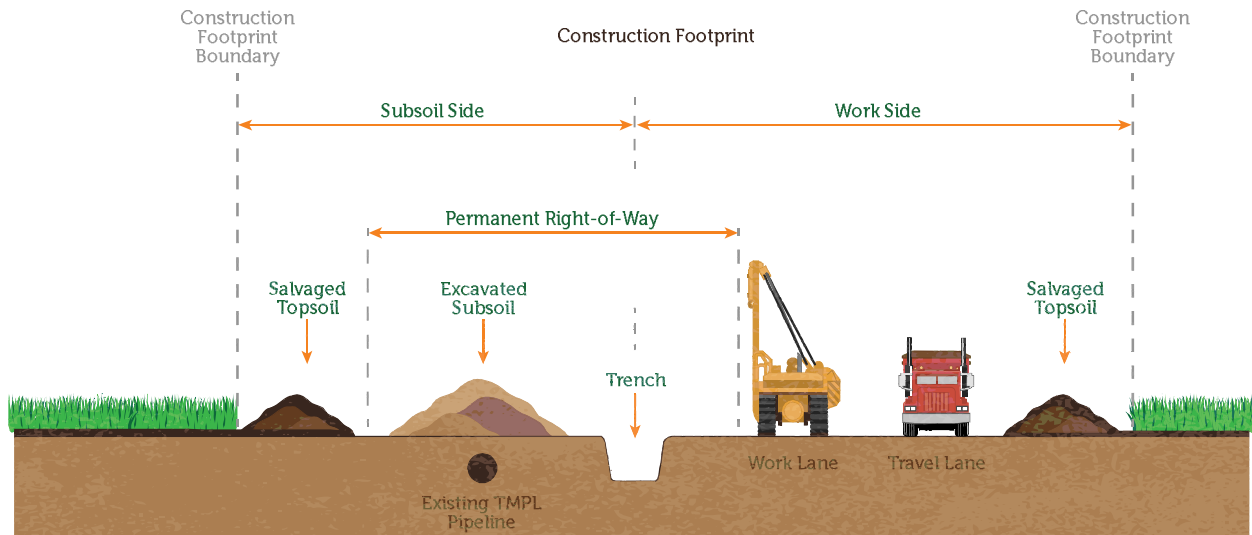
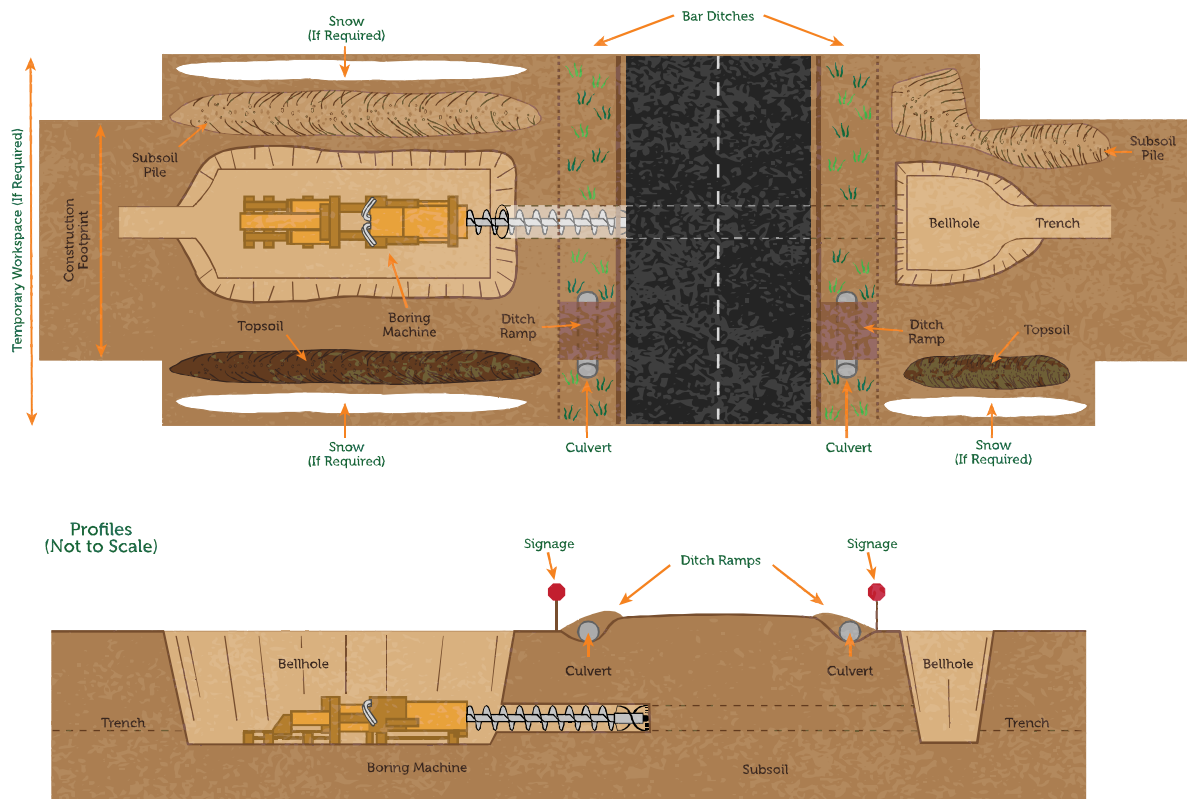


