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WSP acknowledges that every project we work, takes place on First Peoples Lands. We recognise the Musqueam, Tsleil-Waututh and Squamish First Nations Land, the Centerm Project was founded on.

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Centerm Terminal



The importance of the Port of Vancouver

- Is about the same size as the next five largest Canadian ports combined.
- Fourth largest in North America by tonnes of cargo.
- Home to 29 major terminals
- The Port Authority's role is to ensure goods are moved safely, efficiently and sustainably
- Vancouver has four common user container terminals with a capacity of nearly 3 million TEUs

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Project Details


The Project is split into two sub projects:

- Centerm Expansion Project (CEP) 75% total project cost
- South Shore Access Project (SSAP) 25% total project cost

Design Build Contract
 Included most engineering disciplines
 Design and Construction estimated to take 3 years
 New Terminal Equipment
 Project Cost \$0.5B

The improvements will help:

- Increase capacity from 900k TEU to 1.5m TEU
- Provide a continuous port road from Canada Place to Highway 1
- Reduce travel delays for port users and businesses
- Reduce port-related traffic on local roads



Legend:

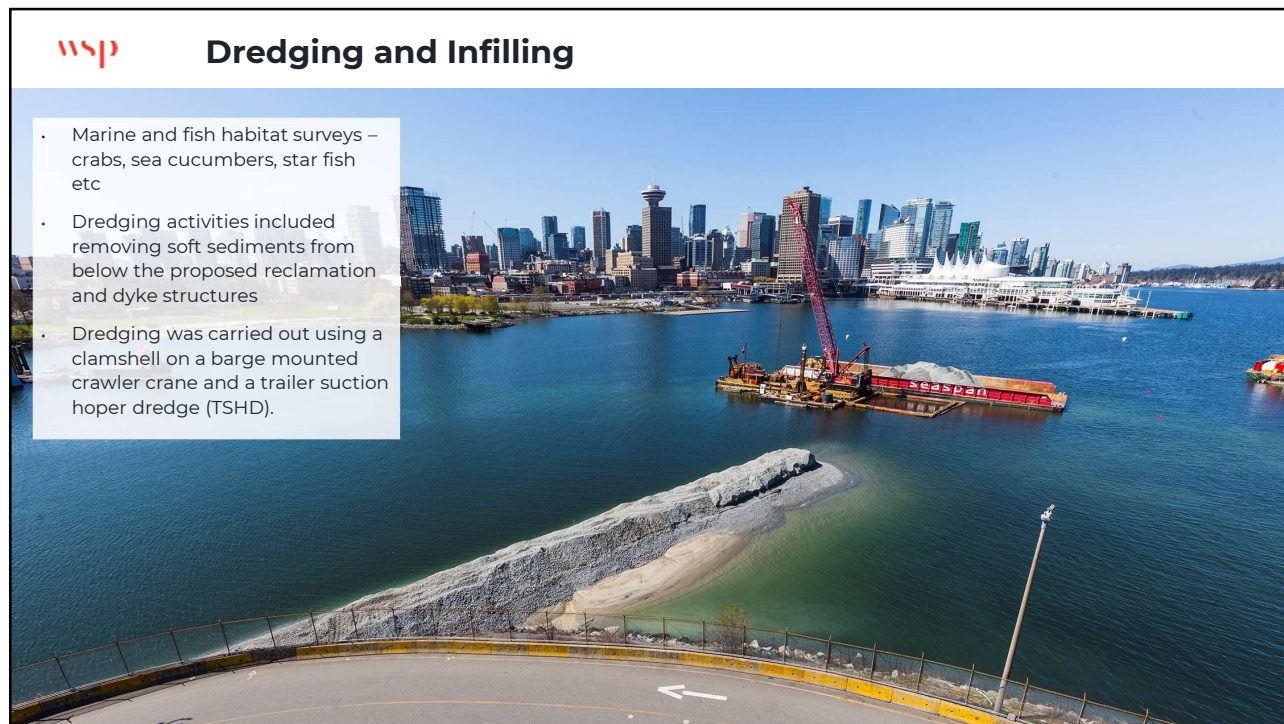
- On-terminal improvements (Centerm Expansion Project)
- Off-terminal improvements (South Shore Access Project)
- Interim

Key features shown in the schematic:

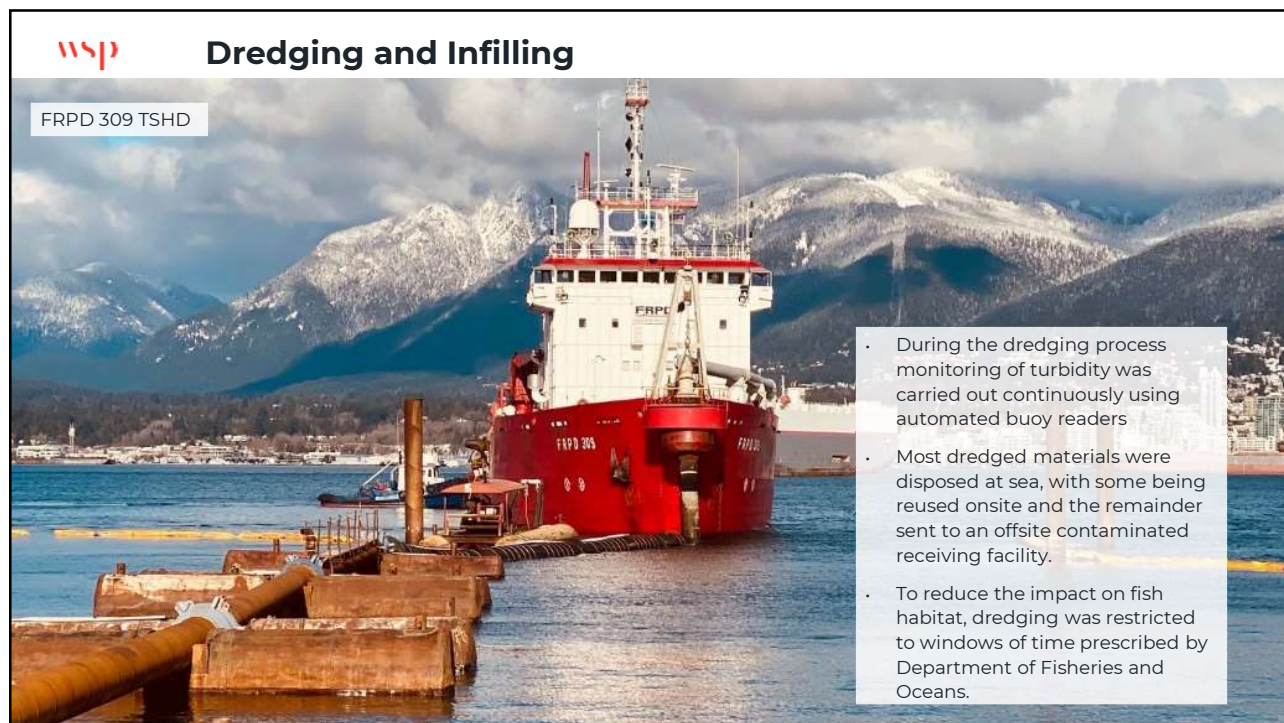
- Western Expansion of Centerm
- Expansion of the Intermodal Yard
- Waterfront Road Extension and Vehicle Access Control System (VACS) Gates
- Removal of Heatley Avenue Overpass
- Reconfiguration of the Container Yard
- Eastern Expansion of Centerm
- Modernize Truck Gate System
- New Container Operations Facility Building and Parking
- Central Road Overpass construction

