## Welcome to the BC Hydro information meeting



### West Kamloops Substation Project

We're here to answer your questions and listen to your comments on our plans for the new West Kamloops Substation.



## Why it's needed



Kamloops is growing. More people and businesses mean a need for more power.

The West Kamloops Substation will provide additional clean, reliable electricity to your city now and in the future.

#### What is a substation?

A substation reduces the voltage of electricity so that it can be used in your home or business.



## Where we're building



We acquired property from the City of Kamloops just off Bunker Road near the City Works Yard to build the new substation.

We chose this location because it's:

- o near the growing population,
- o near our existing transmission lines,
- away from residential areas,
- o the right size and accessible, and
- a previous light industrial site.



## Where we're building



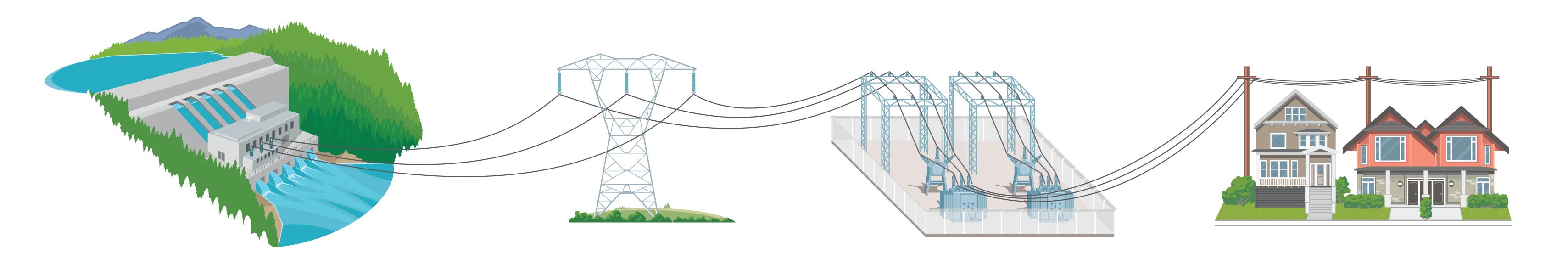
In this area, Kenna Cartwright Park contains Ponderosa pine (Pinus ponderosa), Douglas fir (Pseudotsuga menziesii), saskatoon (Amelanchier alnifolia), big sagebrush (Artemisia tridentata), bluebunch wheatgrass (Pseudoroegneria spicata), bunchgrass; and pussytoes (Antennaria).

We've studied the local area to make sure we can minimize any risks or impacts. We've completed:

- environmental studies,
- o geotechnical studies,
- o archaeology and heritage investigations, and
- flood investigations.



## Our electricity system



#### Generation

Electricity is generated by BC Hydro and independent power producers.

### Transmission

Electricity is moved from where it's produced to where it's used.

### Substations

Voltage is reduced at substations to provide power suitable for use in your home or business.