Conventional Pipeline Construction



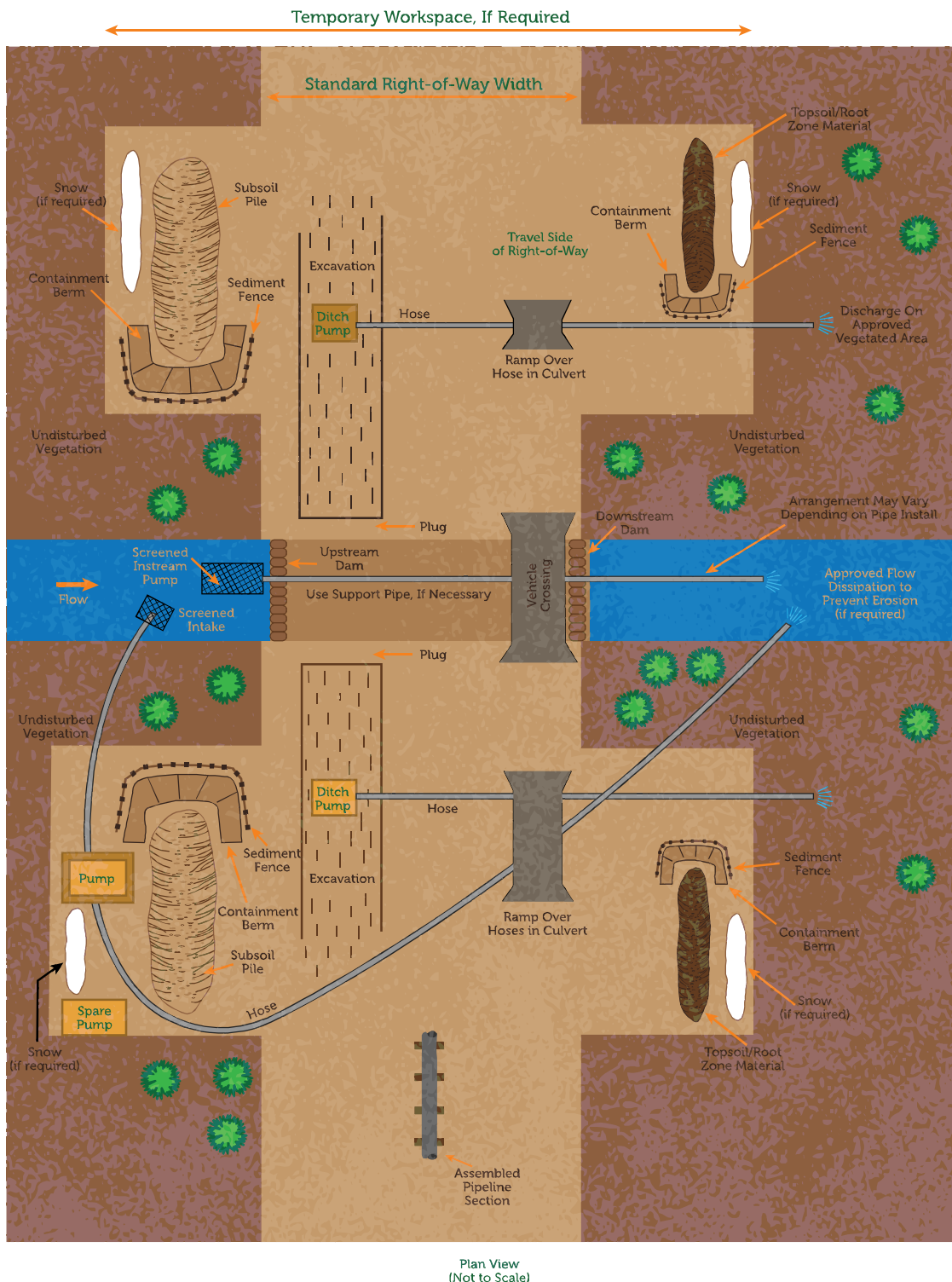
Trenchless Technique for Crossing Roads and Railways



