

Coastal GasLink

Construction in your community

September 2020

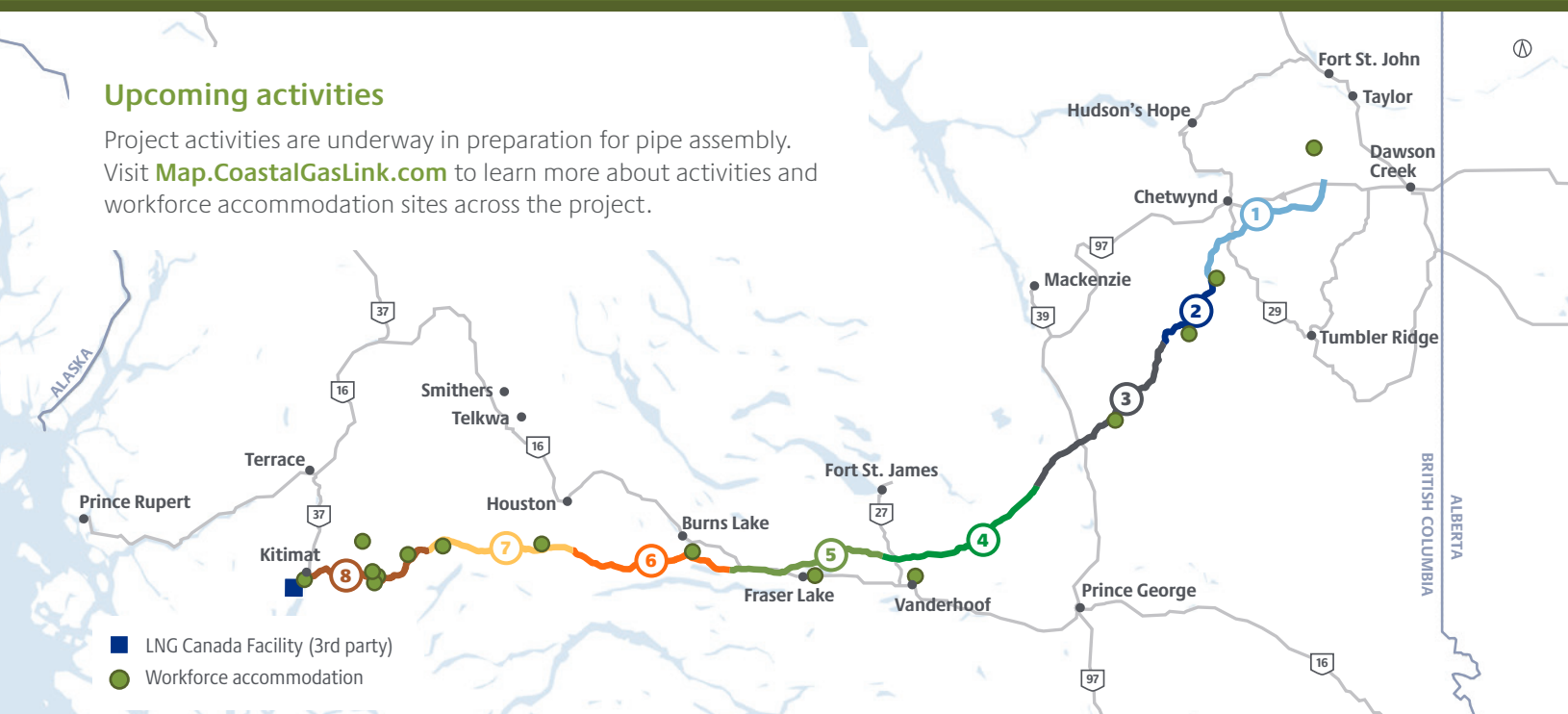
Coastal GasLink is creating an extraordinary legacy of safety and respect for communities and the environment. With construction underway, we want to make sure you have access to the information you need about our construction program.



Sign up today for construction updates at coastalgaslink.com/construction-updates

Upcoming activities

Project activities are underway in preparation for pipe assembly. Visit Map.CoastalGasLink.com to learn more about activities and workforce accommodation sites across the project.