#### Distribution

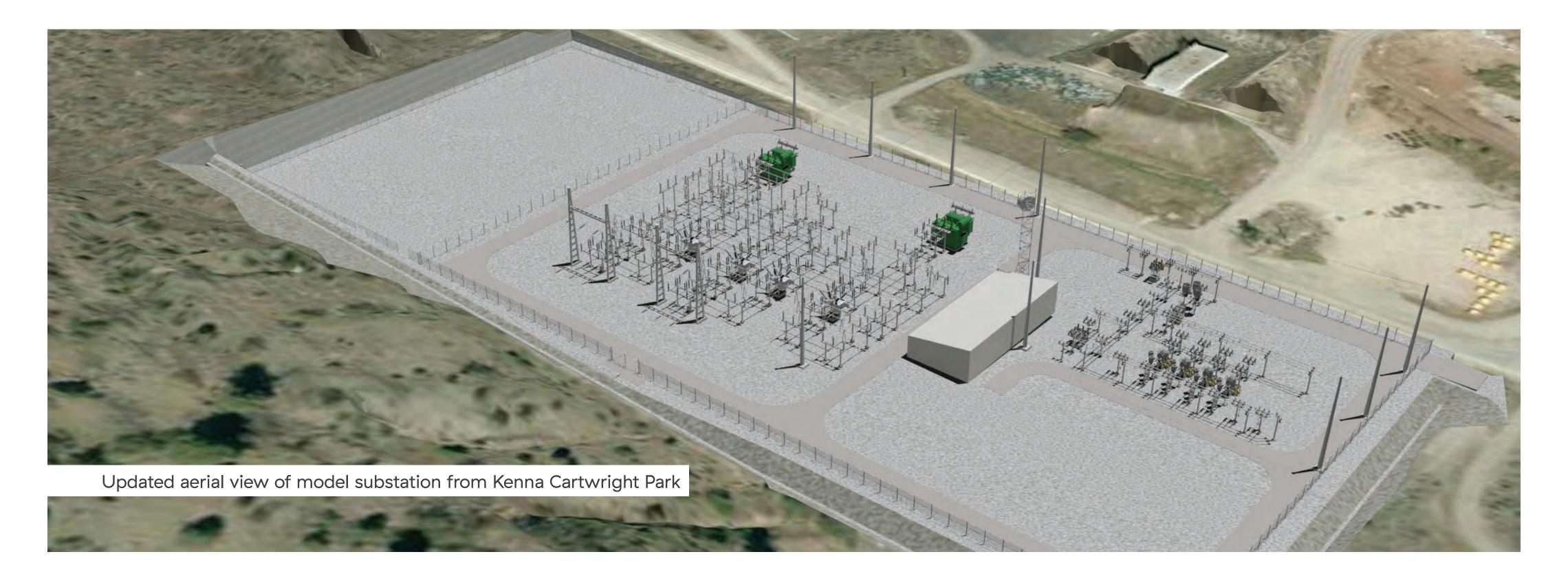
Low voltage
electricity is
provided to
your neighbourhood.



## What we're building – 3D model of substation









## What we're building – West Kamloops Substation



Within the substation fence, we'll install:

