

# Foothills Solar Connection Project

COMMUNITY NEWSLETTER

March 2022



You are receiving this newsletter because you are near the Foothills Solar Connection project and we want your input.

## In This Newsletter

- Project Introduction
- Who is the AUC?
- Project Details
- Routing Selection
- Land Acquisition
- Providing Your Input
- Facilities Application
- Project Schedule
- Who is the AESO?
- Who is AltaLink?
- Contact Us

### Inserts:

- AESO Need Overview
- Project Map
- AUC Public Involvement Brochure

## Project Introduction

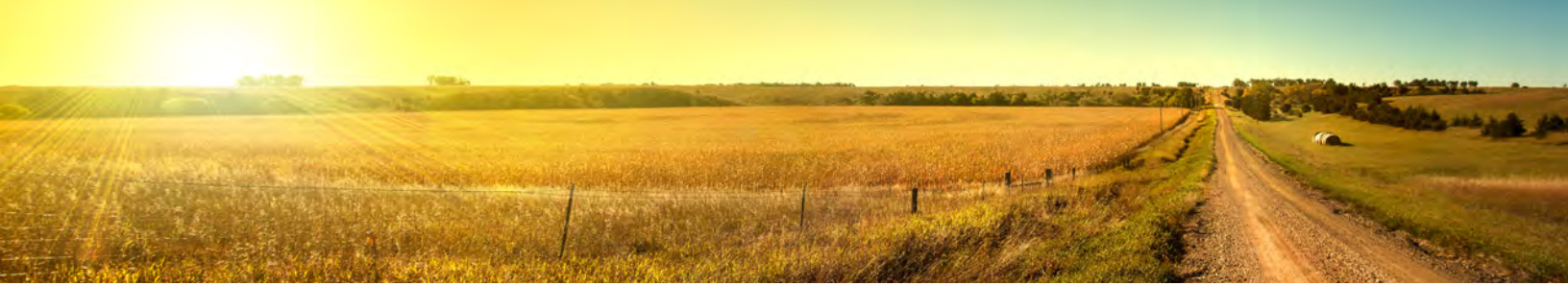
Elemental Energy through its subsidiary Foothills Solar Limited Partnership (the Proponent) has applied to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Foothills Solar Project, which includes the Prairie Sun 1037S substation to the Alberta electric system. For the Foothills Solar Connection project, the Proponent is proposing to construct approximately 4km of new transmission line (known as 721L) to connect the proposed Prairie Sun 1037S substation to the existing AltaLink Management Ltd. Foothills 237S substation. The Proponent is responsible for the design and construction of the new transmission line. Once in service, AltaLink will assume the operation and maintenance of the new line as part of the Alberta Interconnected Electric System.

## Who is the AUC?

The Alberta Utilities Commission (AUC) is a quasi judicial independent agency established by the Government of Alberta, responsible to ensure that the delivery of Alberta's utility service takes place in a manner that is fair, responsible and in the public interest.

They regulate investor owned natural gas, electric and water utilities, and certain municipally-owned electric utilities to protect social, economic and environmental interests of Alberta where competitive market forces do not. For more information visit [www.auc.ab.ca](http://www.auc.ab.ca) or refer to the enclosed brochure.





## Project Details

The proposed project is located near the Village of Blackie, in Foothills County. The project involves constructing approximately 4km of new transmission line to connect the Proponent's proposed Prairie Sun 1037S substation to be located within Section 10-19-27 W4M to the existing AltaLink Management Ltd. Foothills 237S substation located in NW 8-19-27 W4M. Design is ongoing and further details will be provided as the Project progresses.

For routes A and C the new line is expected to consist of mostly single pole structures which may be wood or steel. Structures are expected to be 20-30m in height with typical spans from 100-150m in length. Poles would generally be located on road allowance although specific sites may require occasional poles located on private property. A 9-10m easement for maintenance access would be required on private property adjacent to the road allowance.

