



Site 1 – 2115 Commissioner Street

Proposed Marine Off-loading Facility & Laydown Yard

Kiewit Ledcor TMEP Partnership

Trans Mountain Expansion Project

Presentation to East Vancouver Port Lands Committee

September 19, 2017



Agenda

1. Trans Mountain & KLTP
2. Temporary Infrastructure Sites for TMEP
3. Site 1 – 2115 Commissioner Street
 - Intended use (site operations)
 - Schedule
 - Construction scope
 - Work hours
 - Environmental protection
4. Opportunities to provide feedback

Trans Mountain Pipeline



Current Operations

- Operating since 1953
- Capacity: 300,000 bpd
- 1,150 km between Edmonton and Burnaby
- TMPL also service Ferndale and Anacortes
- Transports refined products, heavy and light crude oils including dilbit

Proposed Expansion

Construction and operation of an expanded pipeline system

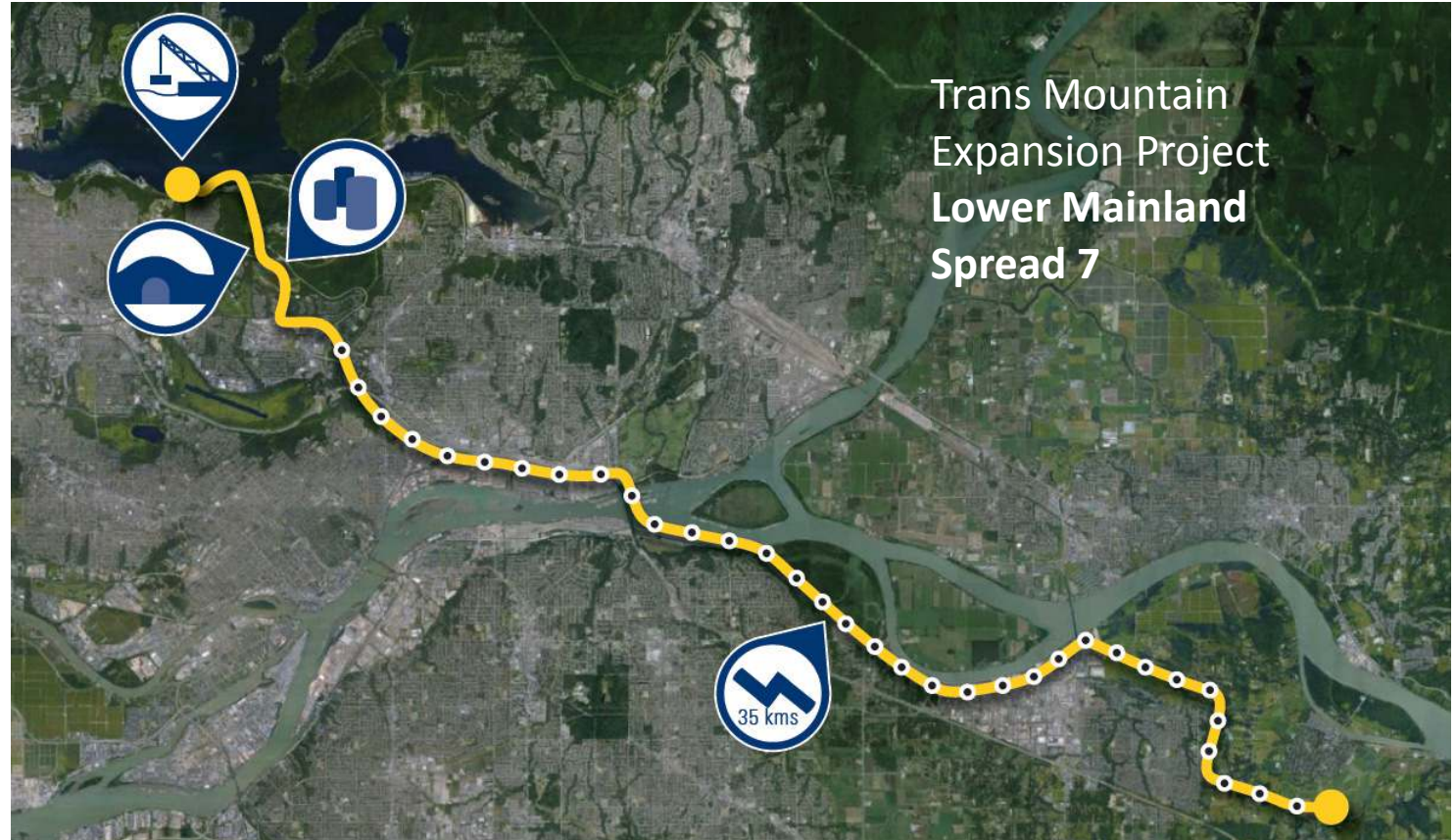
- \$7.4 billion capital cost
- Expand capacity to 890,000 bpd
- Twin remaining 980 km of pipeline
- 193 km of reactivated pipeline
- 12 new pump stations
- 19 new storage tanks
- Three new tanker berths
- Increase in tanker traffic – not tanker size
- Must meet 157 NEB Conditions, 37 BCEAO Conditions
- 57 VFPA Conditions for Westridge Marine Terminal



