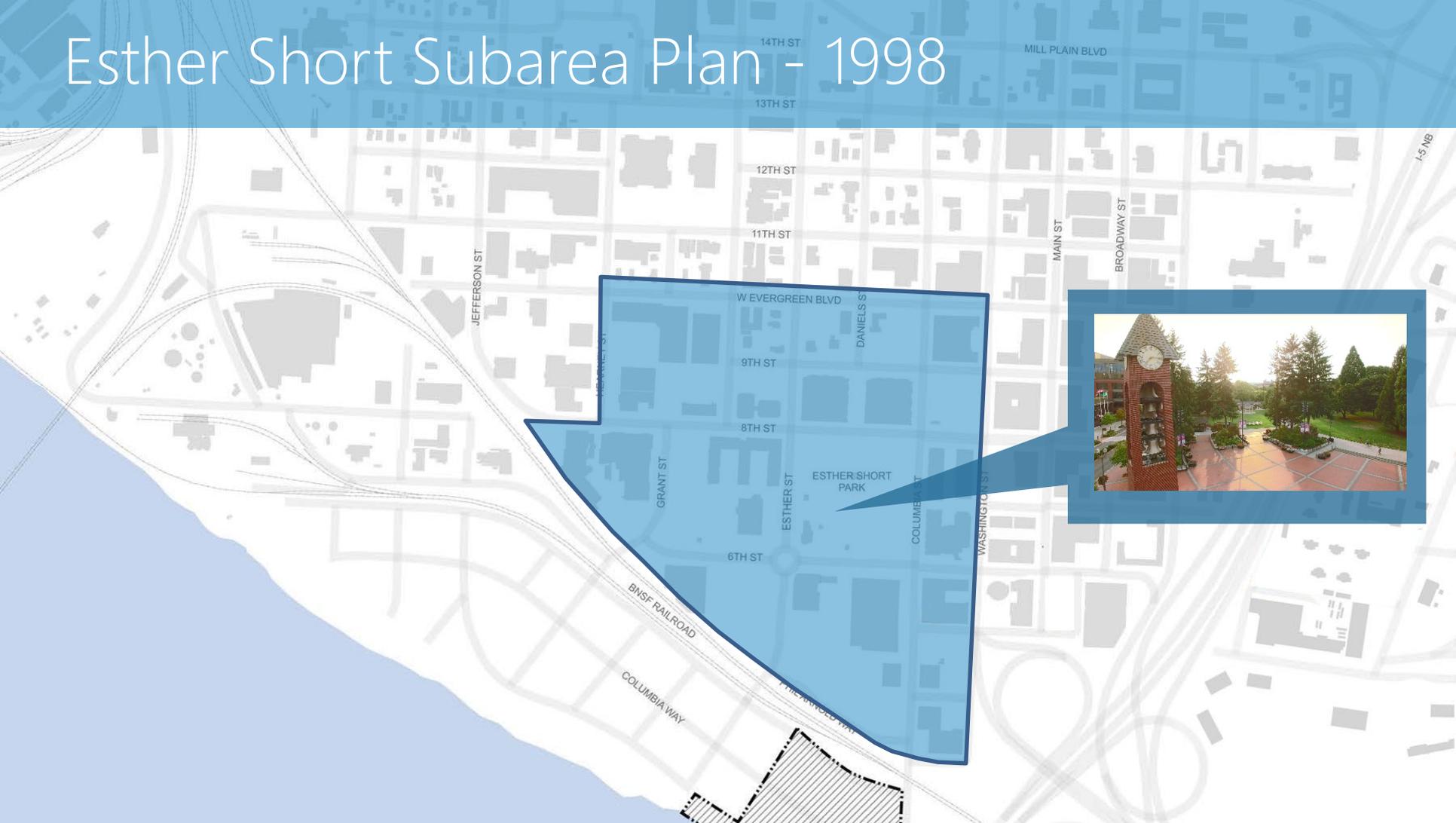
Working Waterfront



Beginnings: Brewery Blocks - 1990



Esther Short Subarea Plan - 1998



Vancouver City Center Vision - 2007



Cascading Development Efforts



Hilton
Development



Esther Short
Roundabout



Boise Cascade
Site Evaluation

Development Milestones

Adopted
Vancouver City
Center Vision



JUN 2007

CWLLC Buys
Boise Cascade
Property



MAR 2008

COV-CWLLC
Development
Agreement



SEP 2009

Access Project
Rail Phase
Begins (BNSF)