These are representations of standard pipeline construction techniques. Trans Mountain will use the most appropriate technique for each specific location.

RIVER AND WATERCOURSE CROSSING CONSTRUCTION TECHNIQUE

Stream Isolation: Dam and Pump Technique

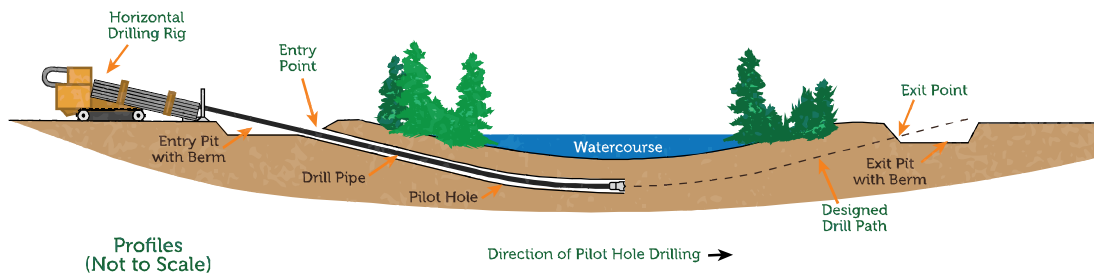


The river and watercourse crossing construction technique may be refined during the detailed engineering and design phase.