Section 1

Site preparation: Ongoing until Summer 2020
Clearing & Grading: Ongoing through Spring 2021
Pipeline assembly: Commencing Summer 2020

Section 4

Site preparation: Ongoing until Summer 2020
Clearing & Grading: Ongoing until Fall 2020
Pipeline assembly: Commencing Summer 2020

Section 7

Site preparation: Summer 2020
Clearing & Grading: Commencing Summer 2020
Pipeline assembly: Commencing Spring 2021

Section 2

Site preparation: Ongoing through Spring 2021
Clearing & Grading: Ongoing until Summer 2021
Pipeline assembly: Commencing Summer 2021

Section 5

Site preparation: Ongoing until Summer 2020
Clearing & Grading: Clearing completed Spring 2020. Grading commencing Summer/Fall 2020.
Pipeline assembly: Commencing Winter 2020/2021

Section 8

Site preparation: Underway until December 2020
Clearing & Grading: Ongoing through 2020
Pipeline assembly: Commencing Summer 2020 with additional work in 2021

Section 3

Site preparation: Ongoing until Summer 2020
Clearing & Grading: Ongoing until Summer 2021
Pipeline assembly: Commencing Summer 2020

Section 6

Site preparation: Ongoing until Summer 2020
Clearing & Grading: Clearing completed Spring 2020. Grading commencing Summer 2020.
Pipeline assembly: Commencing Summer/Fall 2020

Anticipated in-service in 2023

Construction on the Coastal GasLink Project is currently underway to meet our planned in-service date of 2023.

What we are building: pipeline and facilities

The 670-kilometre Project is divided into eight construction sections and includes compressor and meter stations. Each section undergoes site preparation before construction. Construction is being carried out by our highly-qualified prime contractors and their schedules are designed to enable crews to work in both summer and winter months.

Stages of pipeline construction

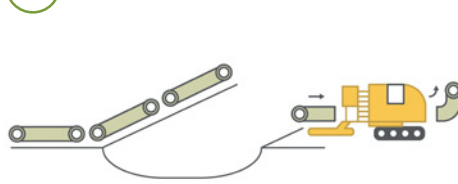
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Clearing and grading

After crews identify and mark the pipeline right-of-way, the topsoil is removed and stored for future reclamation. The ground is then prepared to ensure the surface is level for construction equipment.

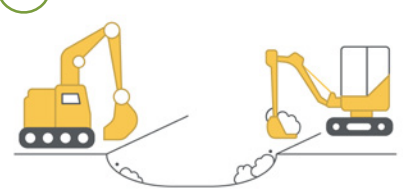
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Stringing/bending

Pipeline crews line-up sections of the pipe end-to-end along the edge of the trench. A machine bends the pipe to ensure it follows the route and contour of the land.

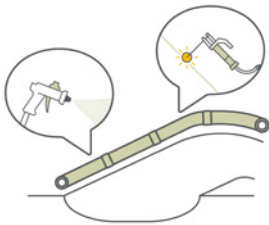
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Trenching

Construction crews use backhoes or ditching machines to dig a trench for the pipeline.

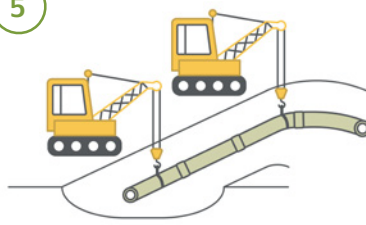
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Welding/coating

Welders join the pipe segments together. Each weld is inspected and certified using X-ray or ultrasonic technology. Pipeline joints are coated with an anti-corrosion material and then the coating is inspected.

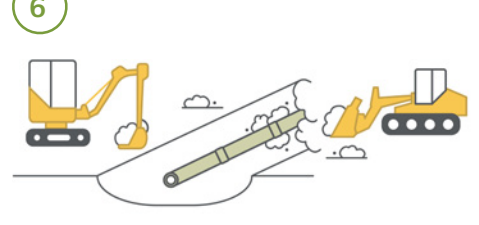
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Lowering/tie-ins

Following careful inspection, a special crane lowers the section of welded pipe into the trench. A separate crew completes the final welds (tie-ins) connecting continuous lengths of pipeline.

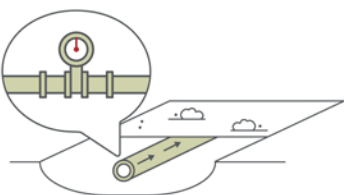
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Backfilling

The soil is returned to the trench and is replaced in the sequence it was removed to bury the pipeline. The land is prepared for reclamation.