For route B the new line is expected to consist of mostly two pole H-frame wood structures to reduce impact on agricultural operations. Structures are expected to be 25-35m in height with typical spans from 190-230m in length. The structures and line will fall within an easement up to 35m in width located entirely on private land.

For all routes, guyed dead ends or angle structures may require additional easements extending beyond the normal line easement for guy wires and anchors.

---

## Routing Selection

Several factors are taken into account in an effort to site a route with the least overall impact. Some of the factors considered include: existing land use, environmental effects, agriculture, existing infrastructure, public and interested party feedback, proximity to residences and economic viability.

Three potential routes are being proposed for this project, as shown on the enclosed route maps. These potential route options are preliminary and there has been no decision regarding placement of the transmission line. We are looking to discuss the proposed Project with those in proximity to the potential transmission line locations to better understand how the land is used and how this Project may affect you before we prepare our final routing and submission to the Alberta Utilities Commission (AUC) for approval.



### Privacy Statement:

Elemental is committed to protecting your privacy. Collected personal information will be protected under the provincial Personal Information Protection Act. As part of the regulatory process for new generation projects, Elemental may be required to provide your personal information to the AUC. For more information about how Elemental protects your personal information, contact us at [development@elementalenergy.ca](mailto:development@elementalenergy.ca)

## Land Acquisition

For route B, the proposed transmission line will be located entirely on private land and will require a right-of-way up to 35m wide, which will be acquired from landowners in the form of an easement agreement. For routes A and C, the proposed transmission line will be located primarily within the road allowance with an additional 9-10m wide easement required on adjacent private land for maintenance access. In addition to the easement, temporary areas will be required for workspace and access roads. Landowners will be compensated for the required easement, and any structures on their land.

## Providing Your Input

The Project is still in the early planning stages and the more information you are able to provide, the better equipped we are to incorporate feedback into the routing process that will be undertaken. Feedback received will be documented and considered before presenting a preferred and alternate route to the public and then filing an application with the Alberta Utilities Commission.

We will be reaching out to landowners, residents and occupants within 100m of the proposed project to gather input and address questions or concerns, however we encourage you to contact us by email or phone once you have reviewed this package to discuss the Project. After the consultation process is complete we will file an application with the AUC. The AUC will review the application through a process in which stakeholders can participate. The AUC will notify stakeholders after the Facilities Application has been submitted. To learn more about the AUC process and how you can become involved, please refer to the brochure included in this package titled Public involvement in a proposed utility development.

## Facilities Application

A transmission facility owner proposing to build an electric facility must submit an application to the AUC to obtain a permit to construct and a license to operate the facility. The application filed is often referred to as a facilities application. The Proponent expects to file a facilities application in June 2022. The AUC will then review the facilities application and either approve (with or without conditions) or deny the application.

To learn more about the AUC application and review process, please contact:

**Alberta Utilities Commission (AUC)**

Phone: (780) 427-4903

Toll-Free by dialing 310-000 before the number

Email: [consumer-relations@auc.ab.ca](mailto:consumer-relations@auc.ab.ca)



# Preliminary Project Schedule



**Notification to Stakeholders - March 2022**

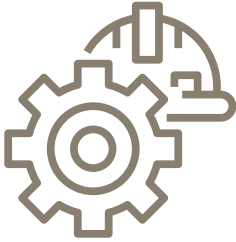
**Public Consultation - Ongoing**

**File Facilities Application with AUC - June 2022**

**Anticipated AUC approval - October 2022**

**Construction commencement\* - Q1 2023**

*\*if approved*



## Who is the AESO?

The AESO is an independent, not-for-profit organization responsible for the safe, reliable and economic planning and operation of the provincial transmission grid. For more information about why this project is needed, please refer to the AESO's Need Overview included with this package, or visit [www.aeso.ca](http://www.aeso.ca). If you have any questions or concerns about the need for this project or the proposed transmission development to meet the need you may contact the AESO directly. You can also make your questions or concerns known to a Foothills Solar LP representative who will collect your personal information for the purpose of addressing your questions and/or concerns to the AESO. This process may include disclosure of your personal information to the AESO.