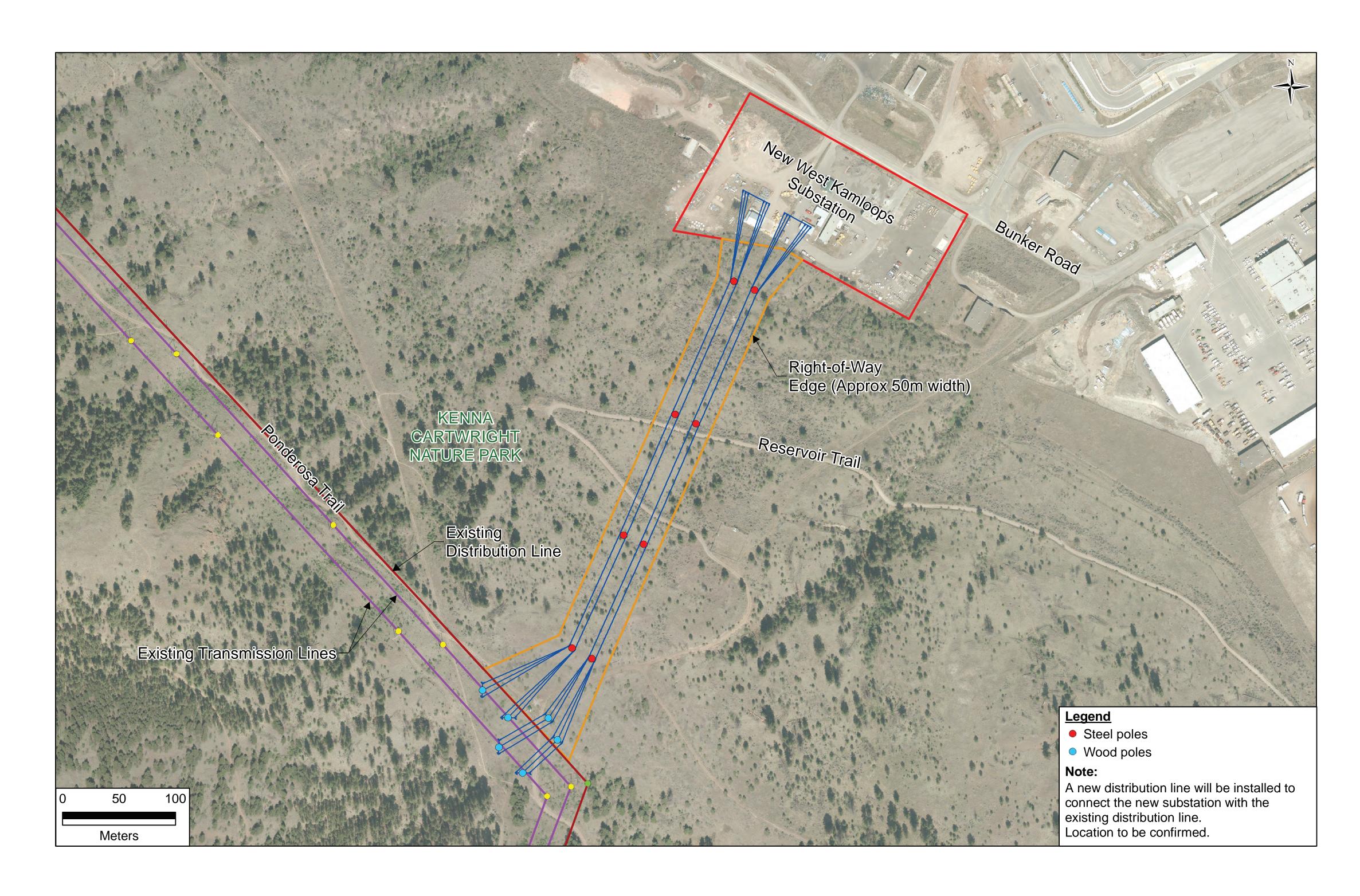
- two transformers,
- a controlbuilding, and
- equipment and steel structures to support the transmission and distribution lines.