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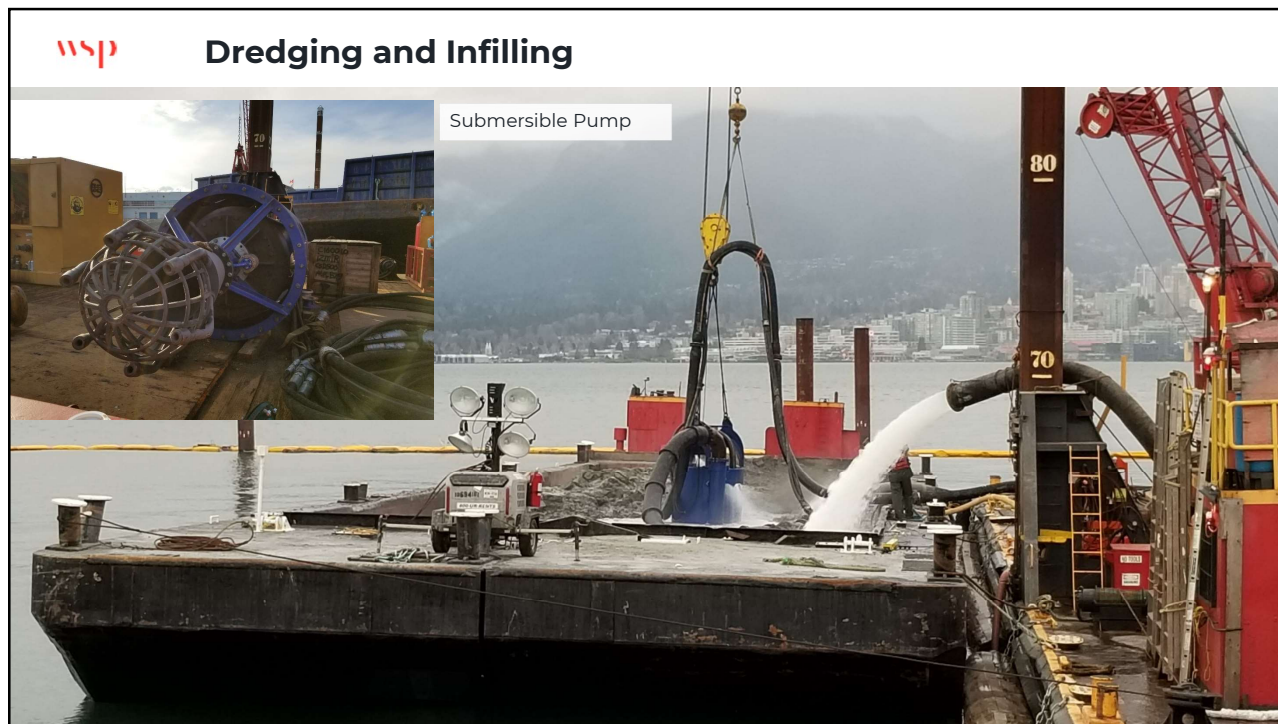
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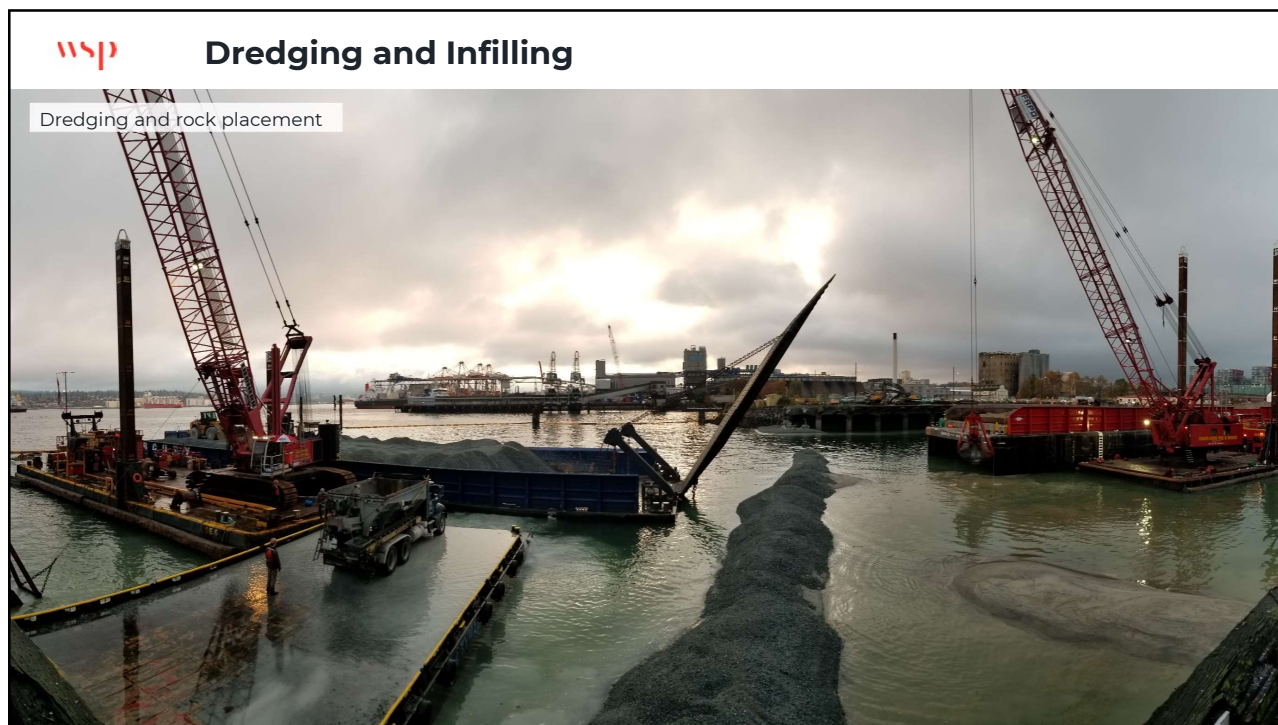
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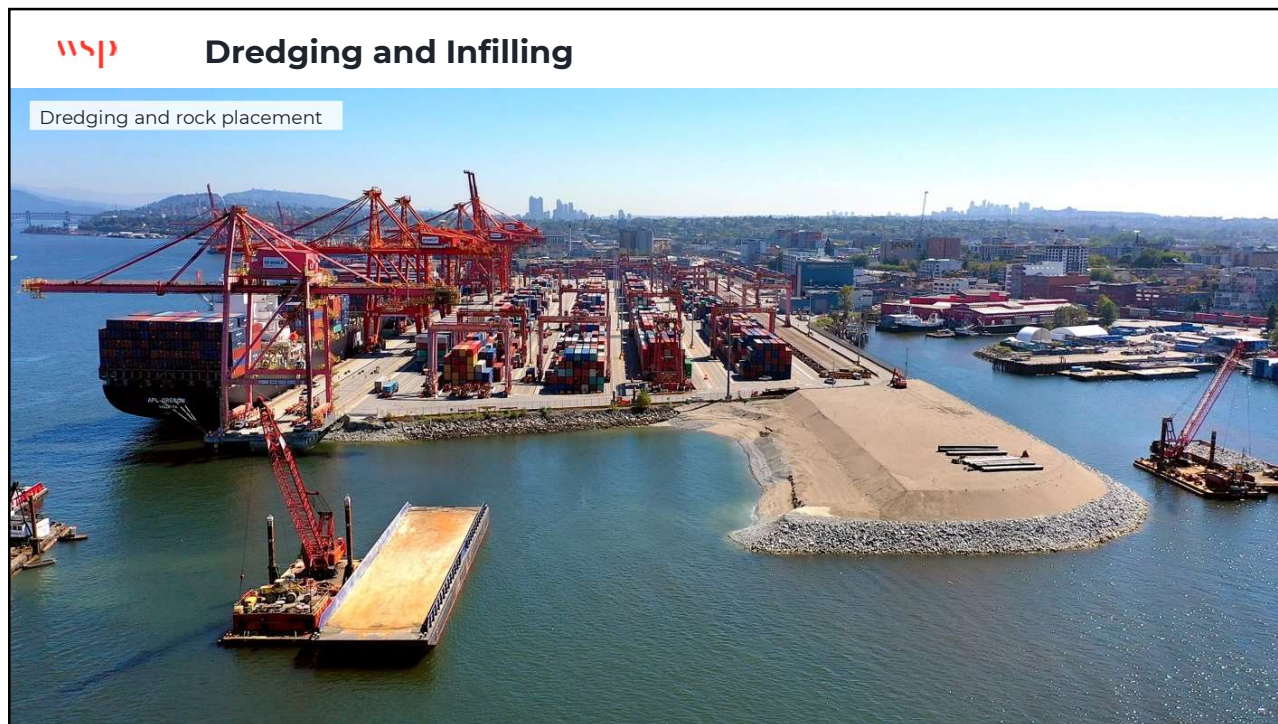
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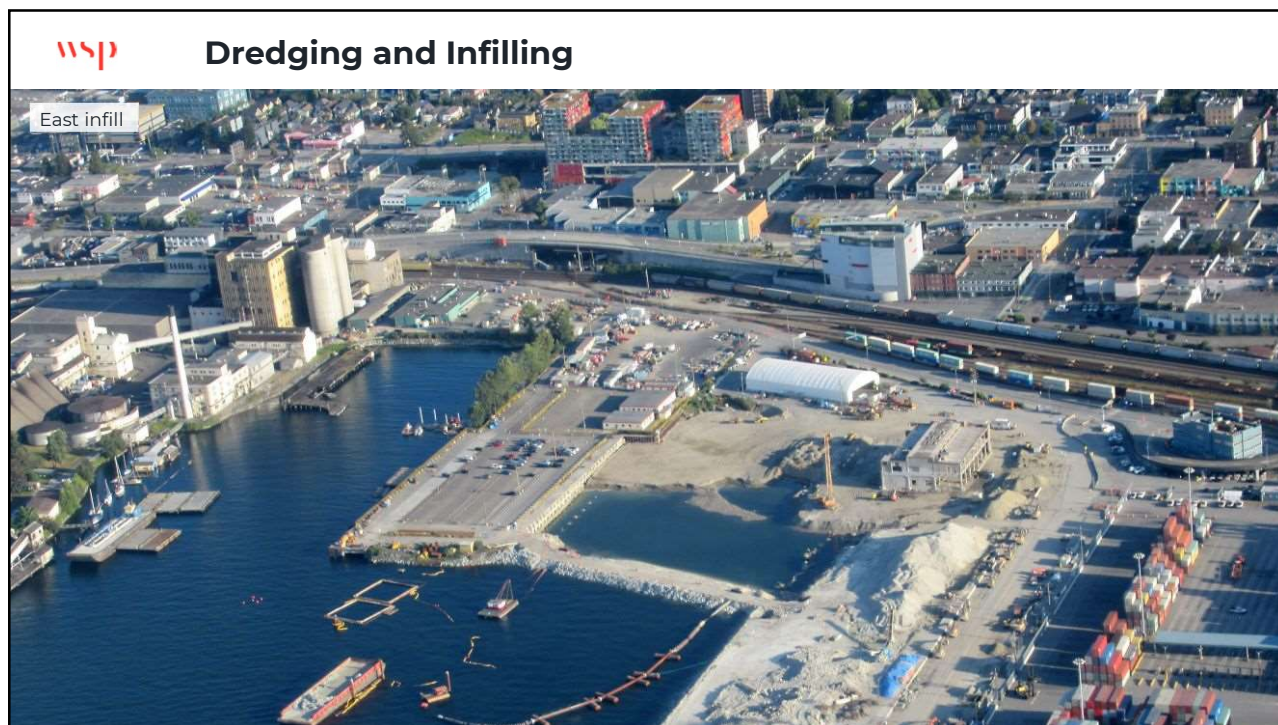
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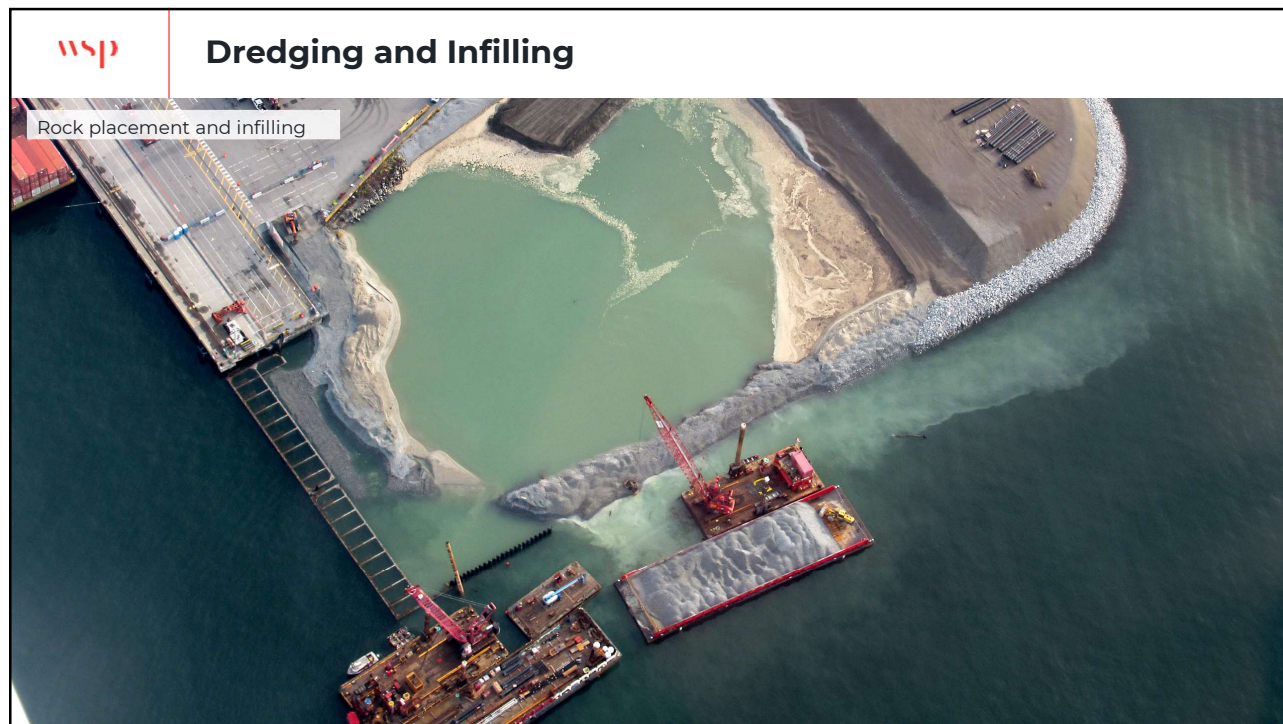
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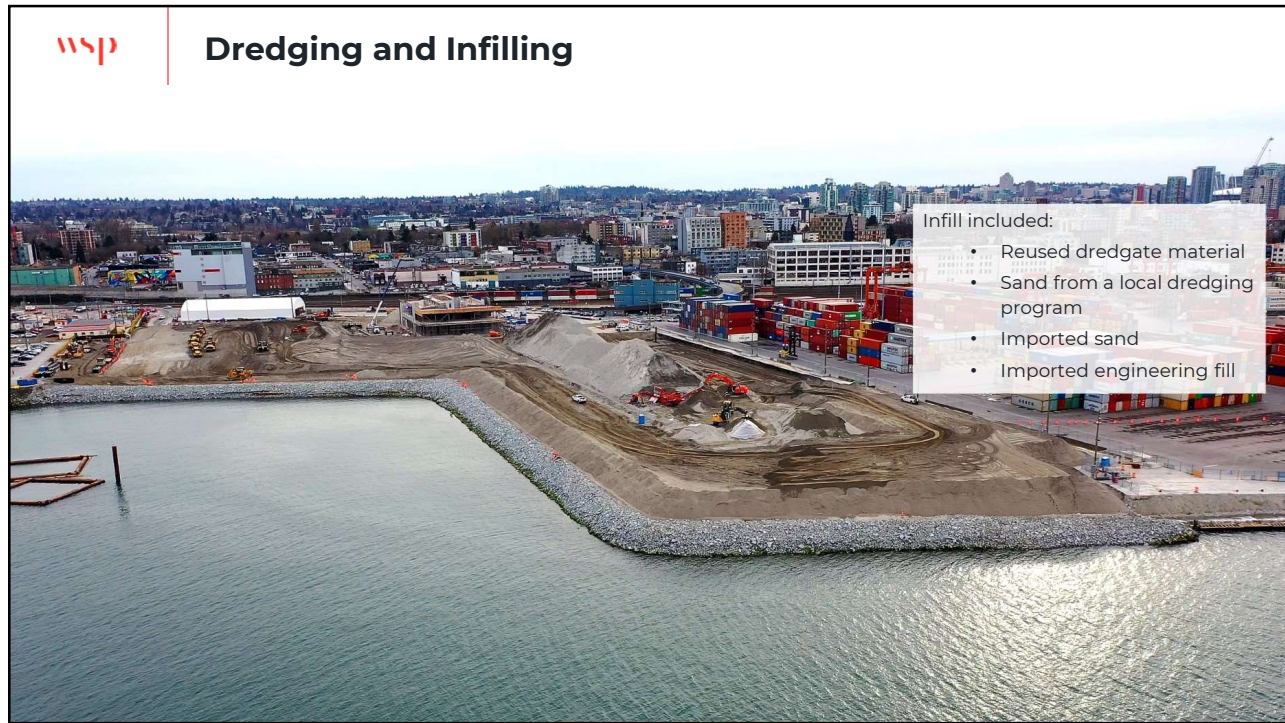
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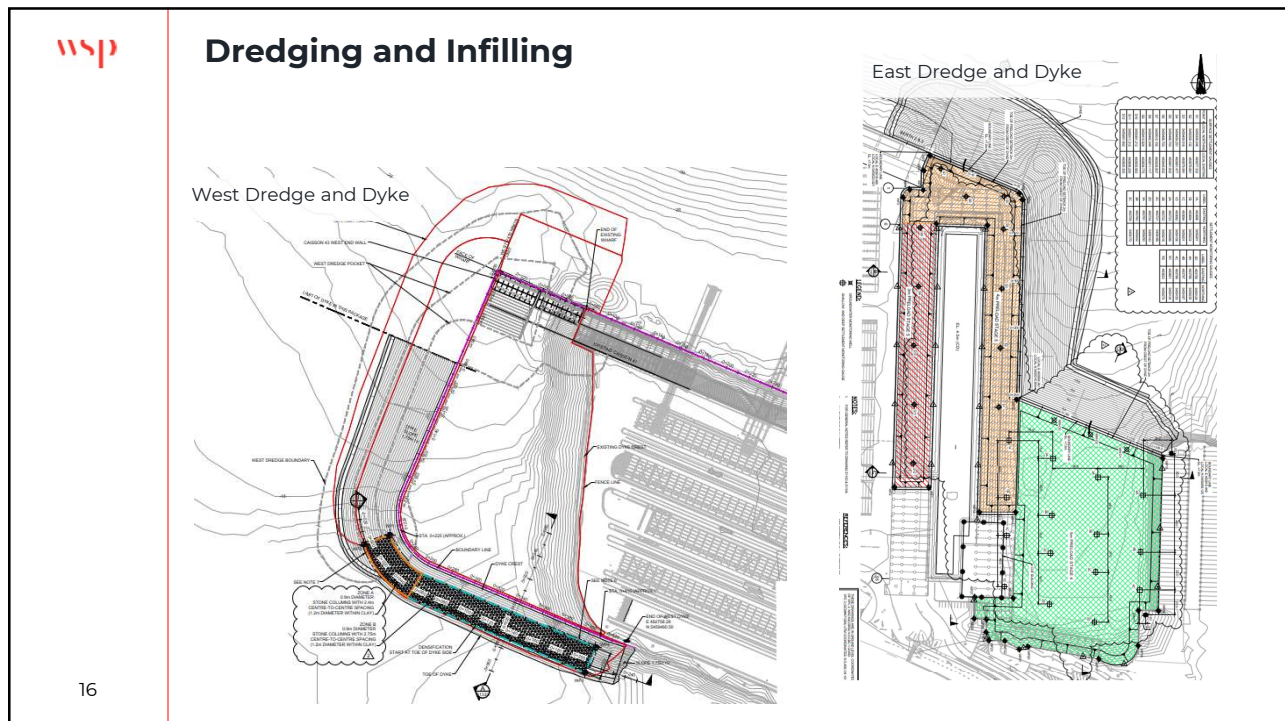
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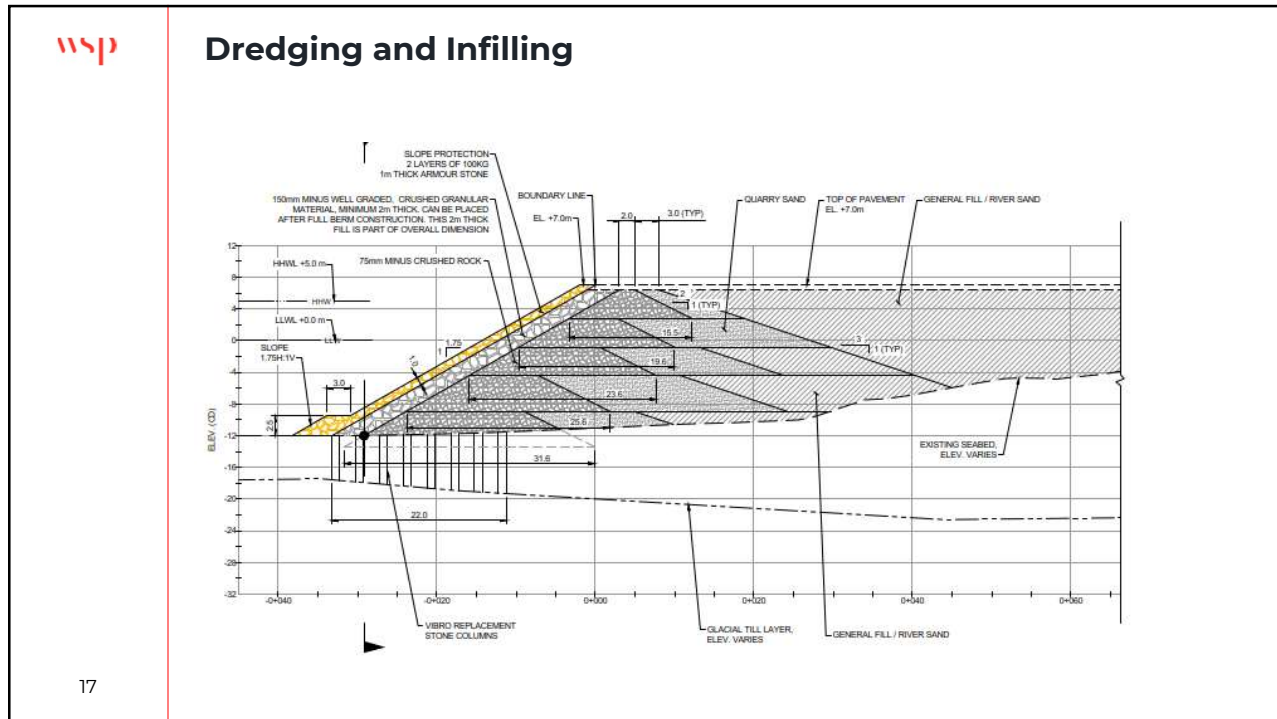
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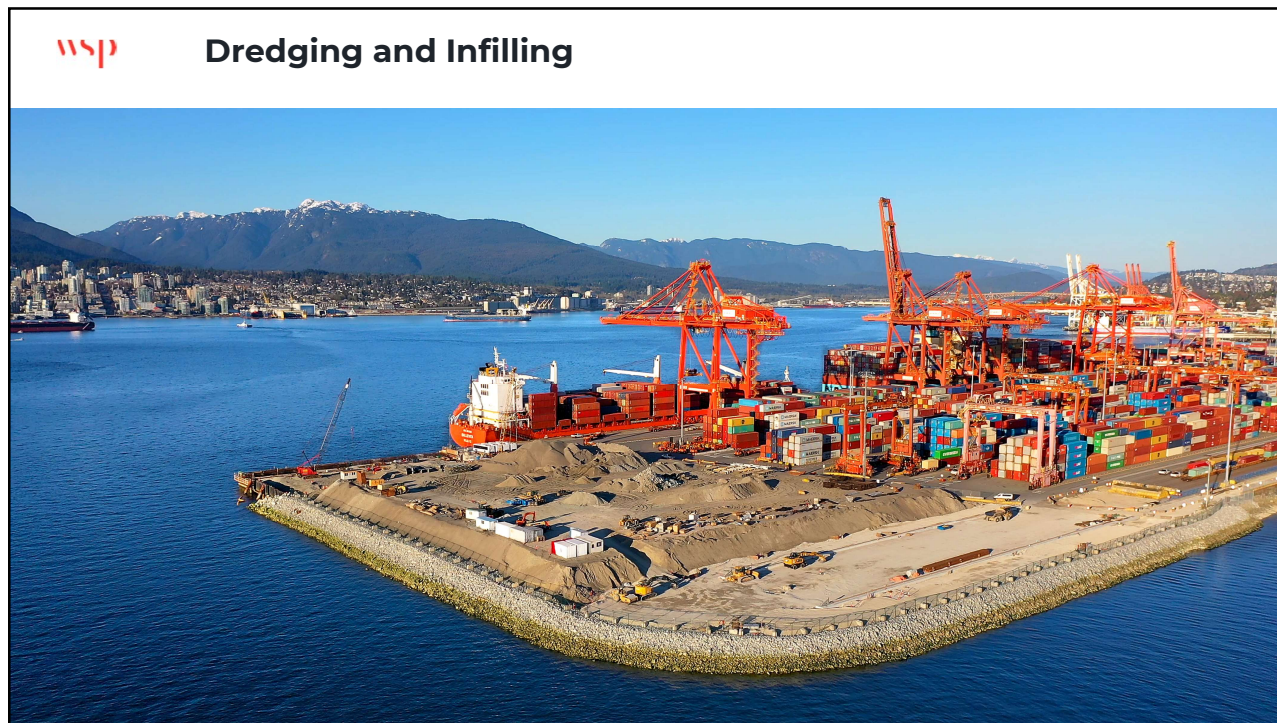