### **Alberta Electric System Operator (AESO)**

1-888-866-2959

[stakeholder.relations@aeso.ca](mailto:stakeholder.relations@aeso.ca)

[www.aeso.ca](http://www.aeso.ca)



## Who is AltaLink?

AltaLink Management Ltd. (AltaLink) is responsible for the modifications at the existing Foothills 237S substation that are also required to connect the Foothills Solar Project. AltaLink's modifications are separate from the facilities that the Proponent is proposing to construct. To learn more about the Foothills 237S substation modifications, please contact:

### **AltaLink Management Ltd.**

1-877-267-1453 (toll-free)

[stakeholderrelations@altalink.ca](mailto:stakeholderrelations@altalink.ca)

### **Contact Us:**

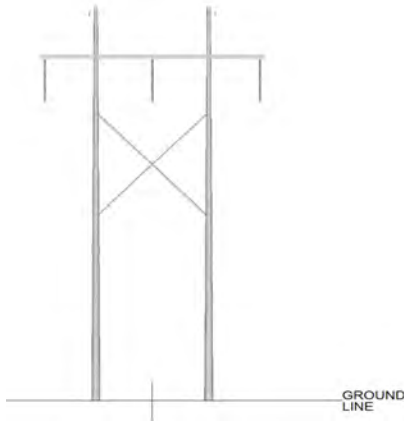
If you have any questions about the Project, or to arrange a personal consultation, please contact:

Samantha Brown, SABR Energy Consulting Inc.

(587) 434-7547 | [sbrown@sabreenergyconsulting.com](mailto:sbrown@sabreenergyconsulting.com)

# Example Structure Details

## Route B Structure Types



### H-Frame Structure

Height: 20 – 35 m (65 – 115 ft)

Width: 9.5 m (31 ft)

Pole Spacing: 4.6 m (15 ft)

Materials: Wood or Steel Poles

Average Span: 180 – 250 m (590 – 820 ft)

Use: Typically installed on quarter line or alignments which are not within a developed road allowance. For use on straight sections of the transmission line.

### Horizontal Angle Structure

Height: 20 – 30 m (65 – 100 ft)

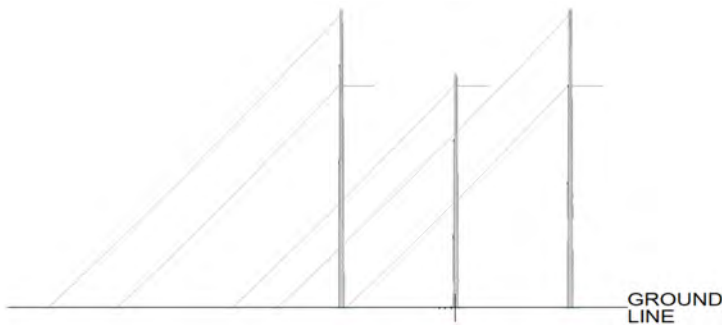
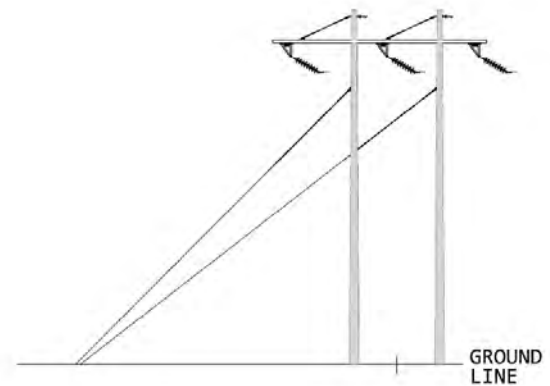
Width: 9.5 m (31 ft)

Pole Spacing: 4.6 m (15 ft)

Materials: Wood or Steel Poles

Average Span: 180 – 250 m (590 – 820 ft)

Use: Typically installed on alignments which are not within a developed road allowance. For use where angles are required on the centerline of the transmission line.