JAN 2011

Access Project
Street Phase Begins
(City Led,
TIB Criteria)



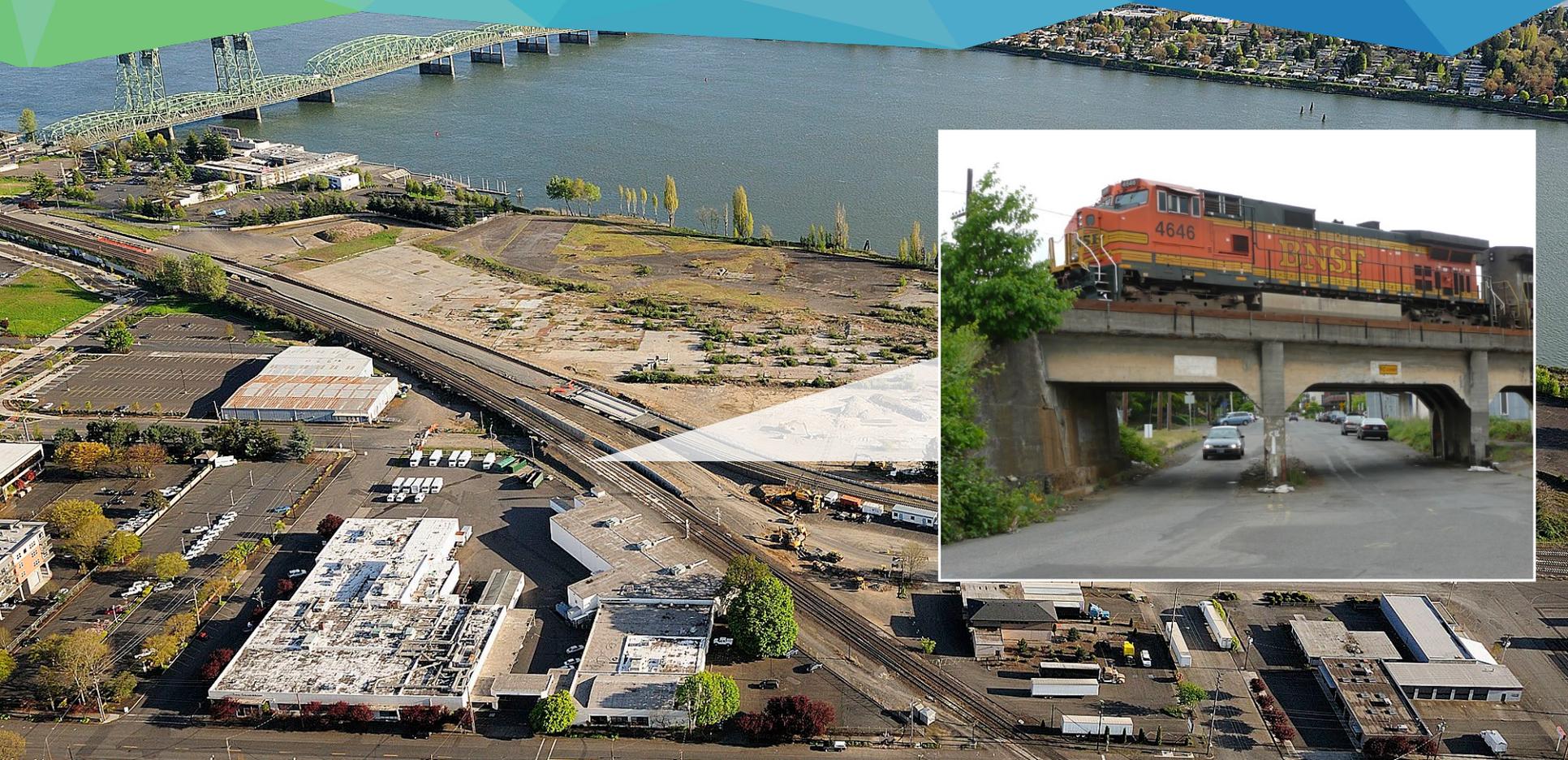
MID 2013

Waterfront Master Plan

- + 35 Acres of Brownfield Development
- + 3,000+ Residential Units
- + 1 Million Square Feet of Mixed-Use Development
- + 7-Acre Waterfront Park and Trail