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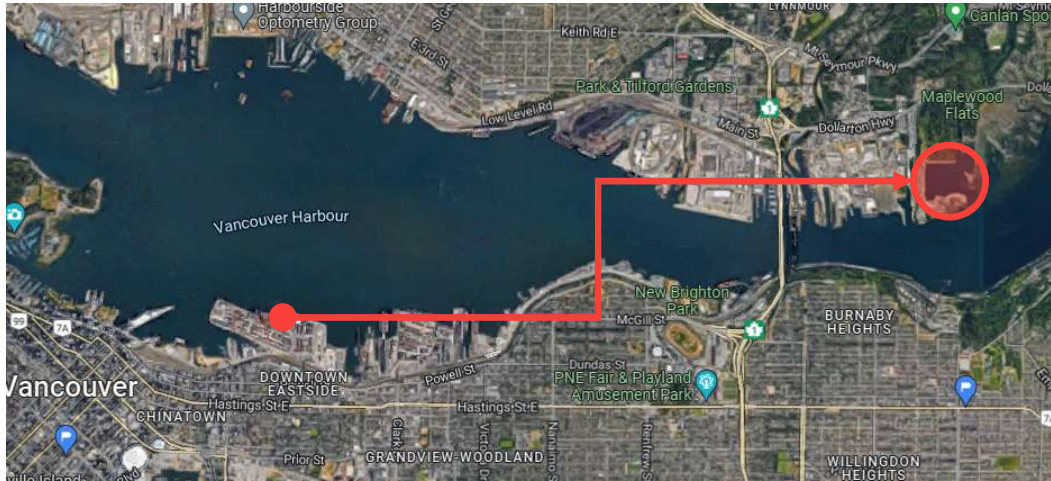
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Marine Habitat Offset



Marine Habitat Offset

The Port Authority's Habitat Enhancement Program (HEP), Is a key initiative which the Port Authority has been running for the past 20 years, where their mandate is to proactively create, restore and enhance habitat within their jurisdiction.

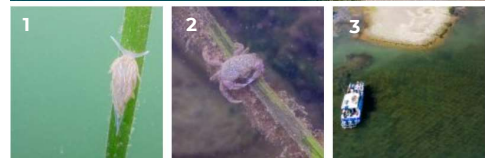
The Maplewood Marine Restoration Project, included

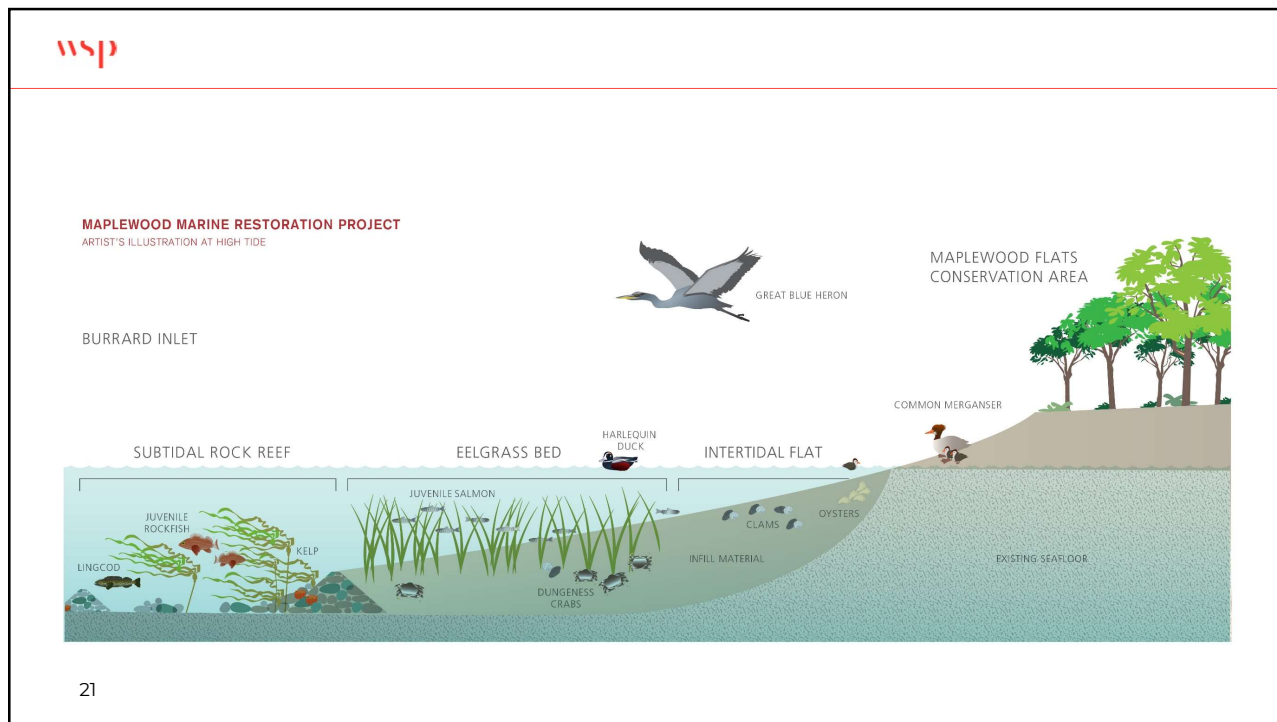
- 5ha of nearshore habitat restoration
- Planting 125,000 eelgrass shoots
- The creation of highly productive habitat areas: 1.5-hectare eelgrass bed, 1.0-hectare rock reef, and a 2.0-hectare tidal flat

(1) Eelgrass provides important refuge and nursery habitat for juvenile fish and invertebrates such as this opalescent nudibranch and Dungeness crab.

(2) A juvenile Dungeness crab uses the newly created habitat.

(3) 125,000 eelgrass shoots were transplanted, the largest eelgrass transplant ever performed in Burrard Inlet.



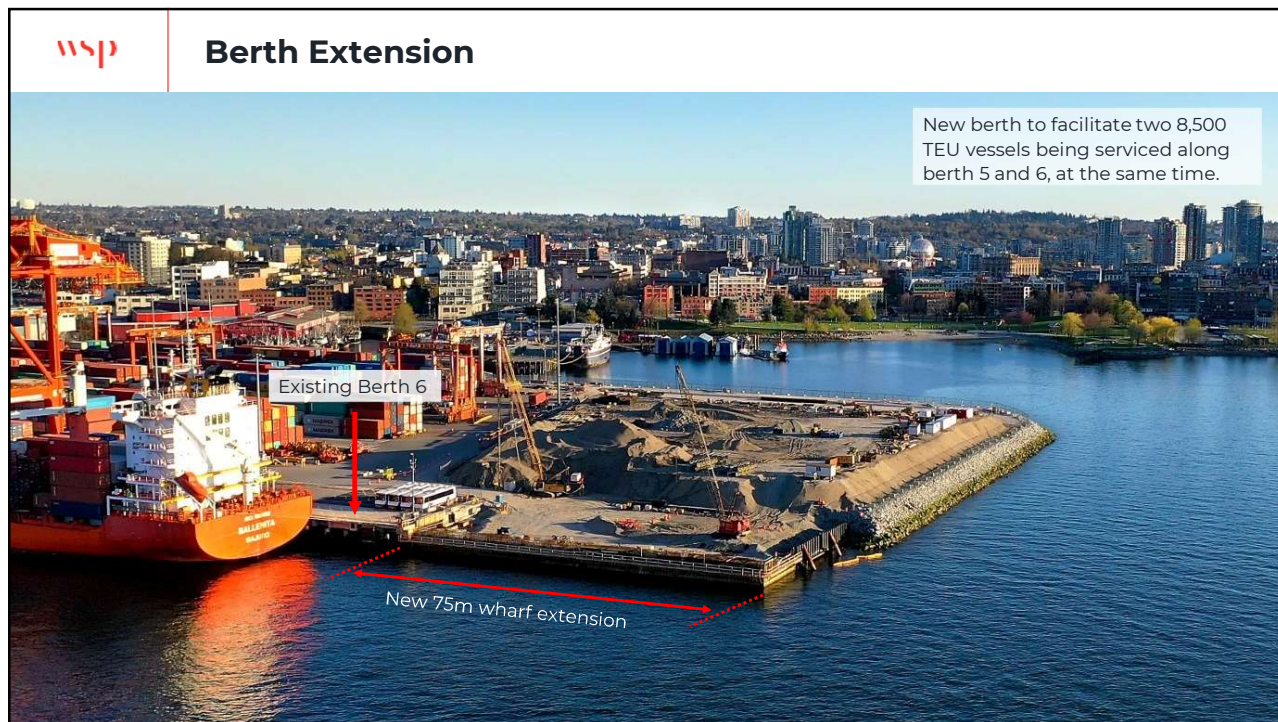


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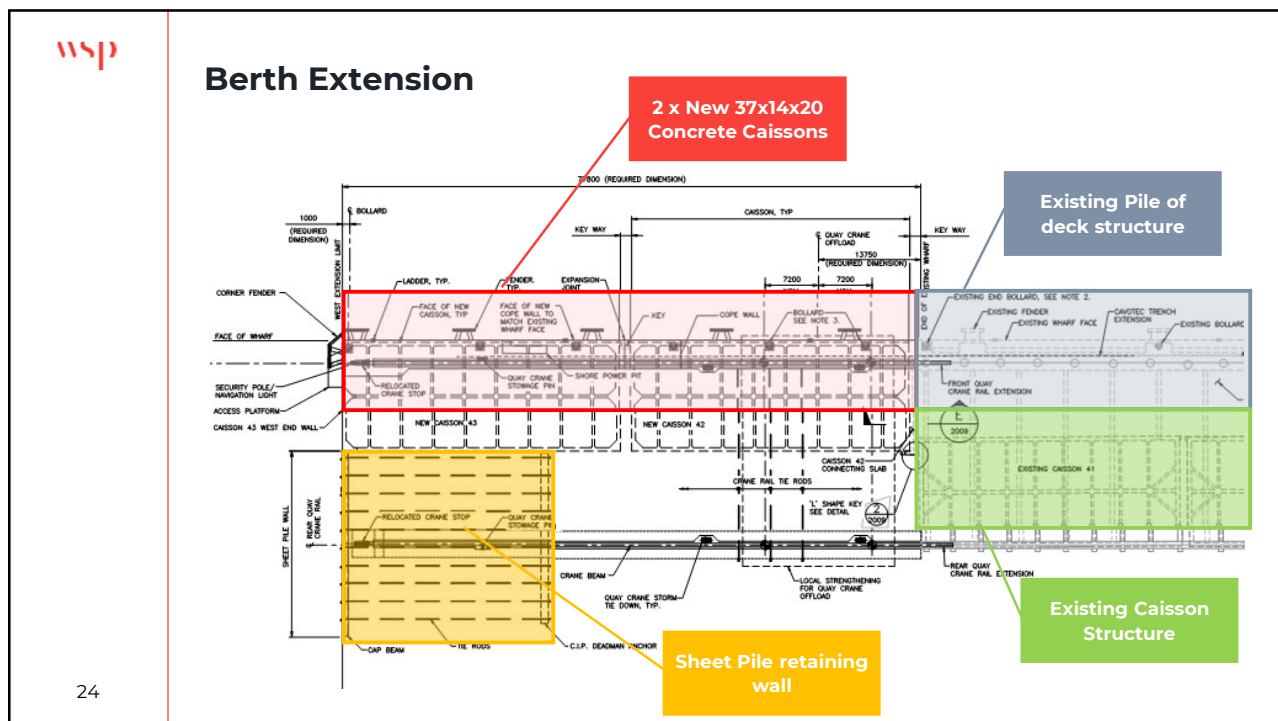
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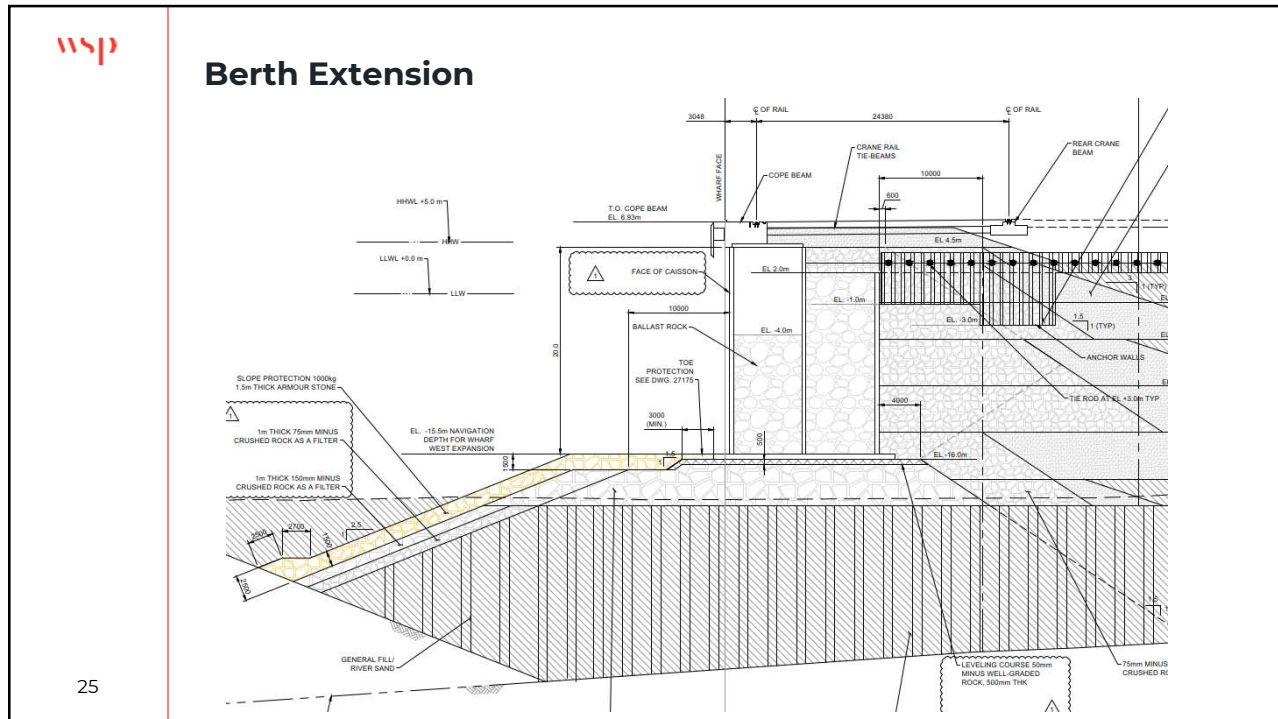
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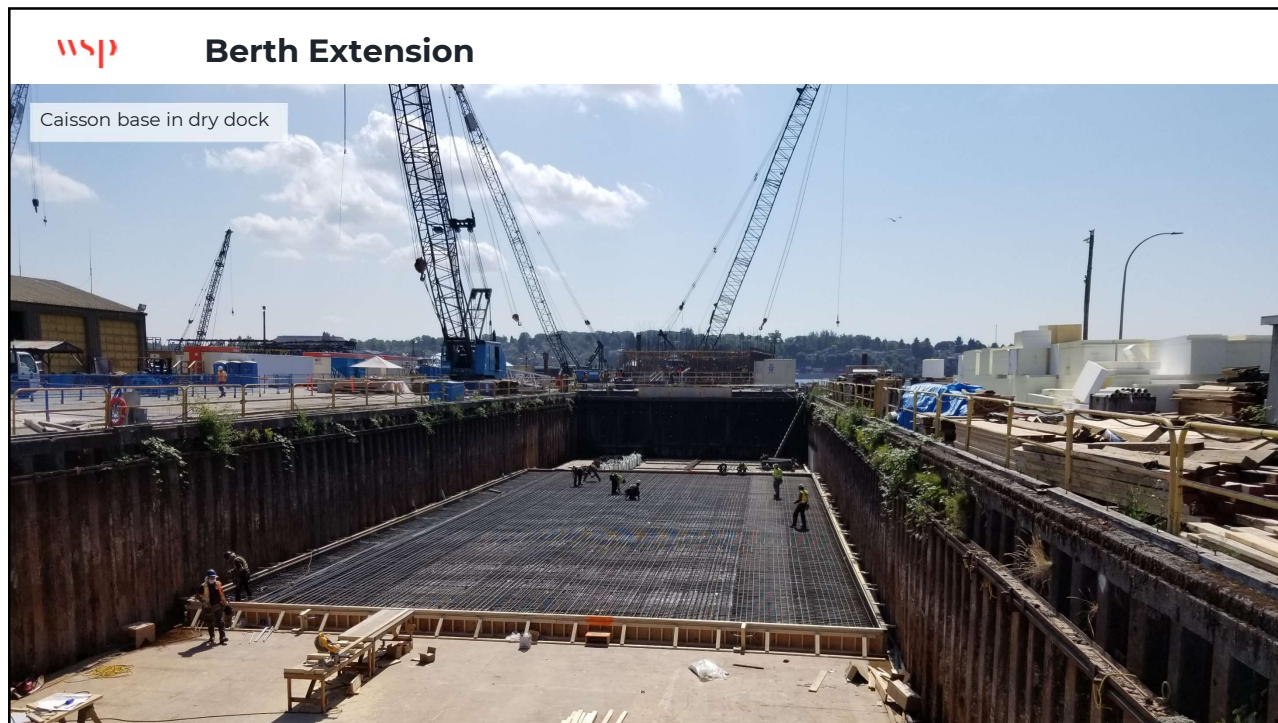