**KINDER MORGAN
CANADA LIMITED**

Kiewit Ledcor TMEP Partnership (KLTP)

- Contractor for Lower Mainland/Spread 7
- Responsible for construction of:
 - 35 km of the pipeline from Langley to Burnaby
 - Sumas Terminal
 - Burnaby Mountain Tunnel
 - Burnaby Terminal
 - Westridge Marine Terminal (WMT)



Temporary Land Use in Burrard Inlet



- Construction of marine works for Westridge will occur from the marine waterway between fall 2017 and spring 2020
- KLTP has identified temporary use of lands in or near Burrard Inlet, including 2115 Commissioner St to support construction



2115 Commissioner Street – Site 1

- KLTP has submitted a Category C project permit application to the Vancouver Fraser Port Authority (VFPA) for the development of 2115 Commissioner Street as a temporary infrastructure site to support the construction of Westridge Marine Terminal

Site Operations

- Site 1 is intended as a marine loading and off-loading facility and laydown yard, with associated prefabricated trailers
- Other activities include parking on both Site 1 and Site 2 and the transport of construction workers by bus or water taxi to the worksite at WMT



Site Operations – On Land



- Two cranes will be stationed on-site to load/offload material from barges and trucks in the laydown areas
- Additional material handling equipment, such as forklifts and wheeled loaders will be on-site during the operational stage of the Project

Site Operations - Marine

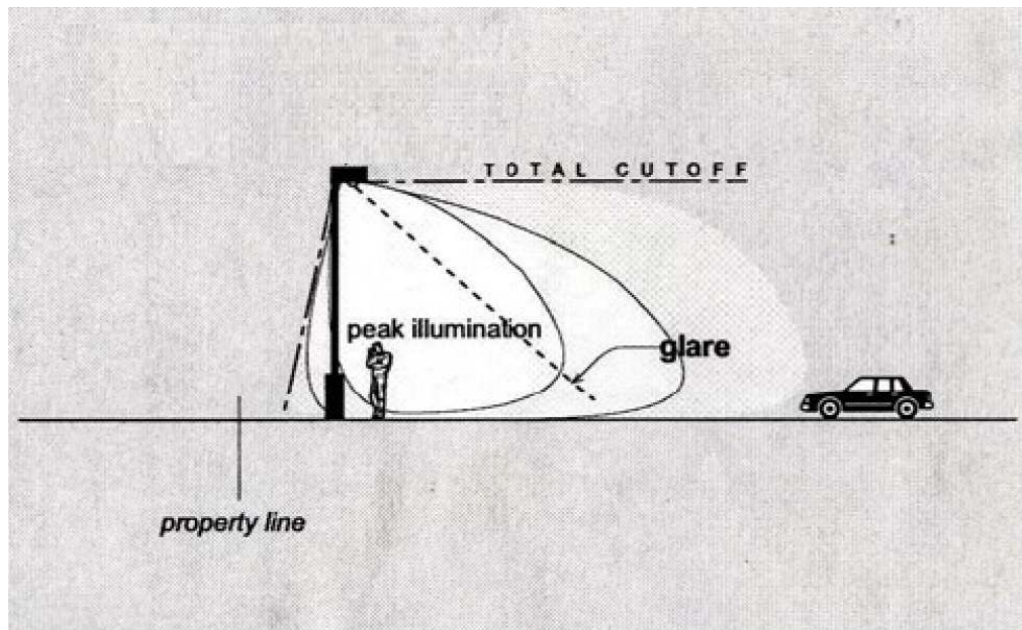
- Up to two barges to be moored at site at any time
 - One barge in and one barge out each day; all barges to be controlled by tug boats with certified personnel
- Two to three water taxis will transport 50 to 60 workers daily to the WMT site
 - One vessel to carry ~40 passengers
 - Two vessels to carry ~12 passengers
- Each water taxi will make one trip at the start and end of each shift

Traffic Management – Site Operations

	Light duty vehicles	Trucks	Buses
Weekday	130 6:00am - 7:00am 3:30pm – 6:00pm	10 7:00am - 9:00am 5:30pm – 7:30pm	Up to 2 buses
Saturday	40 6:00am - 7:00am 3:30pm – 6:00pm	10 7:00am - 9:00am 5:30pm – 7:30pm	Up to 2 buses

- The use of water taxi for workers as well as short driving distances to and from this site will help reduce overall traffic effects on the adjacent road network
 - Impacts are also managed because of established ingress/egress points for Commissioner Street port traffic
- Approximately 130 light duty and other worker vehicles will access the site each day before morning peak commuting period
- 1-2 buses will be used to transport workers to Westridge and other KLTP construction sites for TMEP. Each making one trip at the start and end of each shift
- Materials will be delivered to and hauled from the site on trucks

Lighting



- A detailed site lighting plan will be developed by a qualified lighting professional. Lighting will be designed in accordance with VFPA guidelines
- Installation of 10 temporary 470 watt area lights on the existing wooden poles along site perimeter
- LED Fixtures will be installed at 9 m (30 ft.) and orientated to 90 degrees facing away from surrounding community
- The optics within the LED fixture focuses the light to 180 degrees which diminishes the effects of backlighting
- Installed to improve safety and security on the site, without creating nuisance lighting for the neighbouring community or marine vessels

Schedule – Construction & Operation

- Early 2018: 8 weeks of site preparation (construction), subject to VFPA project permit approval
- February 2018 to the end of May 2020: Site 1 is expected to be in operation, subject to VFPA project permit approval

(timelines subject to change)

Construction Scope – Site 1

Site preparation includes:

- creation of a construction equipment laydown area
- security fence installation
- parking stalls delineation
- installation of site offices (prefabricated trailers)
- installation of temporary marine structures such as trestle dock and temporary mobile small boat dock for water taxis

Work Hours

Construction

- The construction work associated with site setup will be conducted within VFPA's standard construction hours of Monday to Saturday between the hours of 7:00 am and 8:00 pm

Site Operations

- Movement of project personnel may occur outside 7:00 am – 8:00 pm; all work will observe VFPA noise guidelines

Construction Environmental Management Plan*

- Submitted as part of permit application to VFPA
- Environmental best management practices for construction to reduce or eliminate effects on the environment and meet regulatory requirements
- Detailed biophysical assessment reports of the existing aquatic and terrestrial habitat have been completed
 - On-land: entire ground area previously disturbed by human activity
 - Marine: No long-term or irreversible effects expected for local fish and invertebrates

*also known as the Environmental Protection Plan

Construction Environmental Management Plan (cont'd)

- Potential effects to marine mammals, birds and/or fish from underwater noise, artificial lighting, or vessel movement to be mitigated during construction and operation of the proposed infrastructure and associated marine traffic
- Measures include:
 - Adherence to least-risk fisheries windows when piling
 - Safe operations of Project-related vessels will be in observance of VFPA Guidelines and Port Information Guide
 - Bird strike warnings to construction vessels during migration and bad weather
 - Erosion and sediment control measures

Mitigating Construction Impacts

Pile Driving

- Installation of approx. 60 piles (ranging between 600-mm to 900-mm) diameter over 3-4 weeks
- Installation will occur in least-risk fisheries window to minimize impacts to juvenile fish
- In-water impact pile driving will be limited to daytime only
- Piles will be installed as far as possible by vibratory method; finished using a diesel impact hammer
- Use of underwater bubble curtains to limit noise travel underwater





OPPORTUNITIES TO PROVIDE FEEDBACK


Permit Status

- The Category C permit has entered the permit review phase with VFPA
- A public comment period of 20-business days is planned to start in late September / early October (*tbc with VFPA*)
 - Neighbours will receive direct notification by mail once comment period is announced
 - The proposed notification area will be in accordance with VFPA's Public Consultation Guidelines and agreed in advance with VFPA

Ongoing Engagement & Communications

- Feedback can be provided in person, by phone or in writing
 - For inquiries from stakeholders, neighbours and general public:
 - Information line: 1-866-514-6700
 - Email: info@transmountain.com
 - Ongoing communication about construction activities through multiple channels including online, traditional and social media
 - www.facebook.com/TransMtn
- For questions regarding the Vancouver Fraser Port Authority's permitting process, please call 604-665-9570 or email Permit.Comments@portvancouver.com
- Inquiry management process
 - Ensure all inquiries and complaints receive timely responses
 - Track and report on all inquiries and complaints for NEB and VFPA

**timing and specific activities may change*



Thank You

Questions?