### Horizontal Dead-End Structure

Height: 20 – 35 m (65 – 115 ft)

Width: 13.6 m (45 ft) excluding guy wires

Pole Spacing: Typically 6.8 m (22 ft); Varies depending on line angle.

Guy Wires: Steel Cables extend up to 35m (115 ft) from each pole.

Materials: Wood or Steel Poles

Average Span: 150 – 250 m (490 – 820 ft)

Use: Typically installed on quarter line or alignments which are not within a developed road allowance. These structures are typically only used on corners where the transmission line changes direction.

# Example Structure Details

## Route A & C Structure Types



### Line Post Monopole Structure

Height: 18.3 – 24.4 m (60 – 80 ft)

Width: 4 m (13 ft)

Materials: Wood or Steel Poles

Average Span: 75 – 150 m (245 – 495 ft)

Use: Typically installed near the property line in the ditch of a developed road allowance. For use on straight sections of the transmission line.

### Vertical Dead-End Structure

Height: 20 – 35 m (65 – 115 ft)

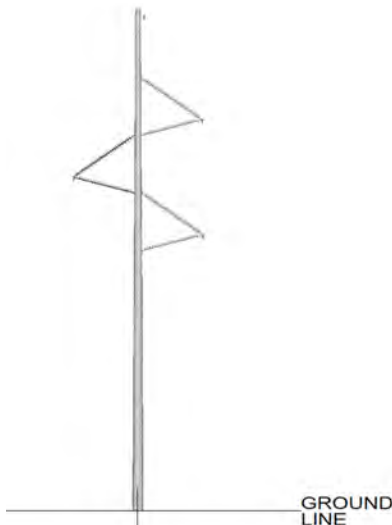
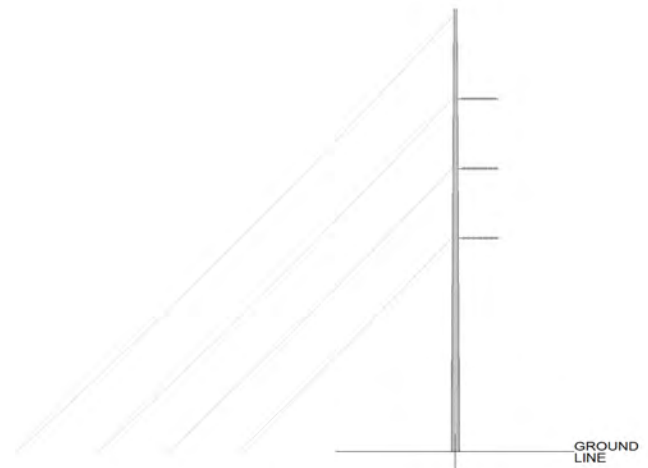
Width: 3 m (10 ft) excluding guy wires

Guy Wires: Steel Cables extend up to 35m (115 ft) from pole.

Materials: Wood or Steel Poles

Average Span: 75 – 150 m (245 – 495 ft)

Use: Typically installed near the property line in the ditch of a developed road allowance. These structures are only used at corners where the transmission line changes direction.



### Braced Post Monopole Structure

Height: 23 – 35 m (75 – 115 ft)

Width: 5.6 m (19 ft)



















Materials: Wood or Steel Poles

Average Span: 75 – 180 m (245 – 590 ft)

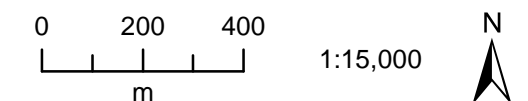
Use: Typically installed near the property line in the ditch of a developed road allowance. For use on straight sections of the transmission line where longer spans or heavier conductors are required.