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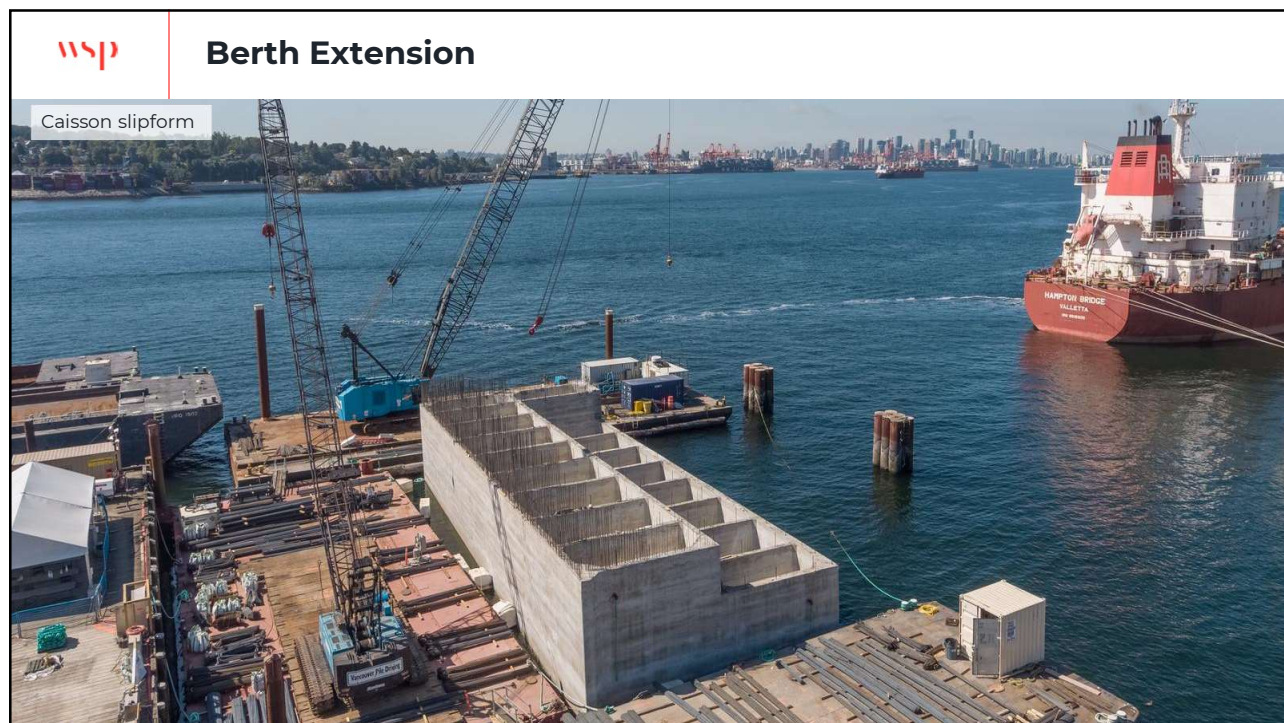


Caisson base in dry dock

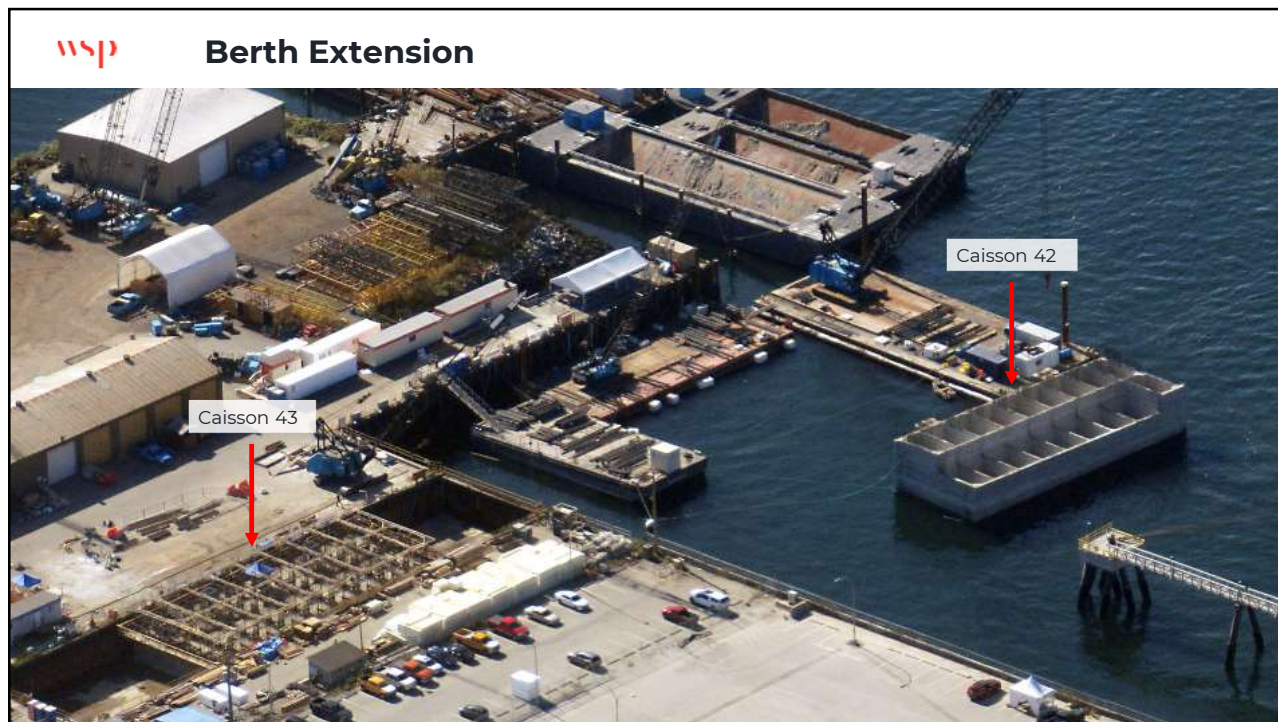
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Berth Extension

Caisson being floated to site

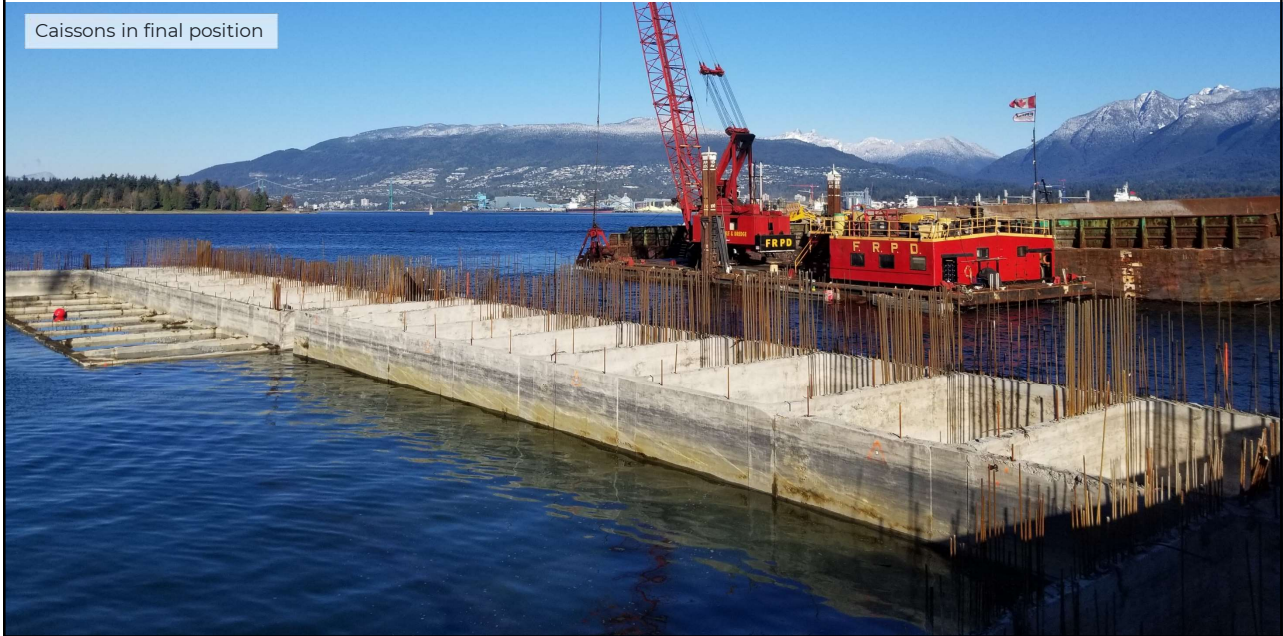


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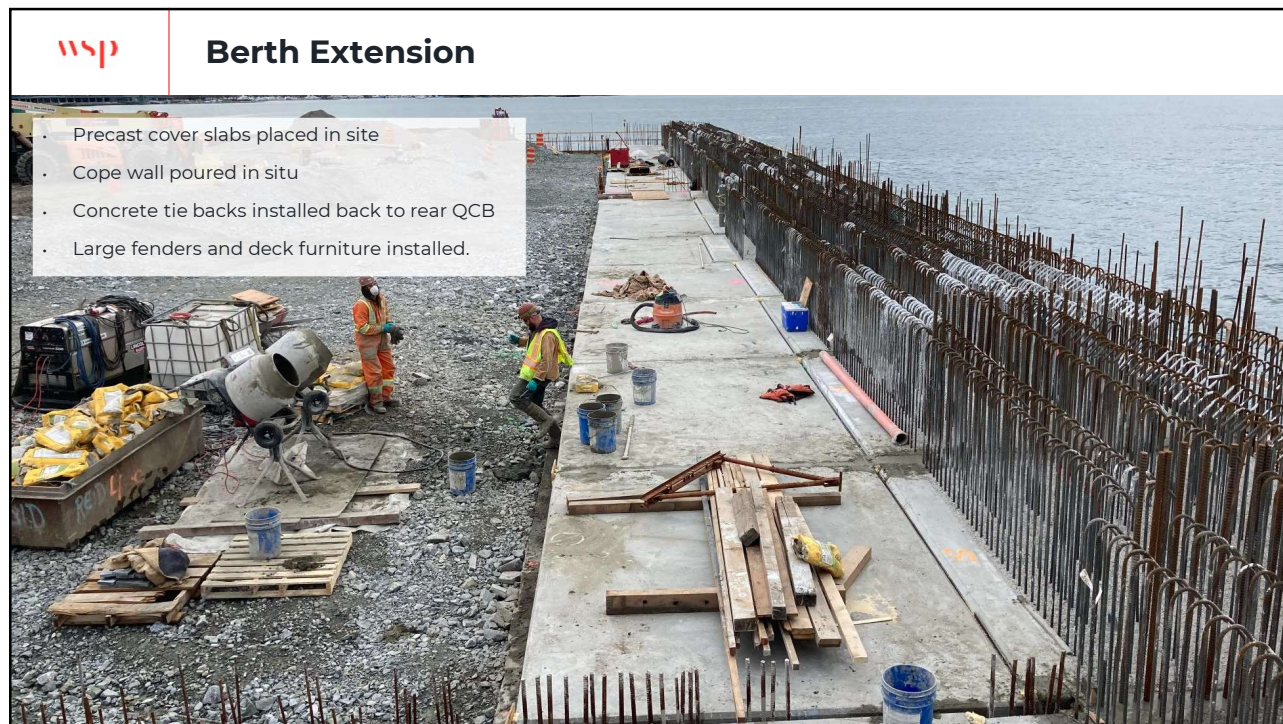