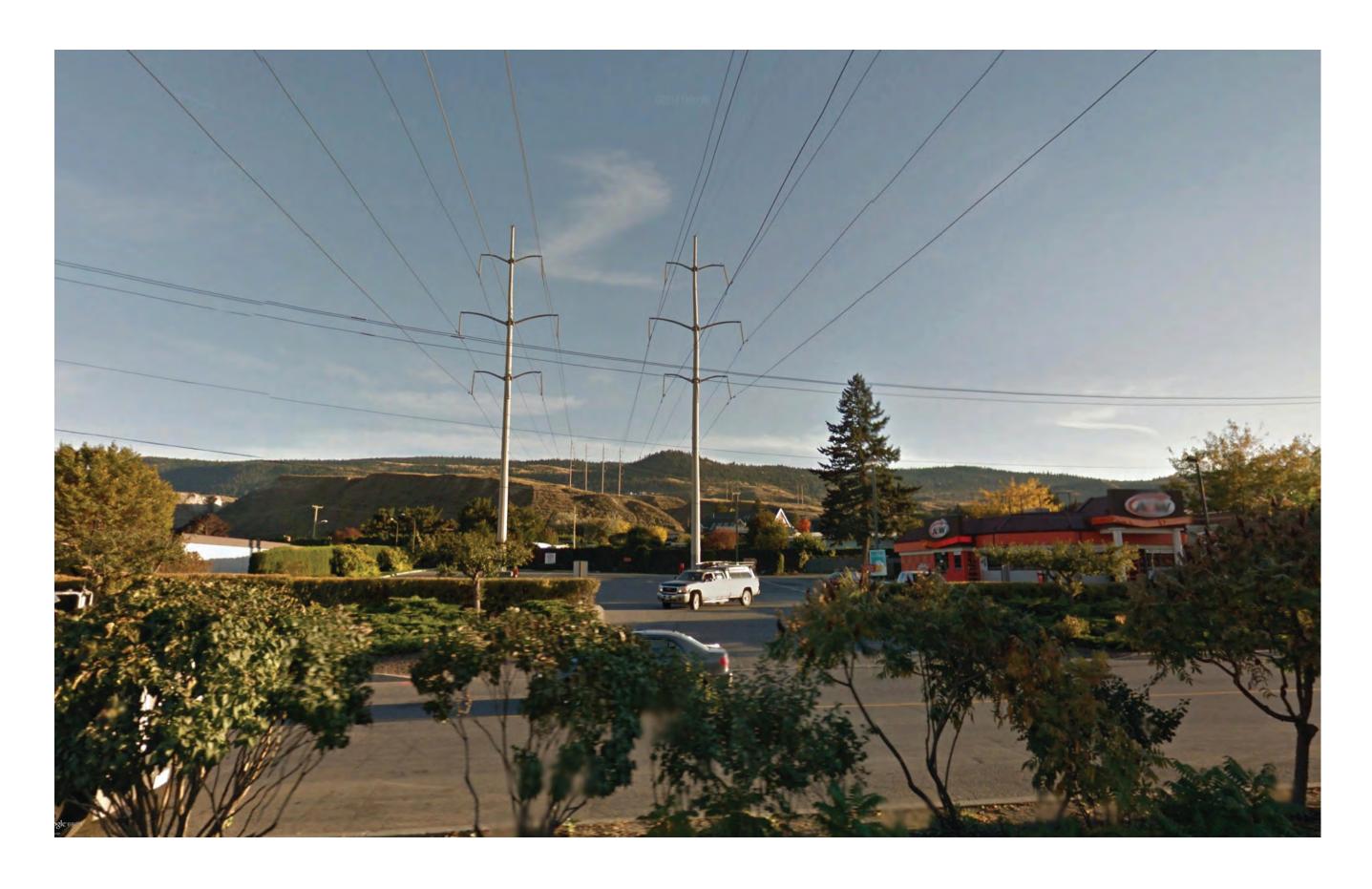
## Connecting it to our system – power lines in Kenna Cartwright Park



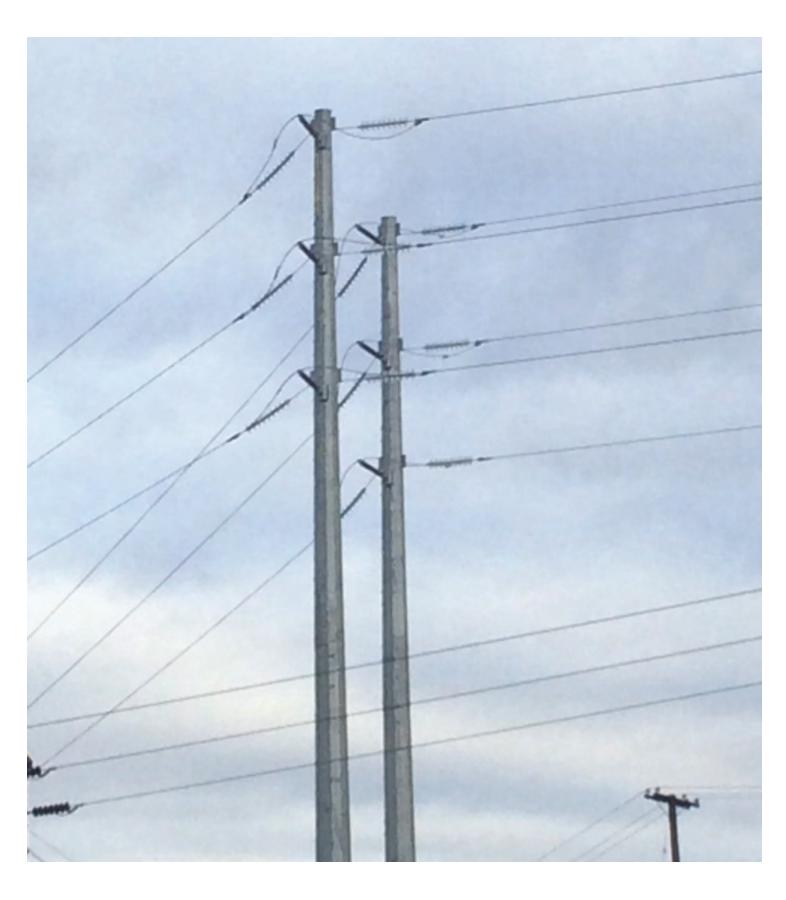
New West Kamloops Substation with planned transmission lines through Kenna Cartwright to connect to existing transmission lines.



