VANCOUVER FRASER PORT AUTHORITY’S CENTERM EXPANSION PROJECT AND SOUTH SHORE ACCESS PROJECT EARN ENVISION PLATINUM FOR SUSTAINABILITY

May 31, 2022 — The Port of Vancouver is Canada’s gateway to over 170 trading economies worldwide, handling $1 of every $3 of Canada’s trade goods outside North America; its national significance cannot be understated. Major expansions and upgrades are underway at the Port of Vancouver’s terminals, and road and rail accesses to ensure the port continues to provide the required capacity for the benefits of all Canadians for years to come as the global movement of goods through ports are set to rise significantly.

The Centerm container terminal (Centerm), a key container terminal in the Vancouver area, is one such facility that is undergoing a significant expansion. With its project partners, the Vancouver Fraser Port Authority is concurrently delivering the Centerm Expansion Project and the South Shore Access Project (the Project). The Project includes terminal expansion and improvements which will increase container and vessel handling capacity, and includes off-terminal improvements to the adjacent road and rail network. This combined project will help meet the increasing export and import demand for containers shipped through the Port of Vancouver. Upon completion, the terminal container handling capacity will increase by two-thirds, from 900,000 20-foot equivalent containers (TEUs) to 1.5 million TEUs. By increasing the terminal footprint by only 15 percent and reconfiguring terminal layout and operations, Centerm will be able to handle 60 percent more containers and access along Vancouver’s south shore will be improved.
The main improvements are summarized below.

**On-terminal improvements include:**
- Creating land east and west of the existing terminal, expanding berth length and reconfiguring the container yard allowing for additional container storage and increased container handling and efficiency. The land creation involved dredging, rock dykes, and fill.
- Expanding the Intermodal Yard by adding a fifth rail track and rail track extensions to the west and east to improve operations and rail service.
- Reconstructing the terminal entrance and exit gates to reduce wait time.
- Creating a new, centralized container operations facility by repurposing the heritage building that until recently served as Ballantyne Cruise Ship Terminal.

**Off-terminal improvements include:**
- Building a new 500 metre long Centennial Road overpass connecting Waterfront Road to Clark Drive which will eliminate three at-grade rail crossings and address road congestion within port lands.
- Extending Waterfront Road to Centennial Road to connect to the Main Street overpass, creating a continuous roadway through port lands between downtown Vancouver and Highway 1, thus removing port-related traffic from surrounding city roads.
- Implementing a new Vehicle Access Control System to meet Transport Canada’s security requirements.
- Reconfiguring the adjacent rail yard at waterfront to enable improved use of the existing land.

The port authority’s vision is to create the world’s most sustainable port. This project’s use of Envision during planning, design and construction supports the port authority’s three pillars of sustainability: providing economic prosperity through trade, enabling a healthy environment, and contributing to thriving communities.

“We are very pleased to have achieved such remarkable, independent recognition for our sustainability efforts during planning, design and construction of this critical project for Canada. It was made possible thanks to a concerted team effort and leadership towards our vision,” said Gilles Assier, Project Director, Vancouver Fraser Port Authority.

At DP World, we are committed to operating responsibly - it is vital to our long-term success,” said Joel Werner, General Manager, DP World Vancouver “We have made efforts to operate as a responsible and innovative business throughout this project and we looked for ways to be more efficient while reducing our impact on the environment. We would like to thank everyone who contributed to the project achieving this recognition from the Institute for Sustainable Infrastructure.”

“We are very pleased to announce an Envision Platinum Award for the Centerm Expansion Project and South Shore Access Project. This project is laser-focused on delivering socio-economic benefits and protecting the environment, deliberative in the measures it incorporates to reduce greenhouse gas emissions, and innovative in the approach taken to protect the marine environment,” said Melissa Peneycad, ISI’s managing director. “The project team recognized how these improvements to the Port of Vancouver are pivotal to the lifeblood of the Canadian economy as a whole and provide an opportunity for deeper stakeholder engagement and local community investment.”
**VERIFIED SUSTAINABILITY ACHIEVEMENTS**

**Stimulating sustainable growth and development.**

Under the Canada Marine Act, the port authority is required to facilitate Canada’s trade objectives, ensuring goods are moved safely, while protecting the environment and considering local communities. As part of this, the port authority leads the development of infrastructure programs and projects that help meet Canada’s trade objectives, while supporting environmental and social sustainability. The increased export and import trade in containers generated by this project alone will add $525 million per year to Canada’s Gross Domestic Product.