Berth Extension

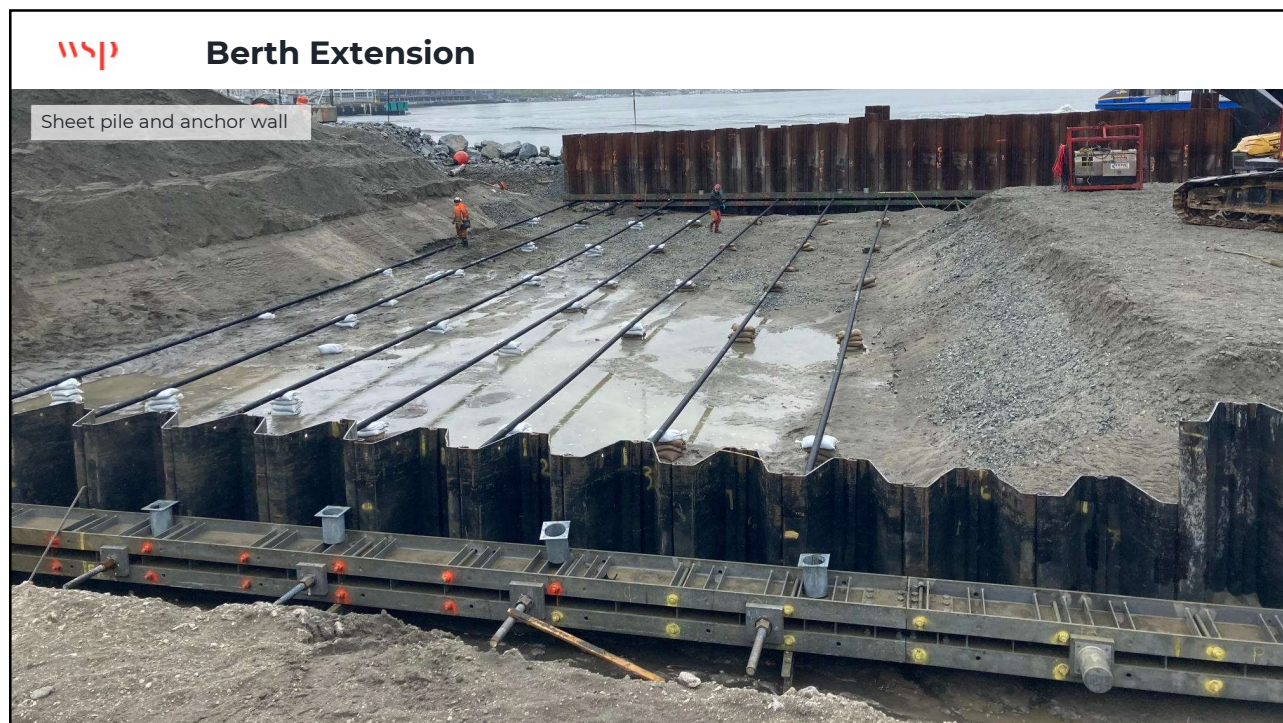
Caissons in final position



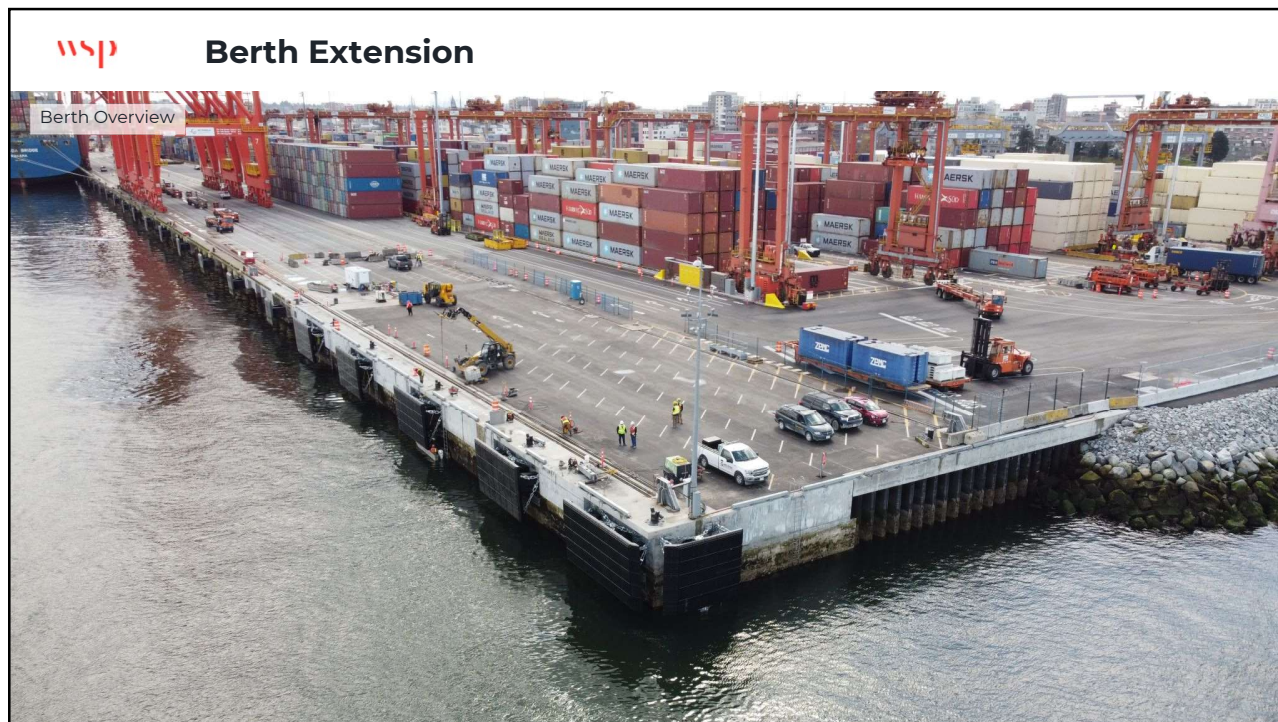
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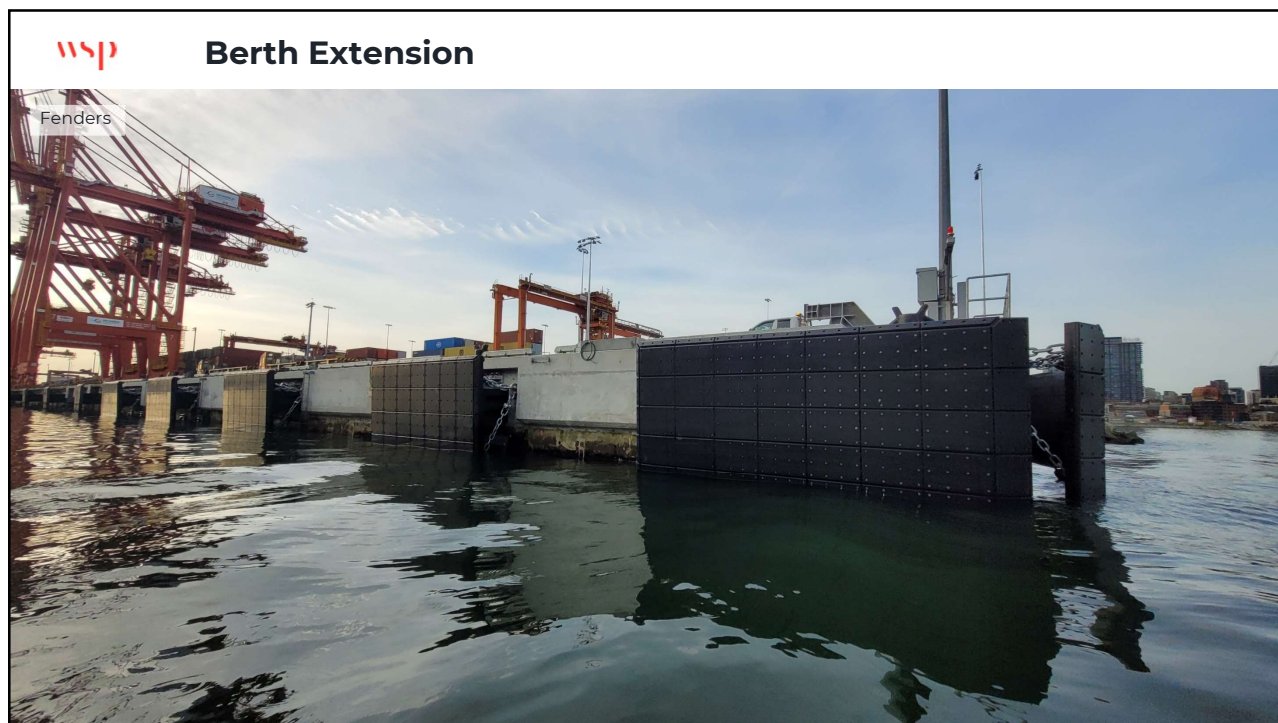
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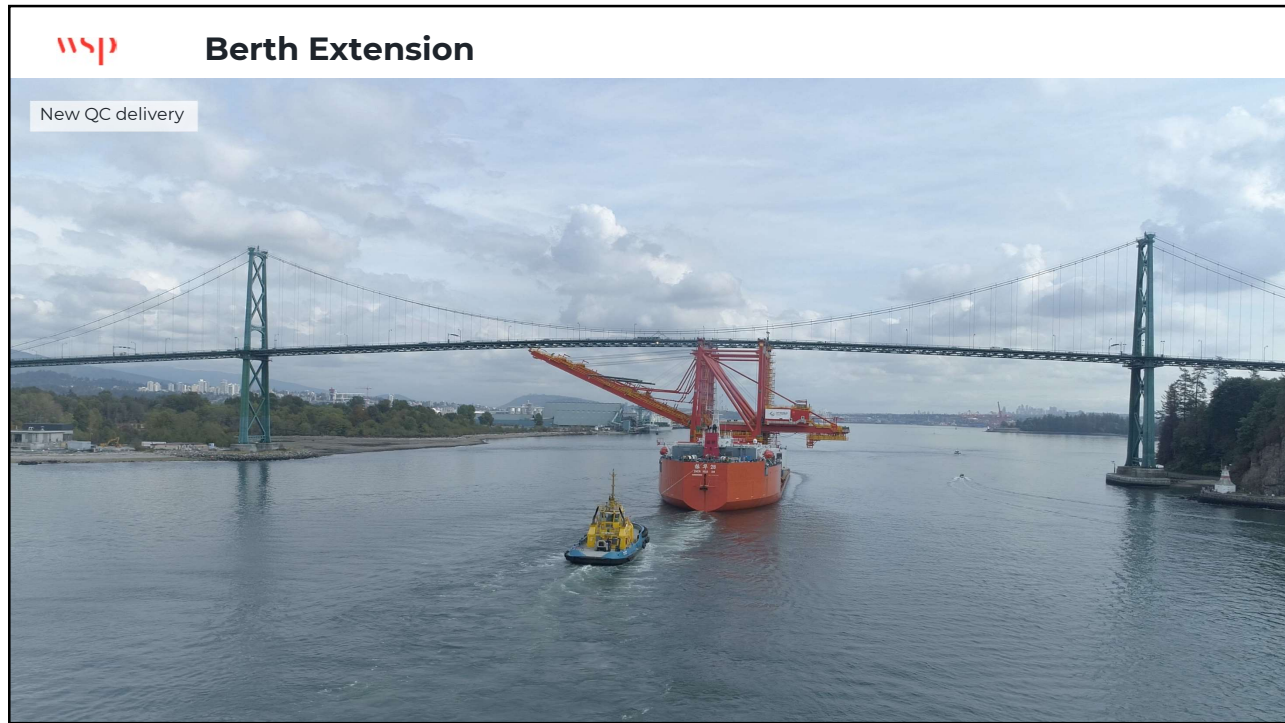
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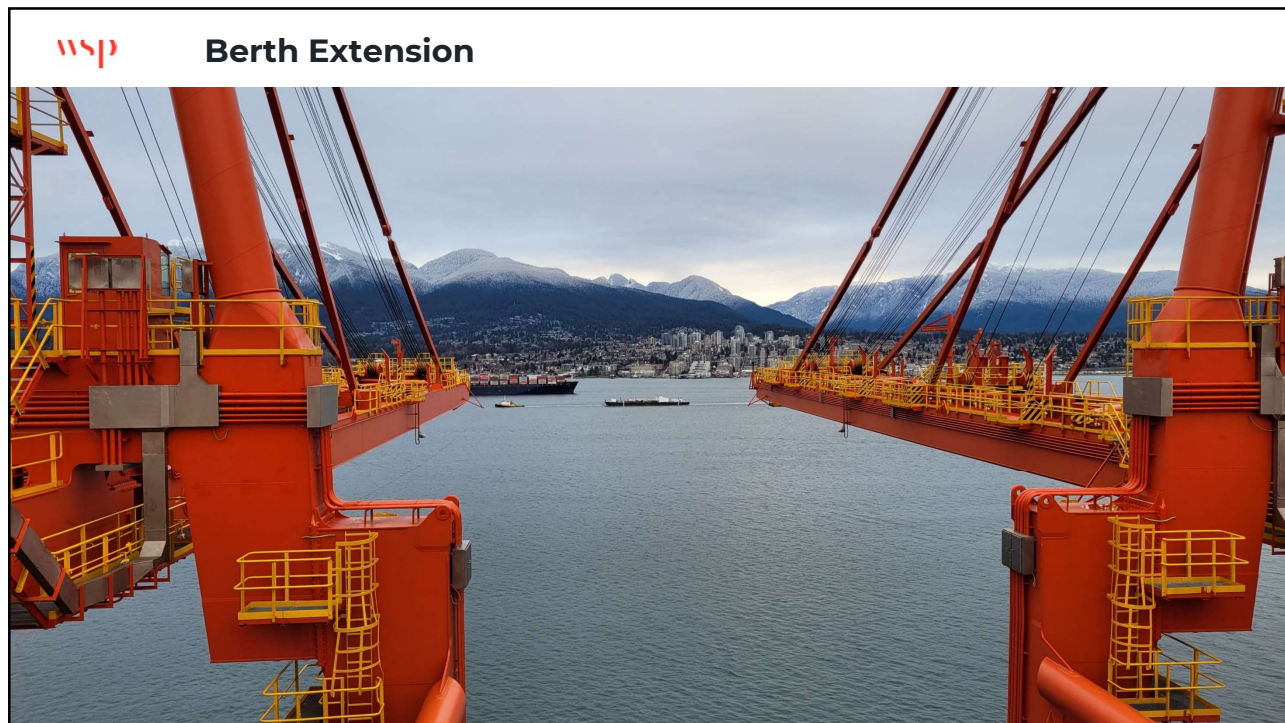
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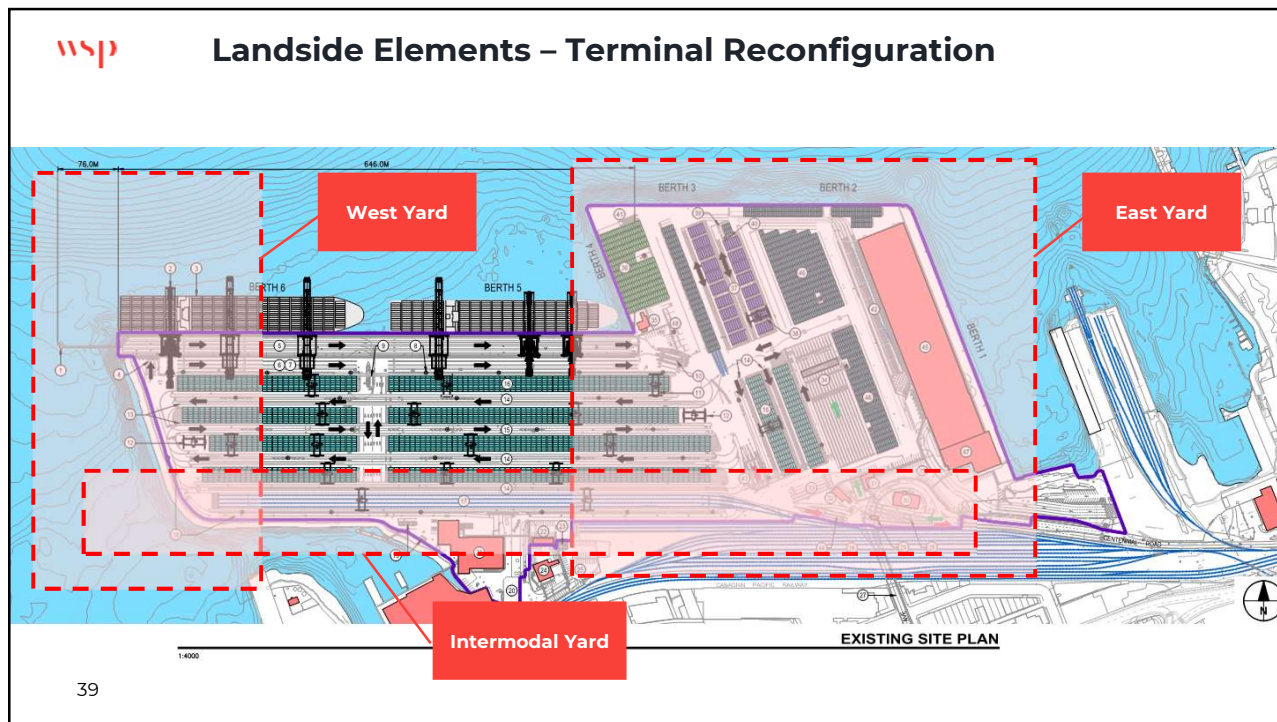