Opening the Waterfront: Freight Access



Opening the Waterfront: Freight Access



Coordinating Funding Partners



COLUMBIA
WATERFRONT LLC

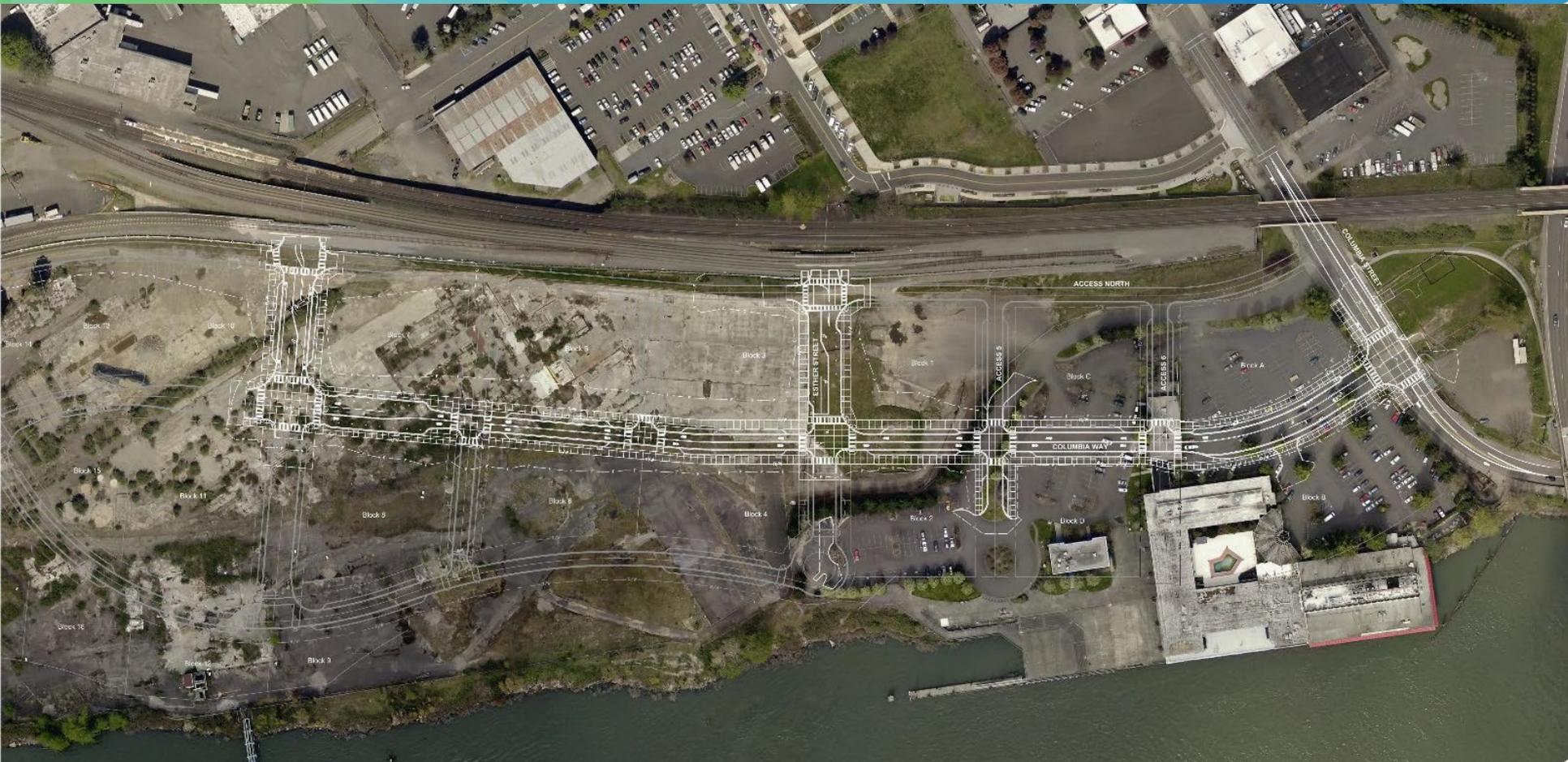


**WESTERN
FEDERAL LANDS**

Utility Plan Phase of TIB Project



Columbia Way, Esther Street, Grant Street - TIB



Project Consultants



murraysmith



nbbj



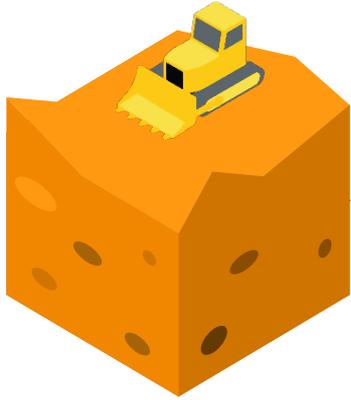
Hansen | DESIGN



Development Milestones

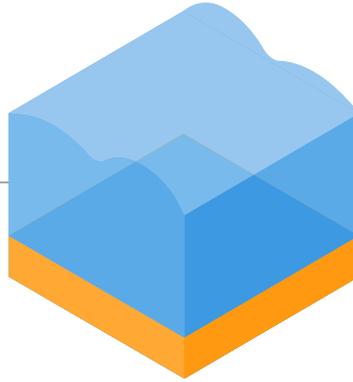


Challenges Addressed



Subsurface Challenges

- Soil Impacts
- Legacy Structures



Columbia River Water Level

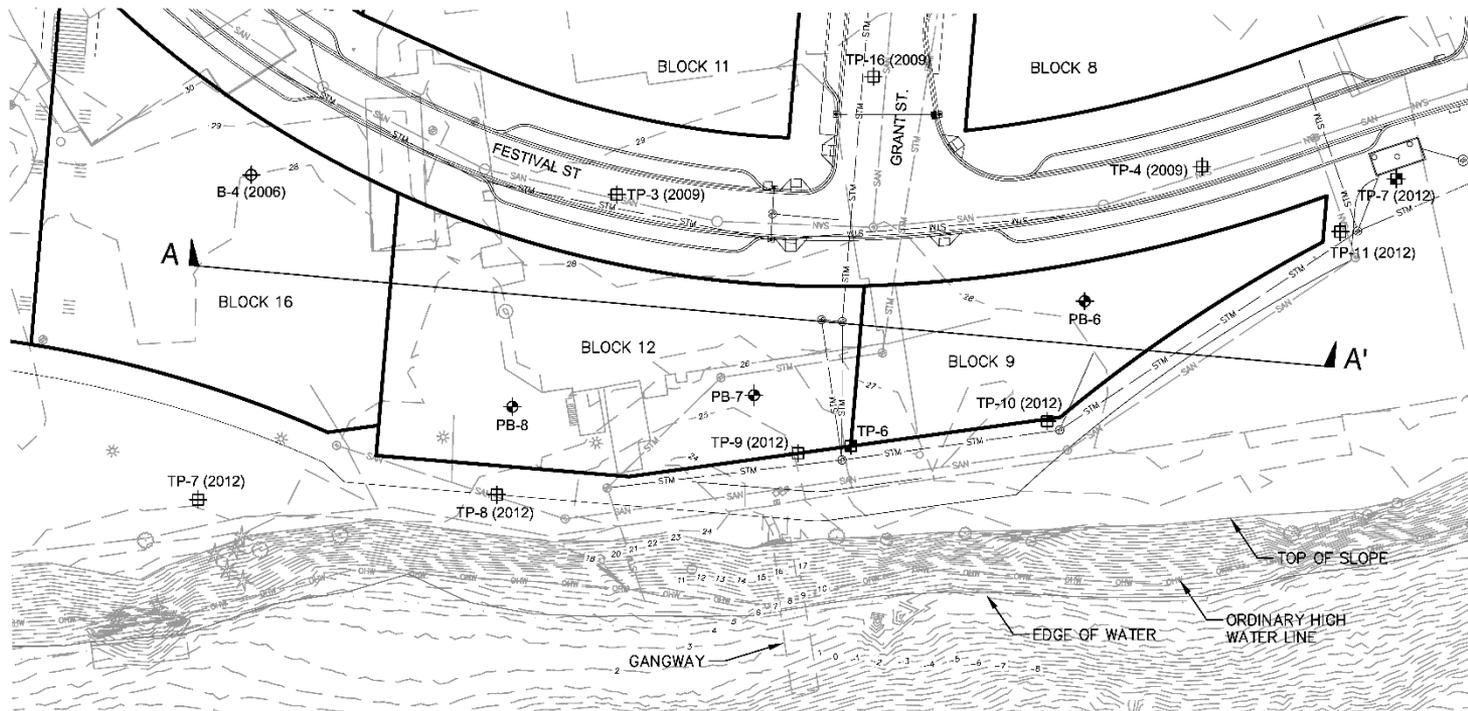
- Storm Outfalls
- Manhole Buoyancy
- Parking Garage Design