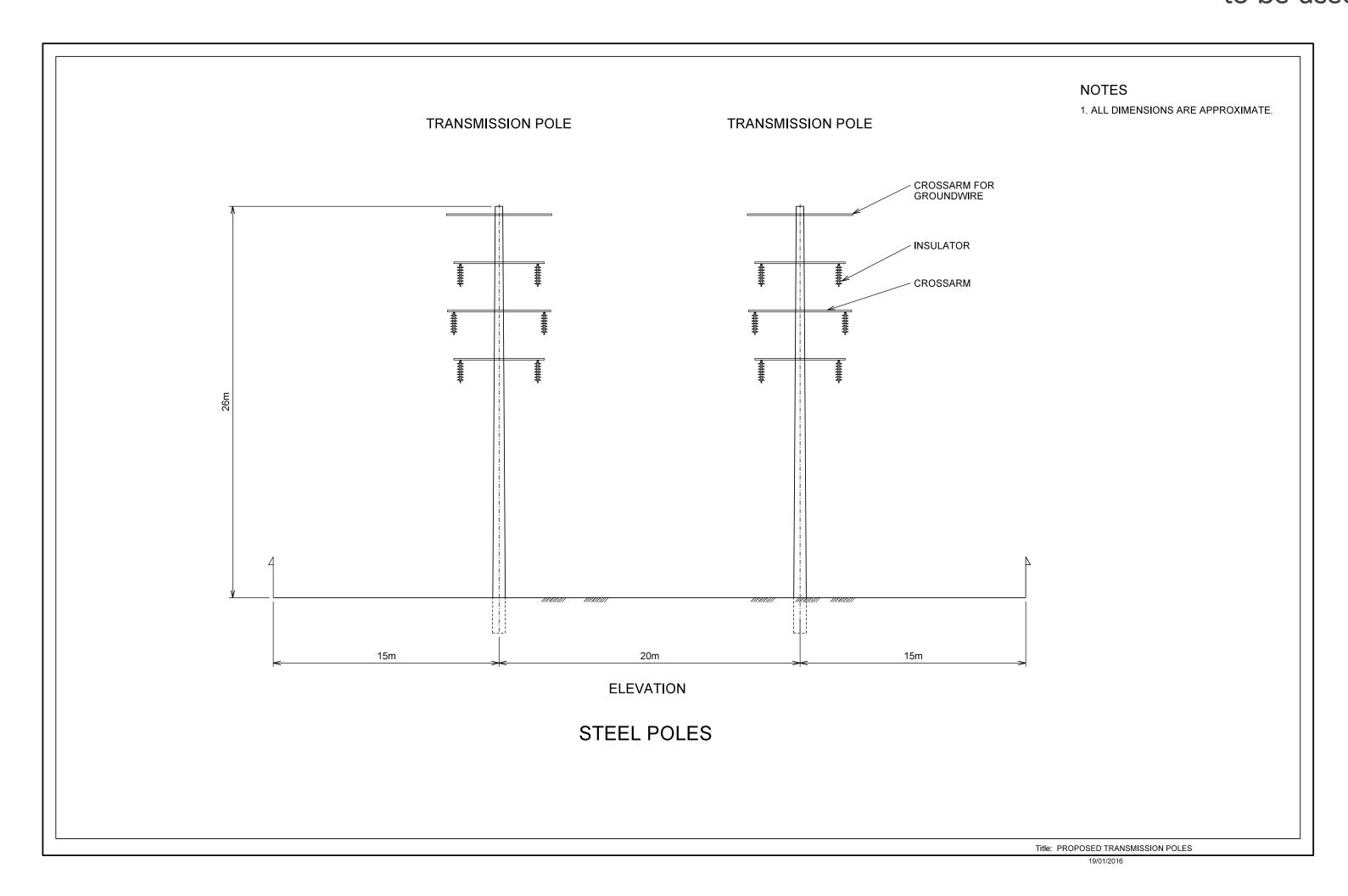
## Connecting it to our system – power lines