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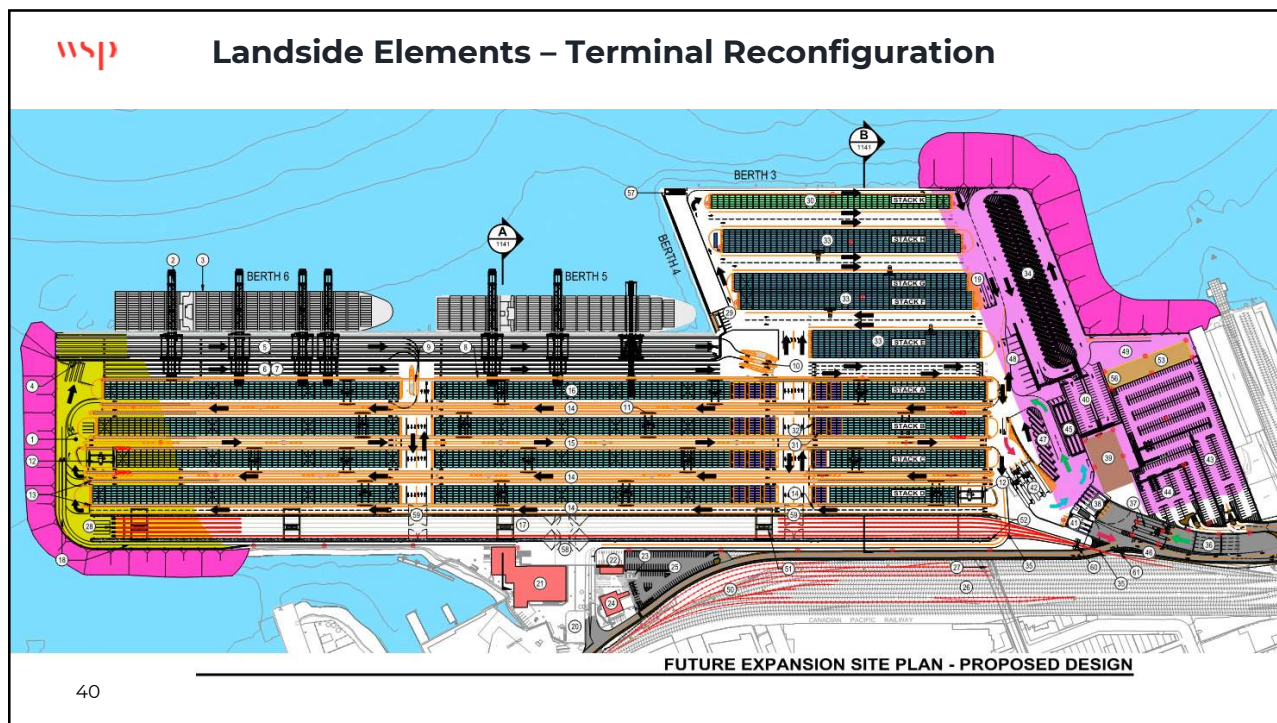
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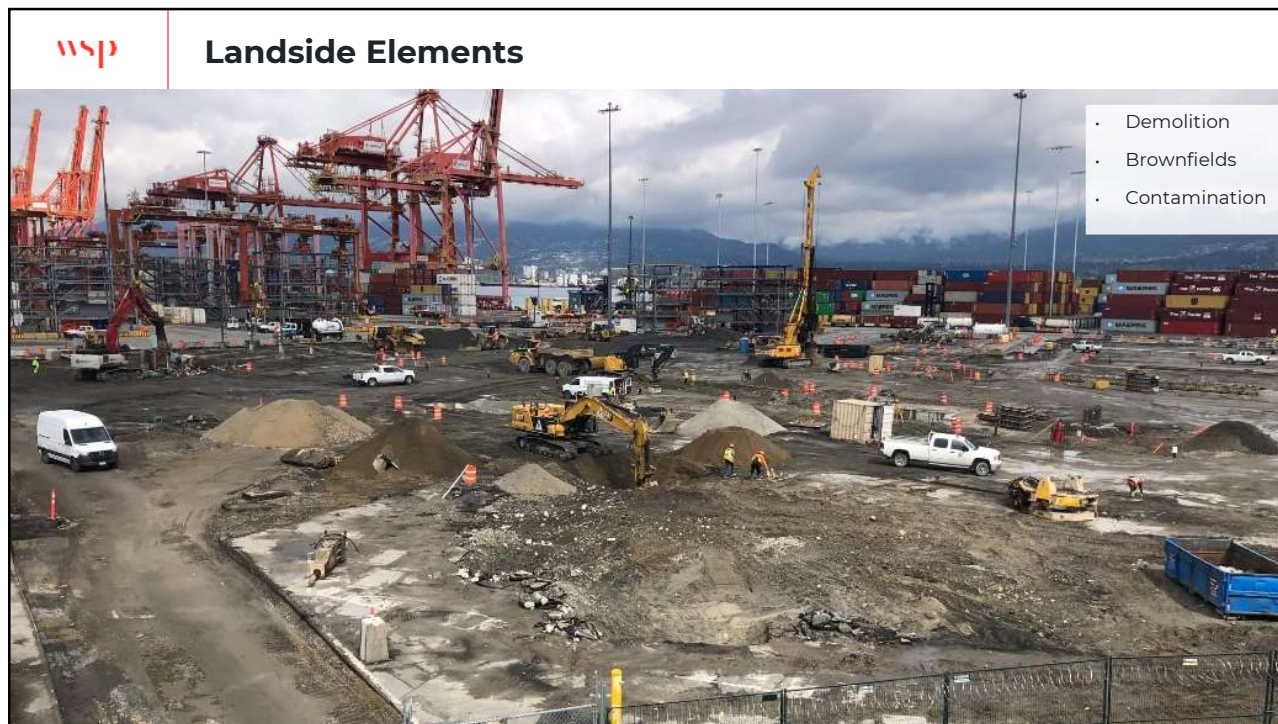
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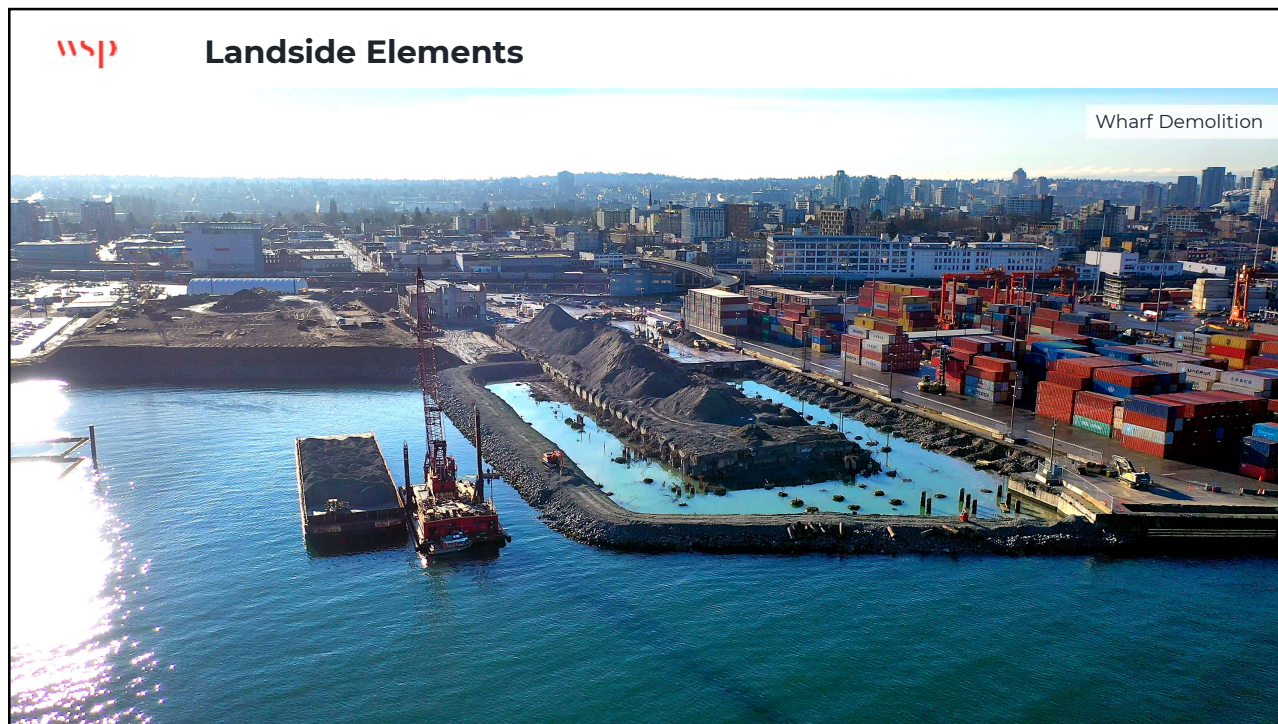
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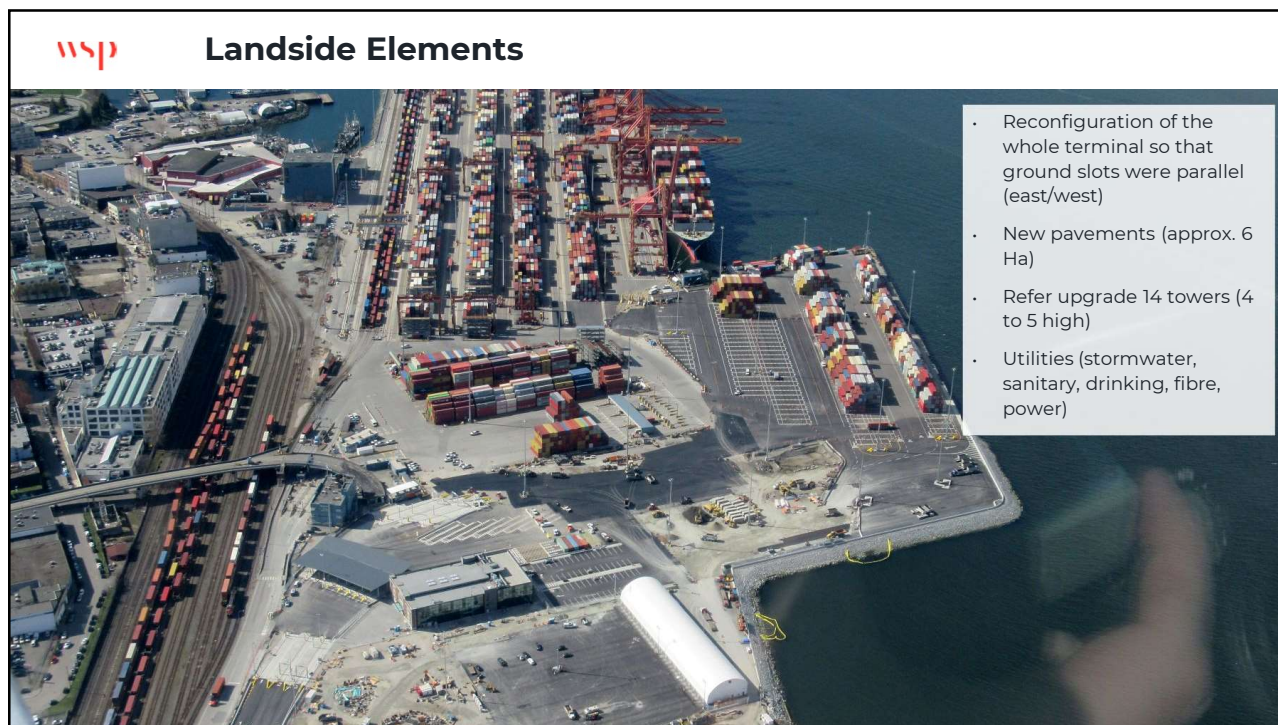
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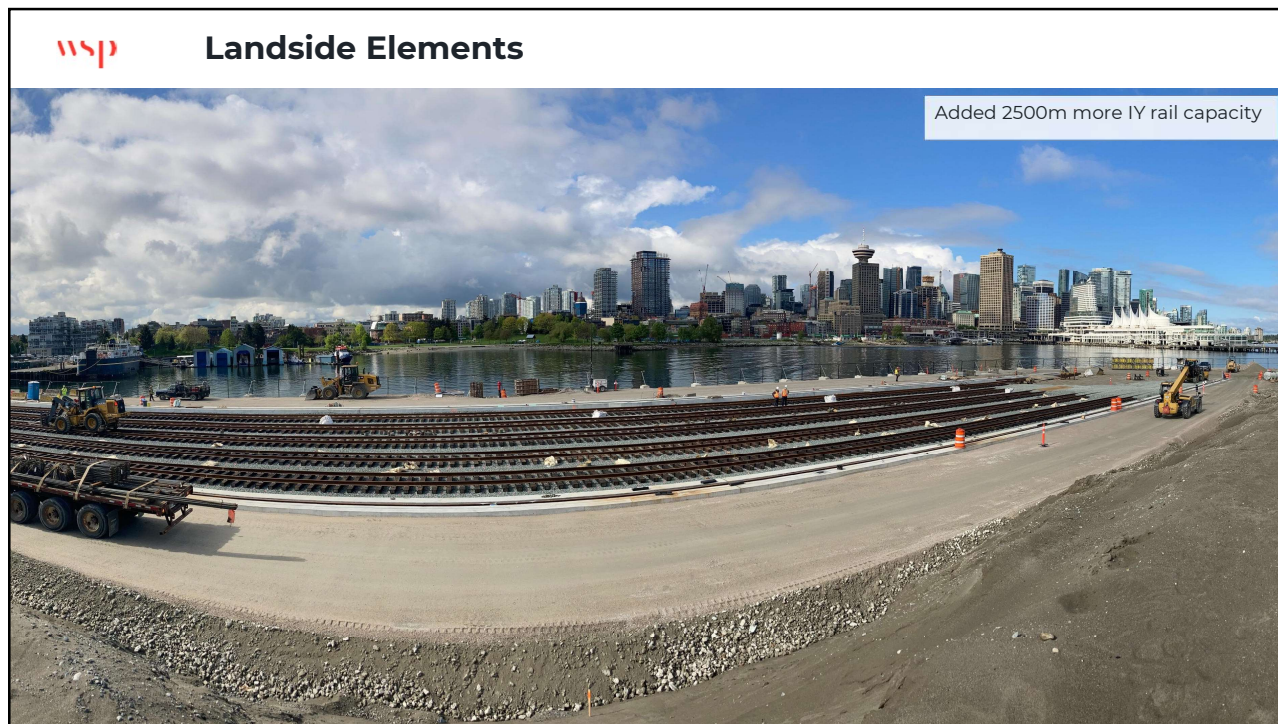