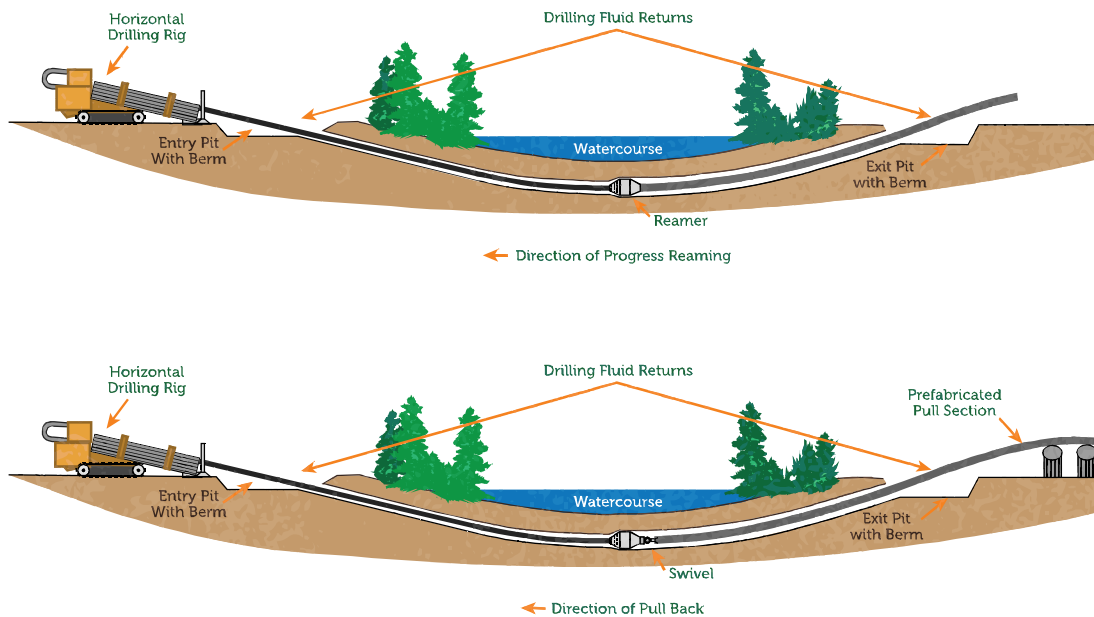
RIVER AND WATERCOURSE CROSSING CONSTRUCTION TECHNIQUE

Horizontal Direction Drill (HDD)

Stage 1: Pilot Hole Directional Drilling



Stage 2: Reaming and Pulling Back



The river and watercourse crossing construction technique may be refined during the detailed engineering and design phase.

URBAN PIPELINE CONSTRUCTION



TRANSMOUNTAIN



RURAL PIPELINE CONSTRUCTION



- Note:**
- Not all activities will occur at every location
 - Sequence may change on occasion



PIPELINE SPECIFICATIONS



- Oil transmission pipelines range in diameter up to 48 inches. There are more than 100,000 kilometres in Canada, roughly 2.5 times around the globe.
- Trans Mountain will use pipe made from high-strength steel that complies with stringent requirements of Canadian Standards Association (CSA Z245.1 Steel Pipe) and Trans Mountain's own specifications
- Trans Mountain will design, construct and operate the pipeline in accordance with CSA Z662 Oil and Gas Pipeline Systems, National Energy Board (NEB) Onshore Pipeline Regulations (OPR) and supplemental Trans Mountain specifications
- The Project will involve building about 860 km of new 36-inch (914 mm) and about 120 km of new 42-inch (1,067 mm) diameter pipes between Edmonton and Burnaby Terminals. The larger 42-inch segment is required between Hargreaves and Blue River, BC to reduce power demand in the BC Interior.
- Trans Mountain will have a quality management program in place to ensure all phases of work from pipe manufacturing through to pipeline installation and final hydrostatic acceptance testing is in compliance with CSA, OPR and Trans Mountain specifications
- Trans Mountain's strong focus on inspection and maintenance could result in the pipelines having an indefinite lifespan

Our Commitment

- We will take every possible action to prevent a spill and have developed a number of programs to protect and inspect the Trans Mountain Pipeline
- No spill is acceptable, but we have plans to respond, clean up, remediate and learn from every incident should one occur
- In the event of a spill, we will examine all aspects of our operations and make modifications wherever possible to prevent a recurrence
- The pipeline has protective coatings and a cathodic protection system to prevent rust and corrosion
- Technology is used to detect changes in pipeline condition and wall thickness

Damage Prevention

- The pipeline is marked and signage along the line is maintained
- We conduct regular aerial and ground patrols of the pipeline to look for any irregularities or unauthorized activities along the pipeline corridor
- Permits are issued for any ground disturbance activities near the pipeline
- “One Call” program ensures the public or an employee can immediately and easily call for a response to a safety concern
- Education workshops and information mailouts help keep the public aware of the potential risk of activities near the pipeline corridor

Pipeline Safety

- Pipelines remain the safest and most efficient method for transporting petroleum products
- As long as pipelines are properly maintained, their lifespan is indefinite

Pipeline Protection

- Our pipeline integrity management includes regular inspection, maintenance and repair programs managed by a dedicated Technical Services team