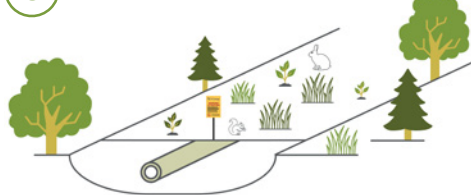
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Pressure testing

The pipeline is filled with water and pressurized to a level that exceeds the operating pressure of the pipeline, ensuring it's ready to transition safely to operation.

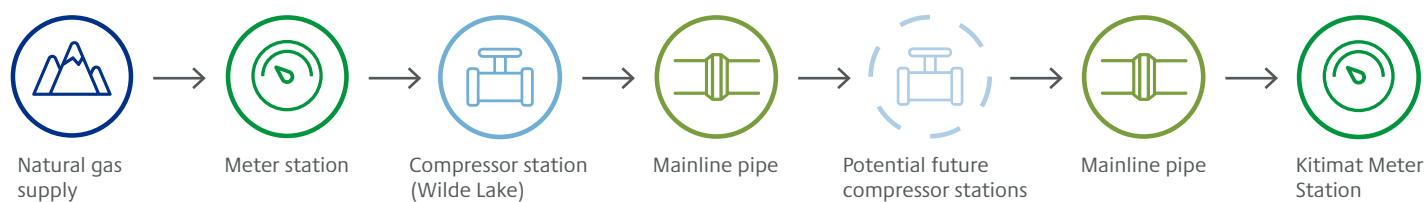
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Cleanup/reclamation

Once testing is complete, the right-of-way is stabilized and the ground surface is contoured to reestablish original drainage patterns. The topsoil is replaced, allowing for the re-establishment of appropriate vegetation. The goal is to bring the land as close to the original state as possible.

Compressor and meter facilities are important pieces of infrastructure for a natural gas pipeline system that ensure natural gas moves through the pipeline safely and efficiently.



Example of a compressor station

What is a compressor station?

As natural gas flows along a pipeline, it slows due to friction with the pipe, resulting in a drop in pressure. To keep the gas flowing at a required rate, it is re-pressurized at locations along the pipeline. This is done by mechanically compressing the gas at sites connected to the pipeline, known as compressor stations.

The location and number of compressor stations needed on a pipeline system is dependent on a number of factors, including the operating pressure of

the pipeline, the diameter of the pipe, elevation changes along the pipeline route and the volume of gas transported.

Coastal GasLink is advancing construction of one compressor station at Wilde Lake. Should a decision be made about potential future increase in capacity, up to seven additional compressor stations could be constructed, as permitted as part of the project's Environmental Assessment Certificate (EAC).

What is a meter station?

A meter station measures the amount of natural gas that enters and exits the pipeline. Meter stations also ensure that the natural gas in the line meets required specifications. These stations are used at all locations where natural gas enters the pipeline (receipt meter station) or leaves the pipeline (delivery or sales meter station).

Coastal GasLink is beginning construction of meter facilities at both the Kitimat and Wilde Lake facility locations. Should a decision be made about potential future increase in capacity, additional meter infrastructure could be constructed at the Wilde Lake and Kitimat facilities, as permitted as part of the project's EAC.

















Example of a meter station

Working together to keep each other healthy and safe

At Coastal GasLink, nothing matters more than the health and safety of our people, their families and communities.

The world has changed but our commitments remain the same. That's why we have implemented project-wide health and safety standards at all worksites and workforce accommodations. While measures may vary by site, all plans are in compliance with government guidelines.

Here are some of the important measures in place to help keep each other healthy and safe, while minimizing the strain on local health care infrastructure.

- | | | | |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|  | Following all government guidelines |  | 24/7 on-site medical care and monitoring |
|  | Daily temperature checks before entering worksites |  | Reduced occupancy at all workforce accommodations |
|  | Mandatory enhanced pre-screening prior to arrival at worksites |  | Modified dining and travel arrangements to promote physical distancing |
|  | Regular workforce health and safety training and education |  | Access to adequate and appropriate PPE |
|  | Increased disinfecting of common areas and hand washing facilities |  | Limiting interaction with communities |
|  | Promote safe work practices around physical distancing |  | Collaborating with health authorities, and Indigenous and local communities |
|  | Establish small family-like groups of workers who live, work and dine together where possible |  | COVID-19 testing as directed by local health authorities |

Learn more

We encourage you to visit CoastalGasLink.com/Safety for up to date information about the measures we are implementing to help keep everyone safe.

Housing workers safely throughout construction

Up to 2,500 workers will be required to build the project, the majority of whom will live in workforce accommodations designed to keep them safe, while also minimizing potential effects on local community services and infrastructure.