## Preliminary Transmission Routes

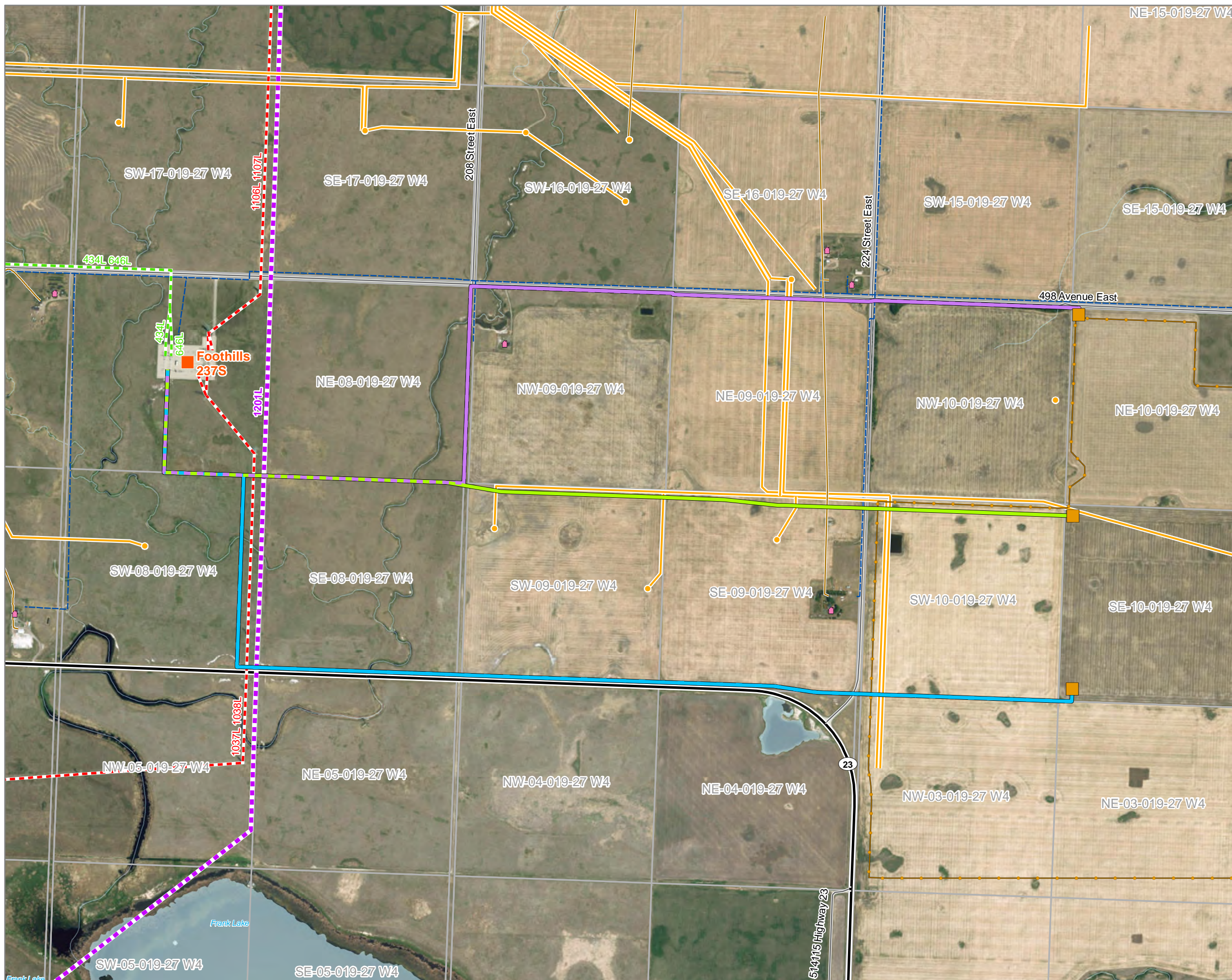
### Preliminary Solar Connection Route

-  Route A
-  Route B
-  Route C
-  Existing Substation
-  Oil/Gas Well
-  Potential Prairie Sun 1037S Substation
-  Residence Location (unverified)
-  Existing 138 kV Transmission Line
-  Existing 240 kV Transmission Line
-  Existing 500 kV Transmission Line
-  Fortis Distribution Line
-  Low Pressure Pipeline
-  Oil/Gas Pipeline
-  Proposed Foothills Solar Facility Fence
-  Paved Road
-  Unpaved Road
-  Watercourse
-  Water Body

**Note:**  
These are preliminary routes subject to change following consultation.



Produced For: Elemental Energy Inc.	Produced By: C. Jackson
Map Date: February 9, 2022	Map #: Foothills-002 Rev. 0
<small>This document is created solely for the use of Elemental Energy Inc. Maskwa Environmental Consulting Ltd. assumes no liability to any other third party for any representations contained in this drawing. Although there is no reason to believe that there are any errors associated with the data used to create this map product, users of this data are advised that errors may be present. Scale of the map is 1:15,000, when printed at 11" by 17".</small>	
<small>Coordinate System: NAD 1983 UTM Zone 12N Path: S:\Client\MHV\ElementalEnergy\Foothills\003_Mapping\2022\0209_Preliminary\Map\out</small>	



# Need for the Foothills Solar Project Connection in the Foothills County area

*Foothills Solar L.P. (Foothills Solar) has applied to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Foothills Solar Project (Facility) in the Foothills County area. Foothills Solar's request can be met by the following solution:*

## PROPOSED SOLUTION

- Add one 138 kilovolt (kV) transmission line to connect the Facility to the existing Foothills 237S substation in a radial configuration.
- Modify the Foothills 237S substation, including adding one 138 kV circuit breaker.
- Add or modify associated equipment as required for the above transmission developments.

## NEXT STEPS

- The AESO intends to apply to the Alberta Utilities Commission (AUC) for approval of the need in mid-2022.