Example of poles to be used in Kenna Cartwright Park



Example of poles (dead ends) to be used next to substation



Design for poles in Kenna Cartwright Park

To connect the substation to the rest of the system, we'll also build:

- new overhead transmission and distribution lines in Kenna Cartwright Park, and
- o new distribution lines both overhead and underground.



# Communicating with our system – three communication towers



Tower location in park

As part of this project, we'll be building three communication towers.

### Kenna Cartwright Park Tower

- This tower will be approximately15 metres in height.
- It will have two microwave dishes approximately
   1.8 metres in diameter.

Communication towers enable our substations to communicate with the rest of our electricity system.

We use them to monitor and manage equipment, and make sure everything is working safely.



Similar 12m tower with two microwave dishes (1.8 m and 2.4 m). Small building will not be required at this site.



# Communicating with our system – three communication towers



Parkerest Ave

BKL

Action in the interest of the interest of

Substation tower location

Brocklehurst tower location

### West Kamloops Substation tower and Brocklehurst tower

- These towers will be approximately20 metres in height.
- The West Kamloops substation tower will have one microwave dish approximately 1.8 metres in diameter.
- The Brocklehurst substation tower will have two microwave dishes, one approximately 1.8 metres and the other approximately 2.4 metres in diameter.



Similar 24m tower with one microwave dish (3.6m in diameter)



### Timeline

KEY STEPS

SCHEDULE (SUBJECT TO CHANGE)