These accommodations were selected following extensive engagement and consultation with Indigenous and local communities. Here are some of the ways they provide a healthy and safe environment for all:



Safety for workers and communities is our number one priority

- Sites are located near the pipeline route to reduce travel risks to workers and the public
- 24-hour on-site security
- Secure fencing to ensure controlled access to each site at all times and avoid wildlife interactions
- Zero-tolerance approach to possession or use of firearms, illegal drugs, and unacceptable behaviour resulting from alcohol or drug consumption



Respect for local communities

- Designed with communities in mind, including siting and opportunities to encourage local economic benefits
- Indigenous Community Workforce Accommodation Advisors will support a positive and respectful workforce culture
- Continuous engagement with Indigenous and local communities to provide up-to-date information and seek feedback to address issues and interests
- Self-sustaining sites to reduce potential strain on nearby community services



Providing a home away from home

- Clean and comfortable private rooms
- Nutritious meals served throughout the day
- On-site amenities to encourage workers to remain on site – including laundry, internet, and other amenities



Keeping each other healthy

- Implementing standards and following all government guidelines
- Access to 24/7 on-site medical service within workforce accommodations and at worksites to minimize the strain on local health infrastructure
- Mandatory enhanced pre-screening prior to arrival and daily temperature checks



Did you know?

Coastal GasLink will be built using the safest, least disruptive construction methods and will meet strict environmental and safety standards. Additional precautions are taken when crossing a road or under waterways – from using thicker-walled pipe to burying the pipeline deeper in areas of higher population. Learn more by visiting CoastalGasLink.com.



Minimizing community impacts

We are committed to minimizing impacts on the local community during construction. Where there may be localized impacts from noise or increased traffic volumes, these activities and potential impacts are expected to be short in duration and in many cases, in remote areas away from communities.

Coastal GasLink is providing advance notification of potentially impactful activities during construction. You can view information related to these activities, including timing and location, on the interactive map on our website at Map.CoastalGasLink.com.

Did you know?

Coastal GasLink's parent company, TC Energy has over 65 years of experience building and operating pipelines. TC Energy's environmental practices have been internationally recognized for:

- Being one of the first companies to apply horizontal directional drilling versus open cut for larger river crossings.
- Pioneering the use of innovative winter construction techniques to ensure minimal impacts.
- Investing significantly in the preservation and enhancement of endangered species habitats.
- Adopting and developing new technology to make our pipelines more energy efficient and reduce greenhouse gas emissions.
- Applying mobile compressors to reduce methane emissions during maintenance programs.



Meet our prime contractors

Coastal GasLink selected four prime contractors to construct the pipeline — Surerus Murphy Joint Venture, SA Energy Group, Macro Spiecapag Joint Venture and Pacific Atlantic Pipeline Construction Inc. We also selected Aecon Group Inc. as the prime contractor for construction of the pipeline's compressor and meter stations. In selecting our prime contractors, we sought out highly qualified companies that met our core principles for safety, environmental stewardship and engagement with Indigenous and local communities.

Our prime contractors are directly responsible for hiring up to 2,500 workers over the four-year construction period, with a focus on giving first priority to competitive, qualified Indigenous and local businesses in northern B.C.

To learn more about potential employment and contracting opportunities, you can connect directly with our prime contractors:



Macro Spiecapag Joint Venture

- For Employment Inquiries: CGL_jobs@msjv.ca
- For Procurement Inquiries: Vendors@msjv.ca



SA Energy Group

- For Employment Inquiries: CGLemployment@saenergygroup.com
- For Procurement Inquiries: CGLprocurement@saenergygroup.com



Pacific Atlantic Pipeline Construction Inc.

- For Employment Inquiries: careers@pacific-atlantic.ca
- For Procurement Inquiries: supplychain@pacific-atlantic.ca



Surerus Murphy Joint Venture

- For Employment Inquiries: surerus-murphy.com/careers
- For Procurement Inquiries: surerus-murphy.com/subcontractor-pre-qualifications



Aecon Group Inc.

- For Employment Inquiries: CGLemployment@aecon.com
- For Procurement Inquiries: CGLprocurement@aecon.com





Keep in touch and learn more

We want to make sure you have access to the information you need about the project. Here are the many ways you can reach out, and learn more:



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CoastalGasLink.com



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Newsletter: **CoastalGasLink.com/
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Email us:
coastalgaslink@tcenergy.com



Follow us on Twitter:
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Visit our community office:
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