- The AESO's needs identification document (NID) application will be available on the AESO's website at [www.aeso.ca/grid/projects](http://www.aeso.ca/grid/projects) at the time of its application to the AUC.

*The following organizations have key roles and responsibilities in providing access to the transmission system:*

## THE AESO

- Must plan the transmission system and enable access to it for generators and other qualified customers.
- Is regulated by the AUC and must apply to the AUC for approval of its NID.

## FOOTHILLS SOLAR

- Has requested transmission system access to connect the Facility.
- Is responsible for detailed siting and routing, and constructing the new 138 kV transmission line to connect the Facility to the existing Foothills 237S substation.
- Must apply to the AUC for approval of its transmission facilities applications.

## ALTALINK

- Is the transmission facility owner in the Foothills County area.
- Is responsible for operating and maintaining the new 138 kV transmission line and constructing, operating and maintaining the transmission facilities associated with the Foothills 237S substation modification.
- Is regulated by the AUC and must apply to the AUC for approval of its transmission facilities applications.

## WHO IS THE AESO?

The Alberta Electric System Operator (AESO) plans and operates Alberta's electricity grid and wholesale electricity market safely, reliably and in the public interest of all Albertans. We are a not-for-profit organization with no financial interest or investment of any kind in the power industry.

We appreciate your views, both on the need for transmission system development and proposed transmission plans. If you have any questions or comments, please contact us directly.

## CONTACT US

### Alberta Electric System Operator

AESO Stakeholder Relations  
[stakeholder.relations@aesocanada.com](mailto:stakeholder.relations@aesocanada.com)  
1-888-866-2959

2500, 330-5th Avenue SW  
Calgary, AB T2P 0L4  
Phone: 403-539-2450

[www.aeso.ca](http://www.aeso.ca) | [@theaesocanada](https://twitter.com/theaesocanada)