Road Design Considerations

- Columbia Way Alignment
- Waterfront Way Characteristics

Soil Impacts



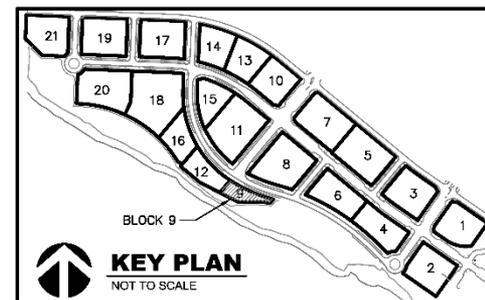
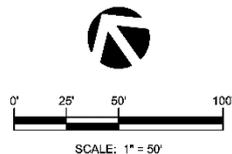
COLUMBIA RIVER SITE PLAN

NOTES:

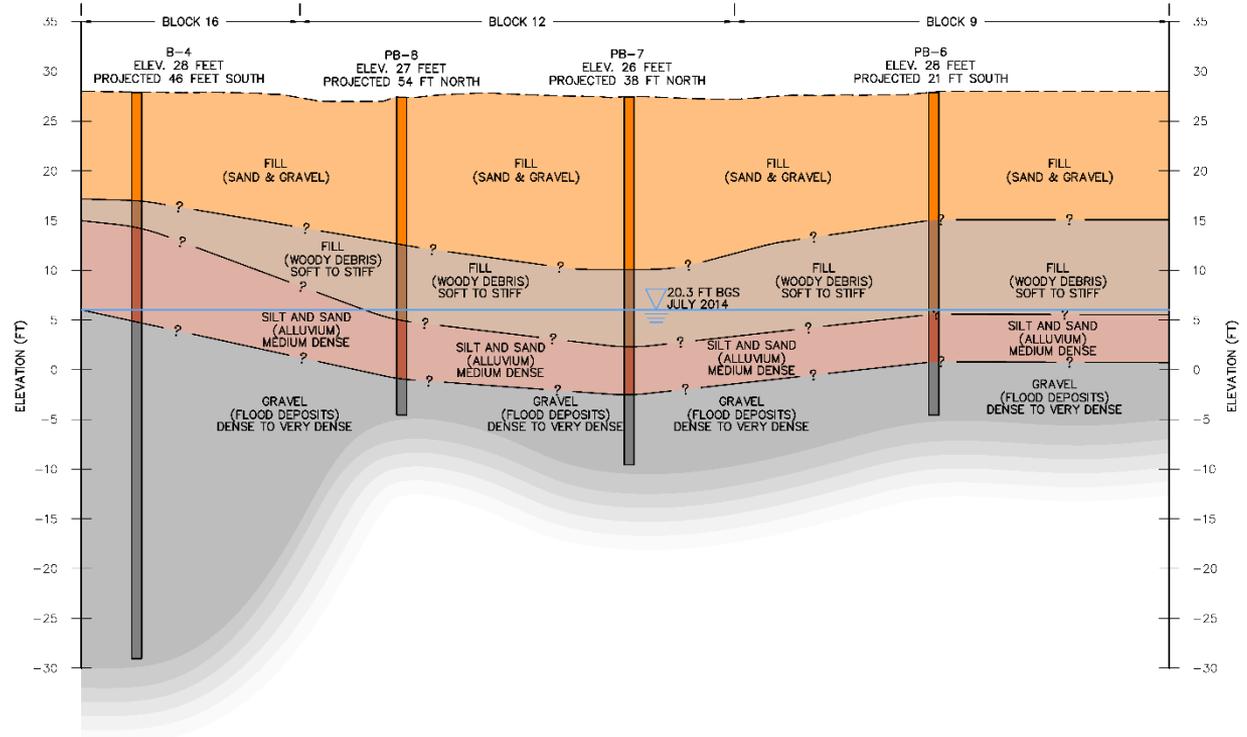
1. ALL LOCATIONS OF EXISTING UTILITIES SHOWN HEREON HAVE BEEN OBTAINED FROM AVAILABLE RECORDS AND SHOULD THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE.