Locally and regionally, this project will improve socioeconomic conditions through job creation. More than 350 full-time equivalent jobs per year are created over the 3-year construction period. This project will provide between 800 and 900 new jobs in port operations jobs. More than 1,700 jobs in the greater port economy will be created, including logistics and supply chain work and at loading and distribution centres. Indirect and induced economic impacts are estimated to add 2,500 to 2,700 jobs. All told, the total number of permanent jobs created by this project will be between 5,000 and 5,500.

**Prioritizing the needs and goals of the local communities through meaningful investments.**

As a result of an extensive community engagement process, the port authority, in coordination with Centerm container terminal operator DP World, donated $2 million to community initiatives as part of the Project in the Port of Vancouver. The donation included $1 million for capital projects for CRAB Park at Portside, $250,000 to First Nations initiatives, $125,000 to the Strathcona Community Centre Association, $125,000 to the Ray-Cam Co-operative Association, and $500,000 to create a three-year Centerm Community Fund, which funded projects proposed by 41 organizations within the local community that supported community enrichment, education and training, and environmental leadership.

The Project also allows for more efficient goods movement and reduces port-related traffic on local roads in the Downtown East Side and East Vancouver.

**Meaningful and credible stakeholder engagement.**

Project stakeholders, including the public; Indigenous groups; strata councils and residents; community associations; unions; local nonprofit and business improvement associations; local, provincial, and federal regulators; first responders, and utility providers were provided extensive opportunities throughout the project design to articulate issues and concerns and provide input on the design of the project. Stakeholder engagement is important to the port authority and project partners, and they use a framework based on the International Association of Public Participation (IAP2) core values and guidelines. Top concerns raised by stakeholders and addressed by the project team included community investments, ongoing consultation and notification processes, and local park improvements. Public engagement and consultation summary reports are available on the port authority’s website. This project earned “bonus points” for exceeding the highest level of achievement for the Envision credit focused on stakeholder engagement.

**Reducing greenhouse gas (GHG) and air pollutant emissions.**

The port authority commissioned a cradle-to-grave Life Cycle Carbon Assessment (LCCA) for this project conducted in accordance with ISO 14040:2006 and ISO14067:2018. The LCCA net GHG emissions reduction is estimated to be -349,141.60 tons of carbon dioxide equivalent (t CO₂e), resulting in an overall
GHG reduction of 13.5%. The project is implementing several strategies to reduce GHG emissions, including:

- Installing electric rail-mounted gantry cranes in place of diesel-powered rubber-tired gantry cranes.
- Installing an Optical Character Recognition (OCR) container truck gates to reduce truck queuing and idling.
- Converting the Ballantyne Heritage Building into a high-performance facility that will meet LEED Version 4 requirements for Gold certification.
- Reusing demolished concrete for construction.

Sustainable siting and innovative marine restoration.

This project is located on a site that was 100% previously developed. In addition, this project is implementing several innovative strategies to remediate and protect the marine environment, including:

- Implementing a Marine Life Salvage Plan that required fish salvage and relocation to be conducted before dredging and infilling works.
- Implementing an Autonomous Monitoring System to continuously monitor water quality during dredging and infilling operations to ensure the project meets the Canadian Council of Ministers of the Environment (CCME) Water Quality Guidelines for the Protection of Aquatic Life.
- Using a silt curtain “moon pool” to isolate the works area and minimize the potential release of sediment during dredging operations.

PROJECT DETAILS AT-A-GLANCE

| Envision-verified Project: | Centerm Expansion Project and South Shore Access Project |
| Location:                 | Vancouver, British Columbia, Canada                      |
| Envision Rating:          | Platinum                                                |
| Owner:                    | Vancouver Fraser Port Authority                         |
| Project Delivery:         | Design Build                                            |
| Lead Envision Firm:       | WSP                                                     |
| Project partners:         | WSP Canada, Inc; AECOM; Centennial Expansion Partners (CXP), a joint venture between Dragados Canada, Jacob Brothers Construction, and Fraser River Pile & Dredge Inc. |
| Award Date:               | May 31, 2022                                           |
| Project Phase:            | Under construction                                      |
| For more information:     | Please visit the [project website](#)                  |

ADDITIONAL IMAGES: