PROJECT OVERVIEW

Expansion

- Approximately 980 kilometres of new pipeline and additional infrastructure at three existing terminal locations along the existing Trans Mountain Pipeline system between Edmonton, AB and Burnaby, BC
- Increased nominal capacity from 300,000 barrels per day up to 890,000 barrels per day
- 12 new pump stations, 19 new tanks, space for three Aframax vessels at the Westridge Marine Terminal
- Customers have signed long-term firm 15- and 20-year contracts with Trans Mountain

Project Details

- Dual-line operation
  - Existing line: refined products, synthetic crude oils, light crude oils
  - New line: heavier oils
- 860 km of 36-inch and 120 km of 42-inch pipe

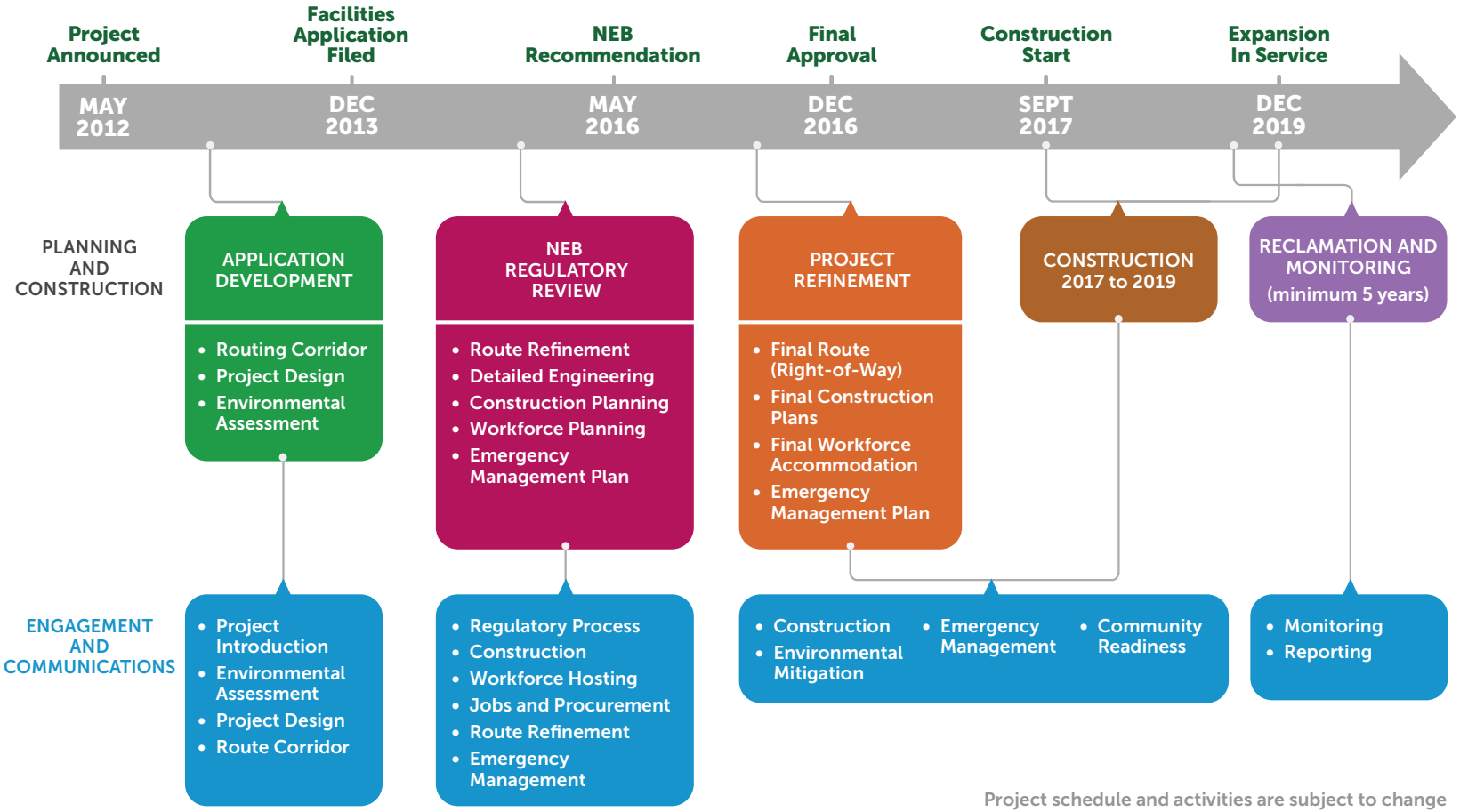
- Two new delivery lines from the Burnaby Terminal to the Westridge Marine Terminal in Burnaby, BC
- Existing pipelines to be reactivated:
  - Hinton, AB to Hargreaves, BC
  - Darfield, BC to Black Pines, BC
- Project cost: approximately $7.4 billion

Numbers based on preliminary estimate, subject to change

PROJECT OVERVIEW MAP – WITH SPREADS

TRANSMOUNTAIN

PROJECT SCHEDULE



Project schedule and activities are subject to change

KINDER MORGAN CANADA

BUILDING A PIPELINE

Step by Step

Surveying and Staking: After finalizing a route, crews survey and stake the right-of-way and any temporary workspace needed for construction.

Clearing: Trees and vegetation are removed from the right-of-way.

Grading: Area is cleared and graded. The topsoil is removed and stockpiled for replacement and future reclamation.

Stringing: Individual lengths of pipe ranging from 12 to 24 metres long are laid out end-to-end along the right-of-way.

Bending: Individual joints of pipe are bent using a hydraulic bending machine for directional changes and to fit the terrain.

Joining: Welders join the pipes together with either manual or automated welding processes. All welds are tested using high-tech methods such as X-ray or ultrasound.

Coating: The pipeline coating protects against corrosion. The pipeline is delivered to the right-of-way pre-coated. Field application coating is applied to welded joints.

Trenching: Excavators dig the trench to the required depth. Pipelines are buried in trenches that are generally a minimum of 0.9 metres deep, depending on sub-surface conditions.

Lowering In: The welded pipeline is lowered into the trench with heavy lifting machines called side booms.

Valves and Fittings: Valves and other fittings are installed at intermediate locations as required by the Canadian Standards Association pipeline code. The valves are used once the line is operational to isolate the pipeline for maintenance or in the event of an emergency.

Backfilling: Soils are replaced in the order in which they were removed.

Pressure Testing: Pipelines are hydrostatically tested to 125 per cent of the anticipated operating pressure.

Cleanup: The pipeline right-of-way is reclaimed. Temporary facilities are removed. The land is re-contoured and re-seeded as part of restoration.

PROJECT CHANGES AS A RESULT OF STAKEHOLDER INPUT

Open, extensive and thorough engagement along the pipeline and marine corridors has been an important part of the Project and will continue into construction and operation. The input we gather through our engagement activities helps us create a stronger, safer and more responsive Project.

Changes as a result of stakeholder feedback include:

- An increase in isolation valves on the pipeline resulting in a significant reduction of potential spill volumes
- An increase in pipeline wall thickness in high consequence areas, such as urban locations and at river crossings
- Routing of the pipeline to avoid river crossings at significant fish bearing rivers such as the Fraser River, upper North Thompson, Albreda, Coldwater and Coquihalla River
- Using the Transportation Utility Corridor instead of routing through established neighbourhoods in Edmonton
- Routing around the community of Hinton rather than through the town
- Upsizing of pipe from 36” to 42” between Hargreaves and Darfield, eliminating two pipeline crossings of the Fraser River and significantly reducing the Project power requirements in the North Thompson region
- Routing to avoid environmentally sensitive areas such as Cheam Wetlands
- Burnaby Mountain tunnel route option to avoid adjacent neighbourhoods and minimize community impact
- An investment in Western Canada Marine Response Corporation of more than $150 million to enhance spill response capabilities along the tanker route, which will double the response capacity and cut in half the delivery time of existing planning standards

CONDITIONS AND COMMITMENTS

Trans Mountain is expanding its current 1,150-kilometre pipeline between Strathcona County, Alberta and Burnaby, BC. The expansion will create a twinned pipeline that will increase the nominal capacity of the system from 300,000 barrels per day to 890,000 barrels per day. On November 29, 2016, the Government of Canada granted approval for the Trans Mountain Expansion Project to proceed with 157 conditions. The expansion will add approximately 980 km of new pipeline and reactivate 193 km of existing pipeline. In addition, there will be 12 new pump stations, 19 new tanks at existing storage terminals and three new berths at the Westridge Marine Terminal.

Conditions

The NEB conditions apply during various stages of the Project's life cycle, including before construction, during construction and during operation of the pipeline. Conditions are designed to reduce possible risks identified during the application process and ensure the pipeline is planned, built and operated safely. The conditions also ensure Trans Mountain protects the environment and respects the rights of those directly affected by the Project through construction, mitigation and into many years of operations.

The conditions, which would be enforced by the NEB, cover a wide range of topics including:

- Safety and integrity of the pipeline
- Emergency preparedness and response
- Protection of the environment
- Ongoing consultation with those affected, including Aboriginal communities
- Socio-economic matters
- Affirmation of commercial support for the Project prior to construction
- Financial responsibility

Before the NEB made its recommendation, Intervenors and Trans Mountain had a chance to review and provide input on the draft version of the conditions. Feedback was considered in the development of final 157 conditions released on May 19, 2016.

A complete list of the 157 required conditions can be found in Appendix 3 of the NEB's report available on its website at www.neb-one.gc.ca.

The NEB's recommendation is the culmination of a lengthy and thorough regulatory review process, which considered many environmental and technical studies, scientific evidence and the results of Aboriginal and community engagement. Trans Mountain believes the 157 conditions are rigorous and appear to be achievable.

The NEB is responsible for verifying and ensuring Trans Mountain is in compliance with these conditions. It does this through inspections, management system audits, compliance meetings, manual or report reviews, emergency response exercise evaluations, information requests and information submissions. More information on the NEB's Compliance Verification Toolkit is available in Section III of the NEB's Regulatory Framework web page at www.neb-one.gc.ca/sftnvrnmnt/prtctng/index-eng.html#s3.

Commitments

As the Trans Mountain Expansion Project has been developed, Trans Mountain has made numerous commitments to address interests raised during this process. These commitments have been made through the NEB Information Request process and directly through conversations with Aboriginal groups, governments, communities and other stakeholders during four years of engagement.

NEB Condition 2 requires Trans Mountain to implement the commitments it has made, and NEB Condition 6 requires Trans Mountain to file updates of its Commitments Table with the NEB at specific times through to operations until all commitments have been satisfied. In addition, Trans Mountain is required to post on its company website the same information. The Commitments Table will be posted on www.transmountain.com.