LEGEND

 PB-6	APPROXIMATE BORING NUMBER AND LOCATION	 TP-6	APPROXIMATE TEST PIT NUMBER AND LOCATION
 B-5	APPROXIMATE BORING NUMBER AND LOCATION BY OTHERS (2006/2009)	 TP-4	APPROXIMATE TEST PIT NUMBER AND LOCATION BY OTHERS (2009)



Soil Impacts



SUBSURFACE PROFILE A-A'

HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 10'

LEGEND

	FILL (SAND & GRAVEL) LOOSE TO DENSE, BROWN-GRAY SAND AND GRAVEL		ALLUVIUM MEDIUM DENSE TO DENSE DARK BROWN SILTY SAND/SANDY SILT WITH TRACE WOOD DEBRIS
	FILL (WOODY DEBRIS) SOFT TO STIFF, DARK BROWN SILT WITH WOOD DEBRIS		DENSE TO VERY DENSE DARK BROWN GRAY SILTY GRAVEL

NOTES:

1. SITE TOPOGRAPHY IS APPROXIMATE. ACTUAL GROUND SURFACE MAY VARY. SITE TOPOGRAPHY PROVIDED BY HDJ DESIGN GROUP, PLLC.
2. CONTACTS BETWEEN UNITS ARE INTERPRETIVE AND MAY REPRESENT A GRADUAL TRANSITION. CONDITIONS MAY VARY BETWEEN BORINGS.
3. GROUND WATER LEVEL IS APPROXIMATE AND MAY VARY SEASONALLY.

Site History



1965



2006

Subsurface Challenge: Soil Impacts



Subsurface Challenge: Legacy Structures



Challenge: Columbia River Water Level



- **Storm Outfalls**

- Outfalls submerged in Columbia River
- High water events could submerge Grant Street underpass
- Provisions for pump system in high water events

- **Manhole Buoyancy**

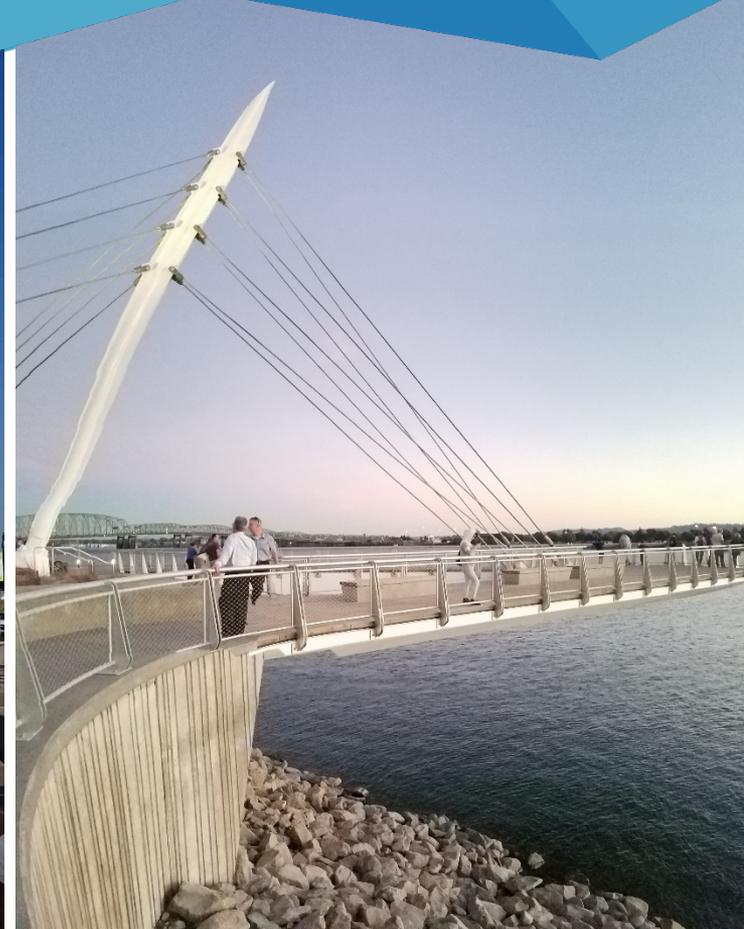
- **Parking Garage Challenges**



Reconnecting to the River



Reconnecting to the River



Opening Day



Credit: Lioneye Aerials

Cultivating Vision: Keys to Success



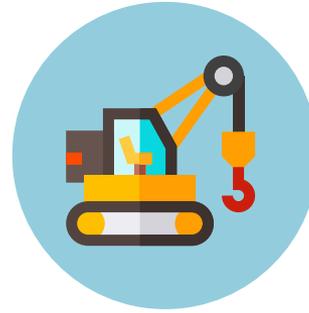
Political will.

Be willing to take risks and invest.



Leverage success.

Early investment in adjacent sites establishes a pathway.



Make it developer-ready.

Do environmental work up-front.



Comprehensive approach.

Develop guiding principals early.



Thank You