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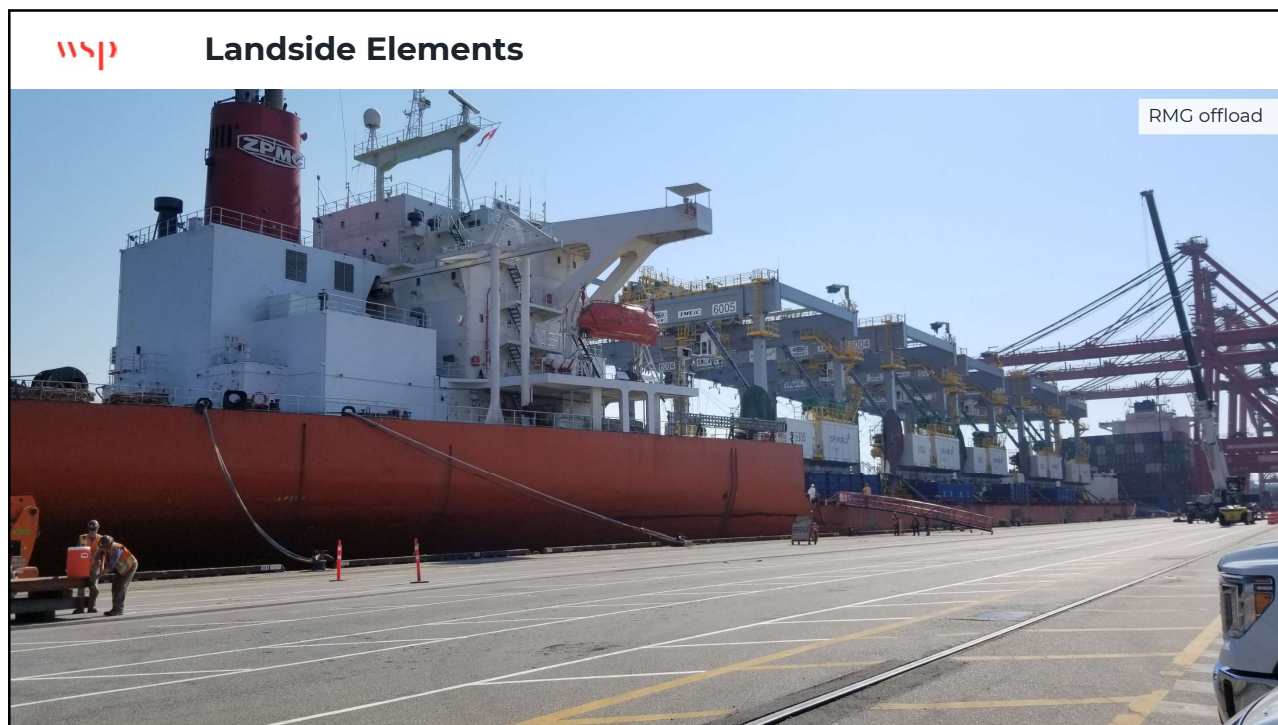


- Reconfiguration of the whole terminal so that ground slots were parallel (east/west)
- New pavements (approx. 6 Ha)
- Refer upgrade 14 towers (4 to 5 high)
- Utilities (stormwater, sanitary, drinking, fibre, power)

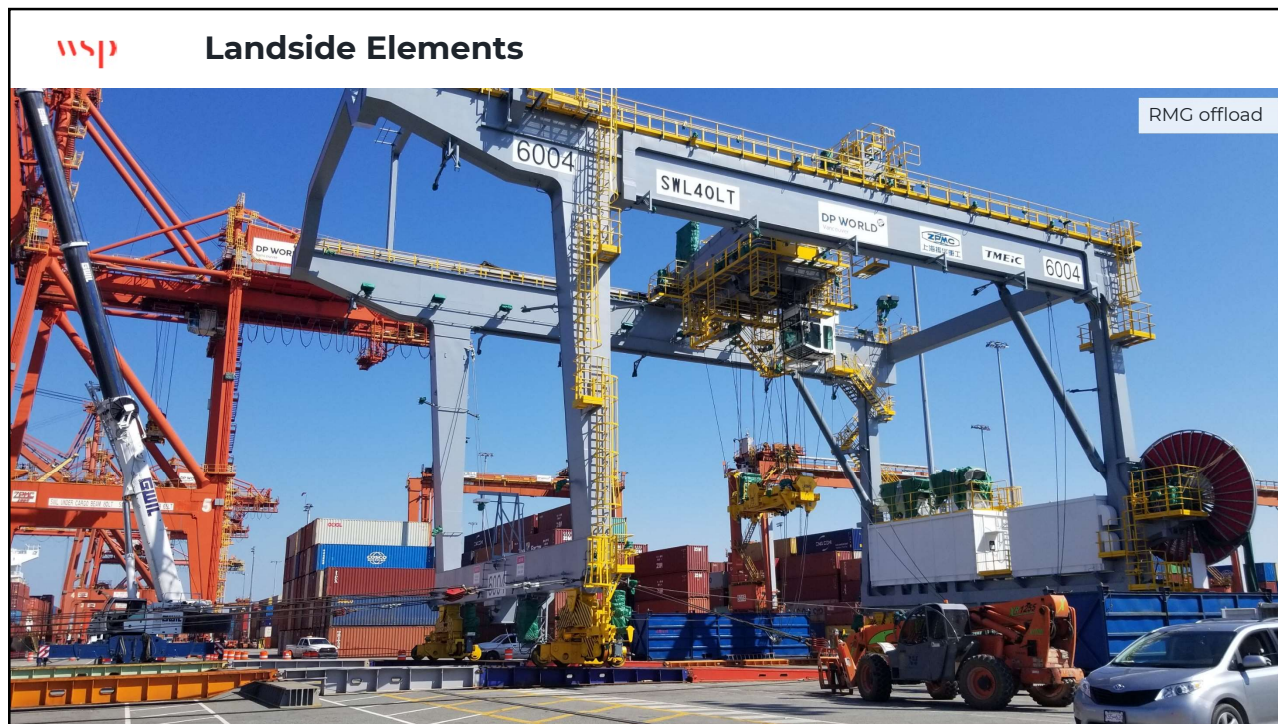
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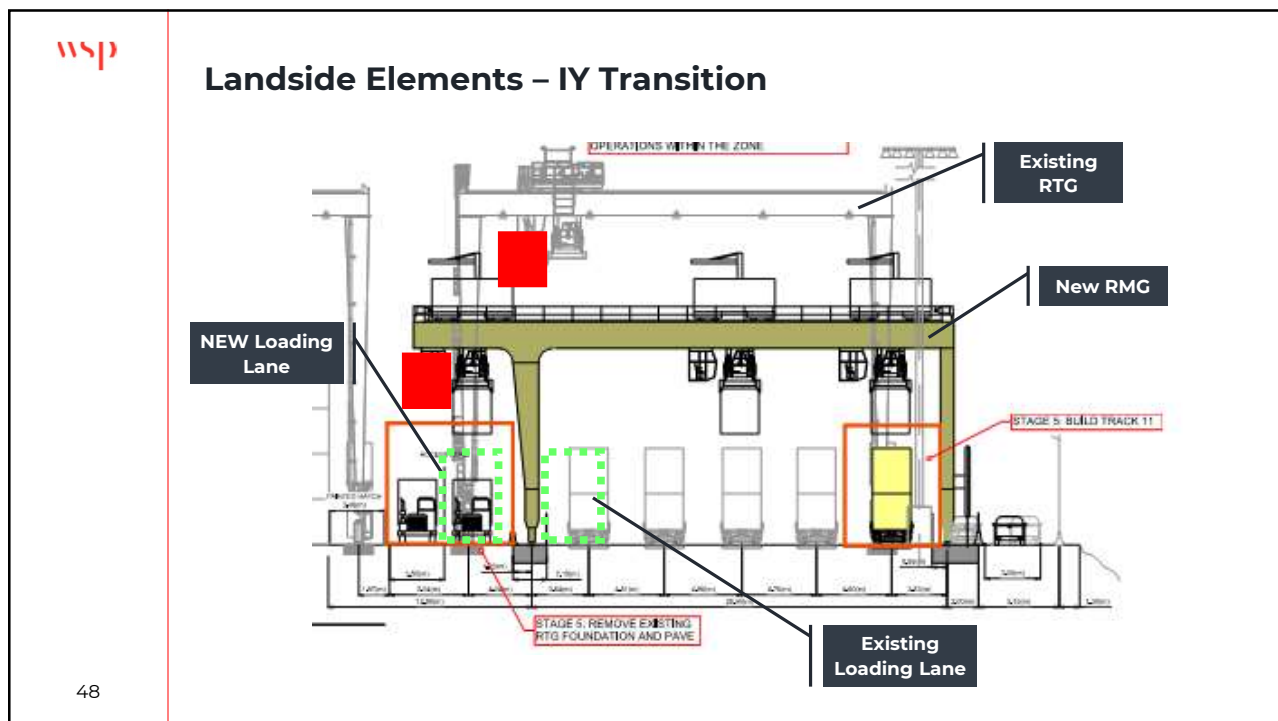
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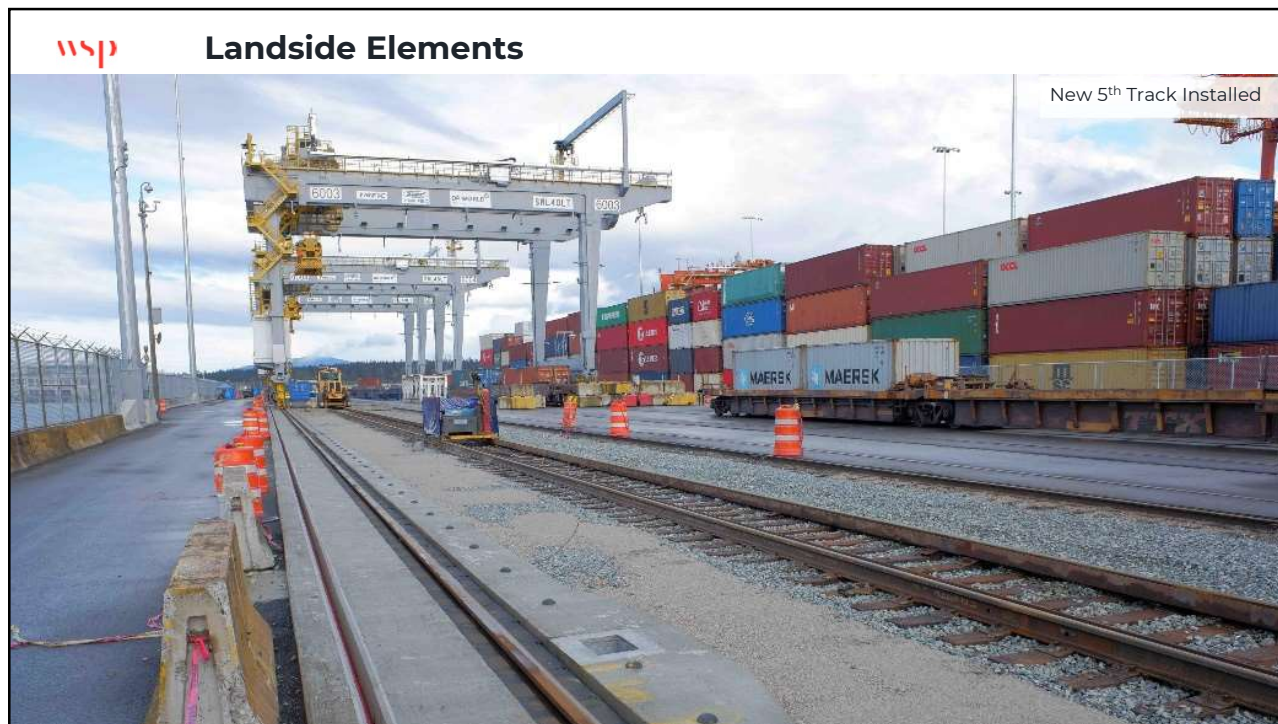


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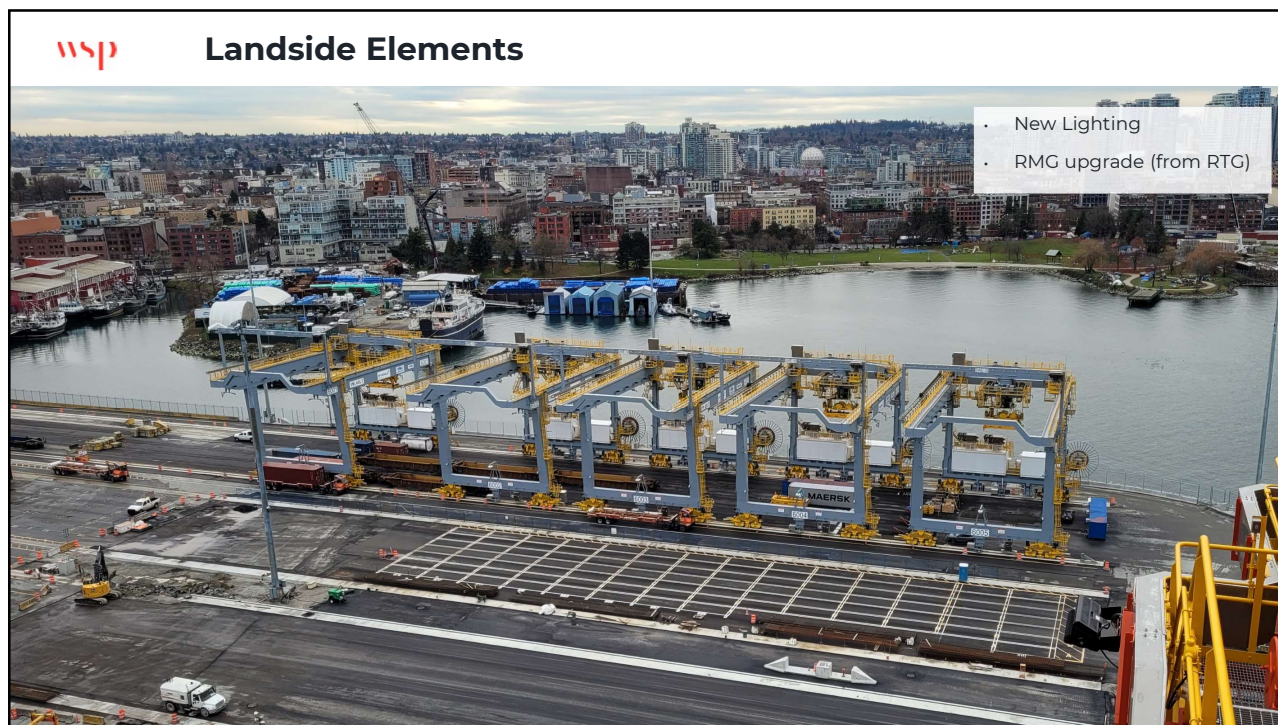