Property acquisition Completed January 2016

Preliminary substation design Completed February 2016

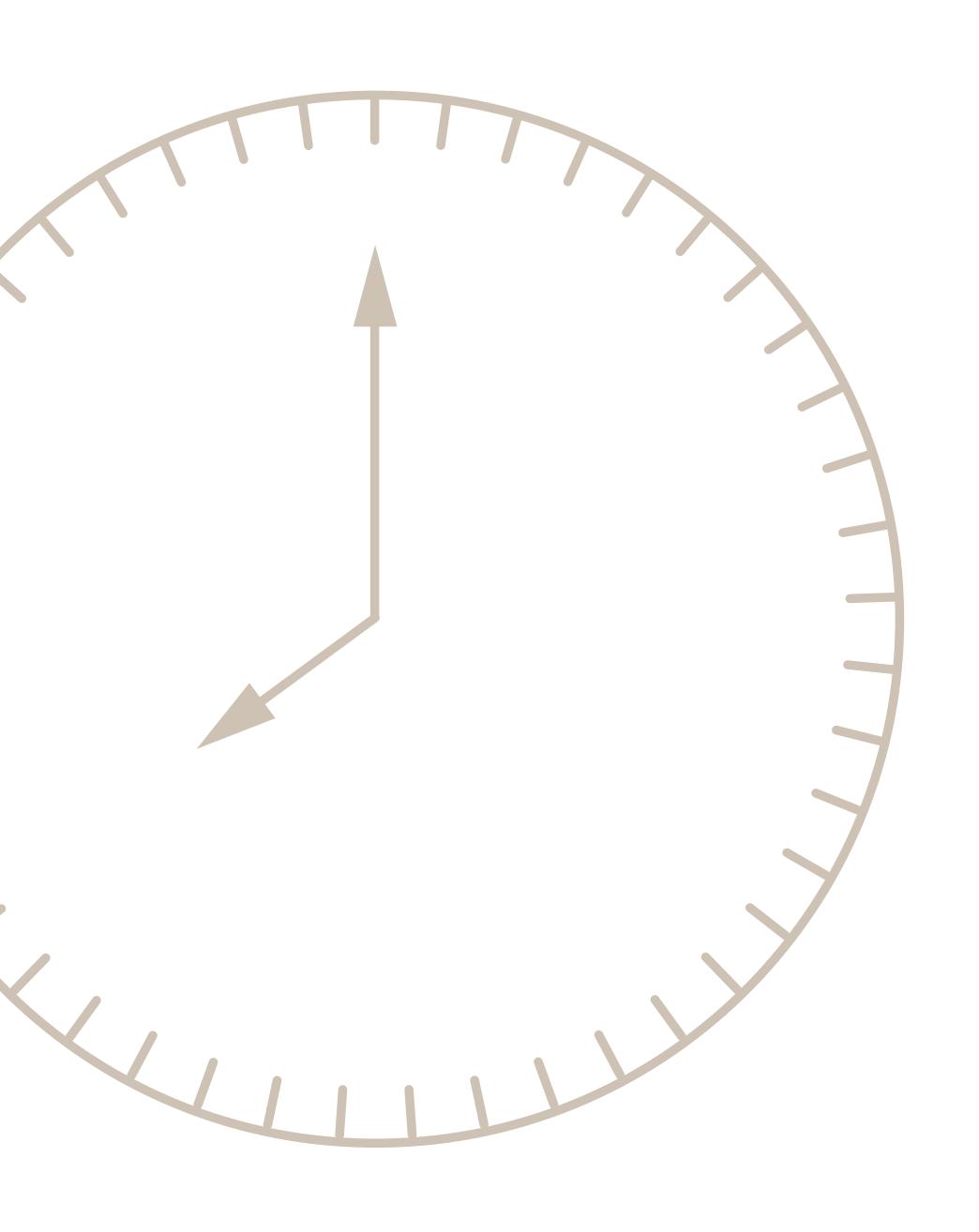
Community information meeting ..... March 2016

Partial site clearing by Summer 2016 the City of Kamloops

Final design Fall 2016

Construction January 2017

In-service date Summer/Fall 2018





## Listening to First Nations



She-Wolfe gifted to BC Hydro by Art Thompson from the Ditidaht First Nation.

We value our relationship with First Nations. Their input and participation is crucial in all our projects.

We'll continue to engage with local First Nations to understand and respond to their interests, and to find opportunities for their participation throughout the life of this project.



### Keep in touch



If you want to be kept up to date on our project please share your email address with us or you can reach us by:

Phone 1866 647 3334

Email stakeholderengagement@bchydro.com

Online bchydro.com/westkamsub



### Talking with our neighbours

# We want to develop mutually beneficial relationships with our neighbours and stakeholders by:

- encouraging your participation,
- providing you with timely information, and
- hearing your thoughtson the project.

#### So far we've:

- launched a
   project website at
   bchydro.com/westkamsub,
- o informed the public about the project through local media and direct mail,
- o informed the local MLAs about the project, and
- o met with the City of Kamloops.

Going forward we'll continue updating the City of Kamloops, local MLAs, stakeholder groups and interested neighbours about the project.

Communication will be ongoing throughout the life of the West Kamloops Substation Project.