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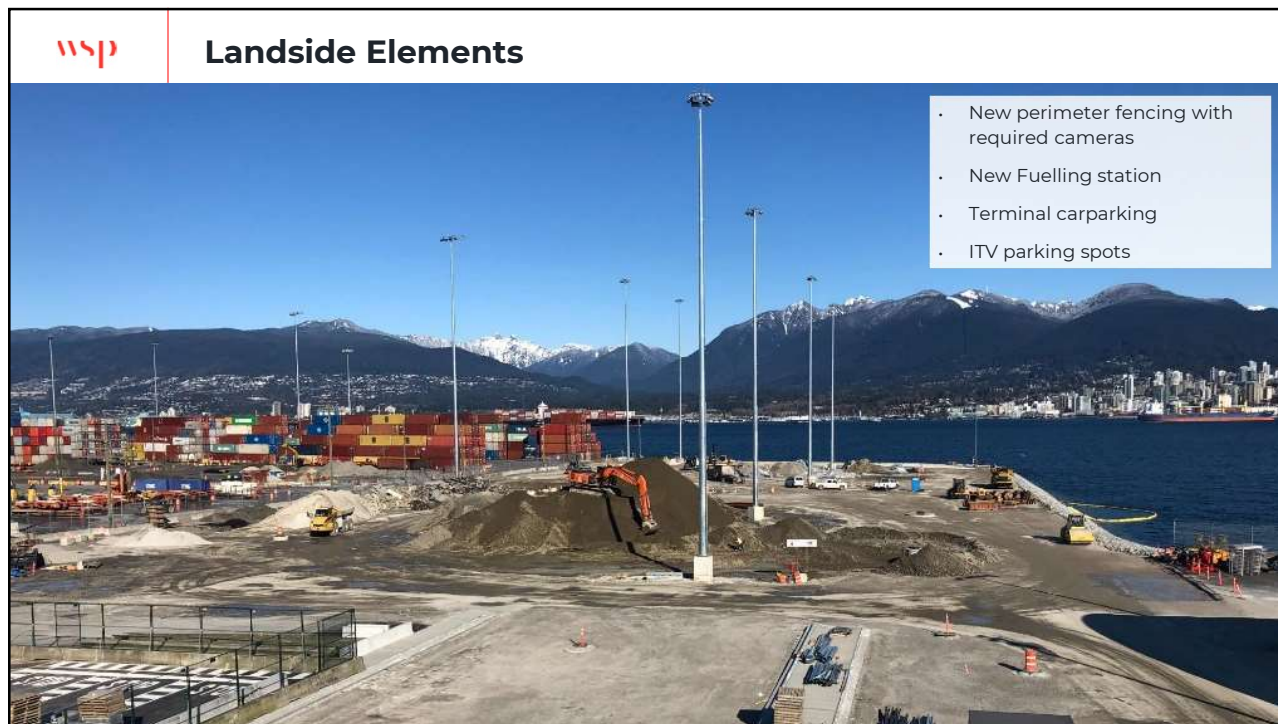
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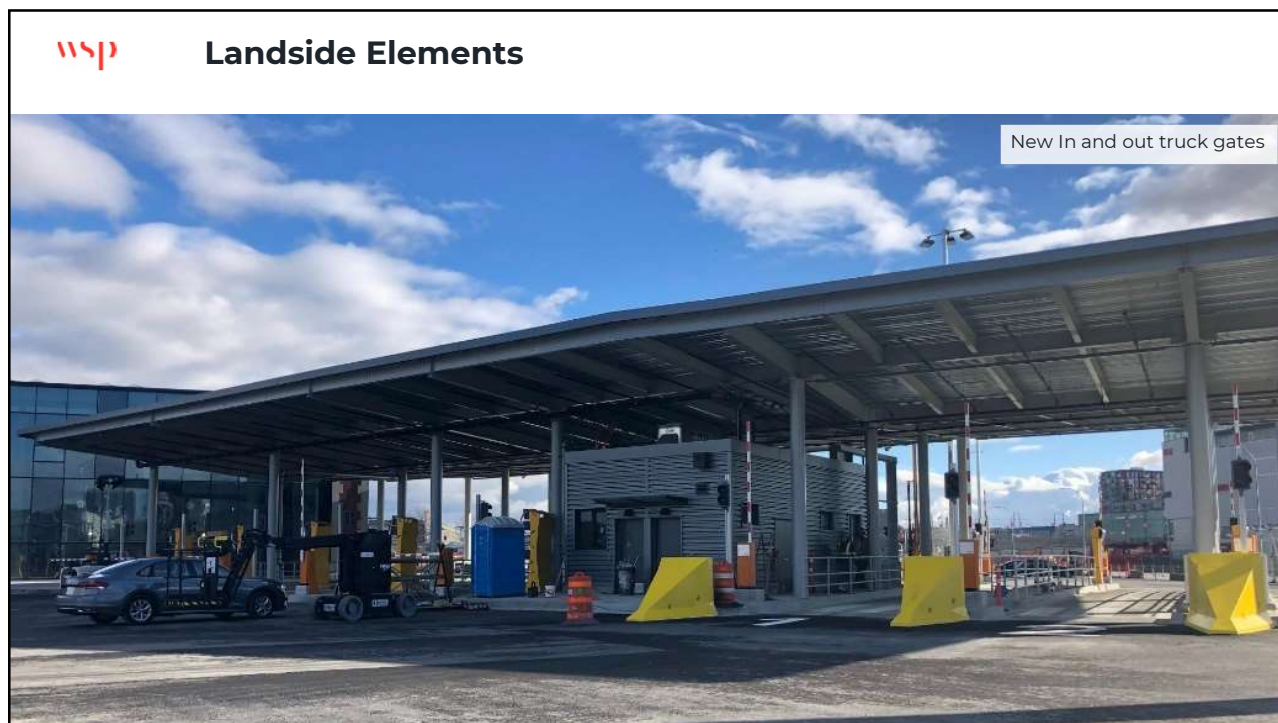
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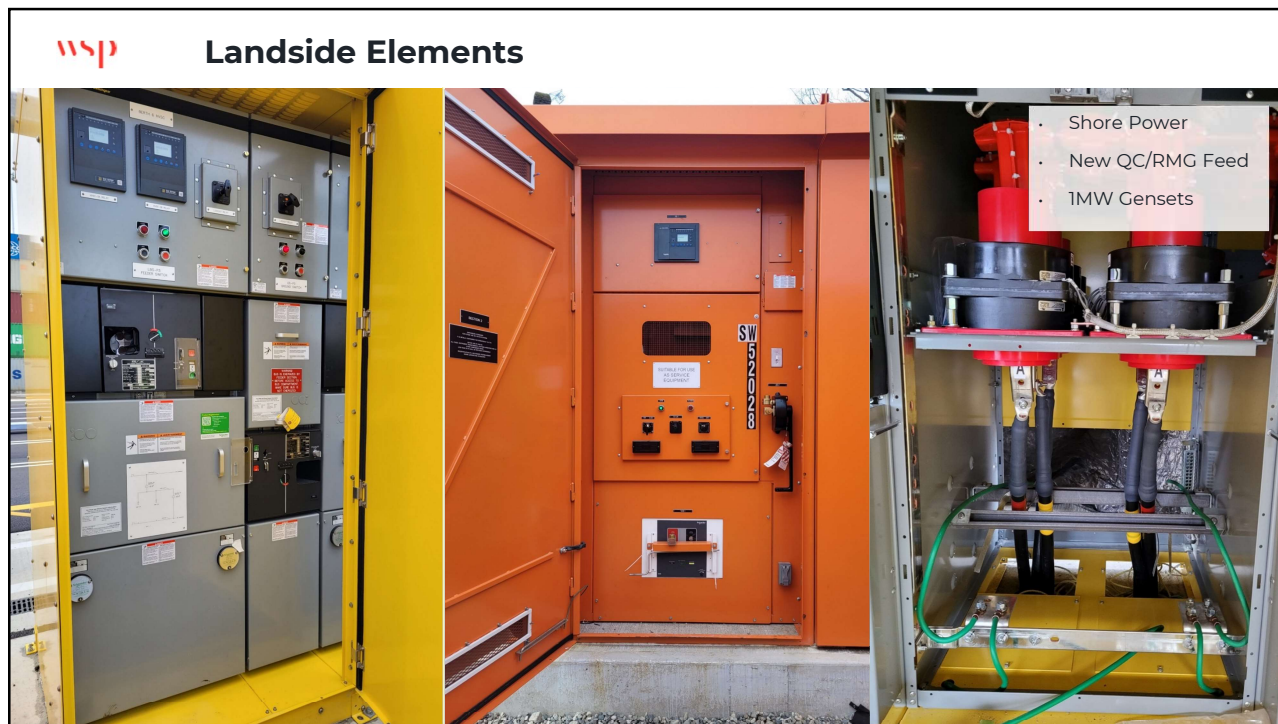
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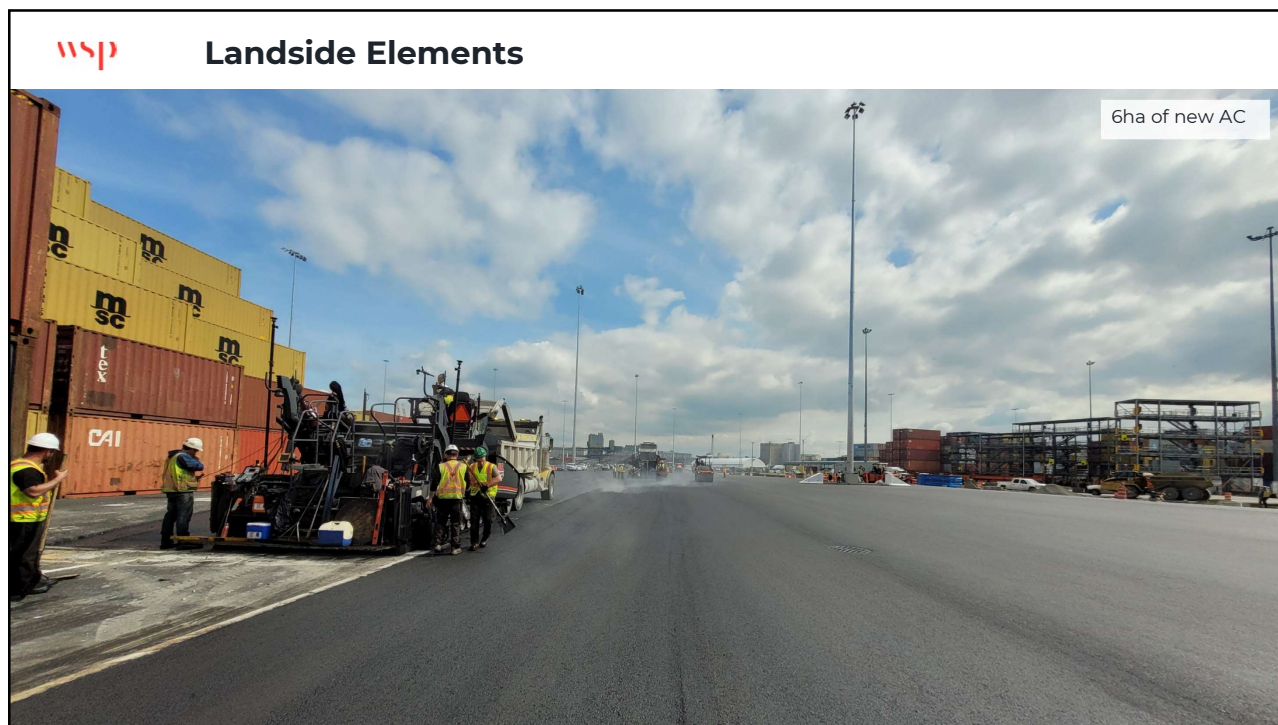
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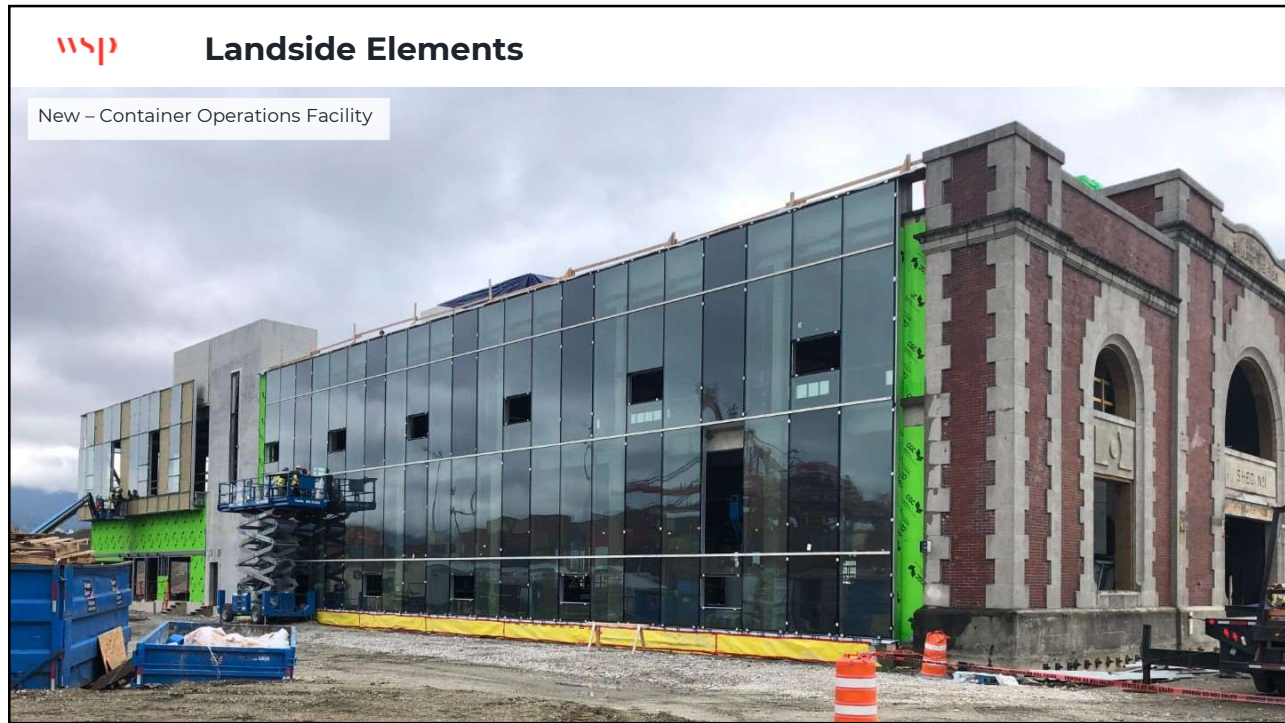
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Landside Elements

New – Container Operations Facility

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Envision Certification

The **Centerm Expansion Project** and the **South Shore Access Project** at the Port of Vancouver have obtained an Envision Platinum Award for Sustainability.

- This award recognizes the success of the project team in achieving sustainability goals in these areas:
- Prioritizing the needs and goals of the local communities through meaningful investments.
- Meaningful and credible stakeholder engagement.
- Reducing greenhouse gas (GHG) and air pollutant emissions
- Sustainable siting and innovative marine restoration.

ENVISION™

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Community Engagement



Community engagement and First Nations consultation has been a strong focus in the planning and delivery of the project. Monthly project newsletters updating progress of the work, changes to port access and environmental matters were issued to stakeholders and interested parties.

The Centerm Community Fund was created as a part of the Project to show appreciation to the community for their patience during construction of the terminal expansion and construction on the south shore. It was part of a larger \$2 million donation to community initiatives in East Vancouver from the Port Authority and the container terminal's operator, DP World.





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Delivery during the COVID pandemic

A major challenge to the project was delivery of most elements of the construction during the COVID pandemic. All members of the project team worked diligently to ensure the success of the project during this challenging time.

Introduced covid protocols to keep working

- Masks in offices
- Vaccination requirement
- Work from home
- Two person per site office
- Construction workers 2m apart, unless masked

Issues

- Procurement delays due to supply chain issues
- Staff shortage on site
- Factory shutdowns for supplies

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Re-cap

- Increased terminal capacity from 0.9mTEU to 1.5m TEU
- Increased IY capacity by 2500m (transition from RTG operation to RMG)
- Extended berth by 75m
- Reconfigured yard for better efficiency; including container stacks, new pavement, lighting etc
- Reclaimed 5ha of land
- Built new parking facility for workers and ITV
- Added shorepower, new QC and RMG power feed and upgraded reefer towers
- New truck gates
- New container operations facility
- New QC, RMGs and TOS

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Thank you



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