



# WINDCHARGER BATTERY STORAGE PROJECT

## 2020 CONSTRUCTION UPDATE

Total Safety at TransAlta™

targetzero

+

Ops Integrity!

## PROJECT UPDATE

In 2019, TransAlta Corporation (TransAlta), through its wholly owned subsidiary Western Sustainable Power Corporation introduced the WindCharger Battery Storage Project (the Project), a 10 megawatt (MW) / 20 MWh utility scale lithium-ion battery storage facility located next to TransAlta's Summerview Wind Farm substation in the Municipal District (MD) of Pincher Creek.

Throughout 2019 TransAlta advanced the Project through the Alberta Utilities Commission (AUC) application process to seek a permit to construct and license to operate the Project. Following TransAlta's submission of a facilities application in March 2019, the **AUC approved the Project and granted TransAlta a permit and license** for the WindCharger Battery Storage Project in November 2019.

With the necessary AUC approvals in-hand, TransAlta is advancing **construction of the Project, which is expected to begin March 9, 2020 and end late-June 2020.**

Total Safety at TransAlta is a safety management system that provides tools and a framework to protect our people, the public, environment, and the company's infrastructure. This commitment is a corporate responsibility for TransAlta and the personal responsibility of each and every employee and contractor who work on TransAlta's behalf.

The Project crew will monitor safety performance and compliance on-site during construction. TransAlta views safety as a critical element in construction planning for the Project, with TransAlta's Total Safety governance system embodied in the construction work plan.

Enough energy to power Pincher Creek for  
**1.5 hours in one charge.**



# CONSTRUCTION ACTIVITIES

## Access Roads and Road Improvements

No upgrades or improvements are required to any municipal roads for construction of the Project. An extension of the existing Summerview Substation access road will be constructed and used by Operations personnel to access the Project.

## Foundation Preparation

This will involve grading, minor excavation, and new pile foundations. You can expect a minor increase in truck traffic, with a brief period of heavier traffic during the equipment delivery and piling.

## Equipment Delivery

Delivery of the fully assembled batteries will take place between late-April and early-May with installation occurring shortly after delivery. Three transformers will also be delivered to site to facilitate connection of the batteries to the Summerview Substation.

## Transportation Routes

Hwy 3 will act as the main transportation route from Pincher Creek during construction. The batteries and other equipment will be transported along Rge. Rd 291 to Rge. Rd 290 to the junction of Secondary Rd. 785 and on to Twp. Rd 74. The public can expect increased traffic on these municipal roads during equipment delivery in late-April and early-May.

## Project Assembly

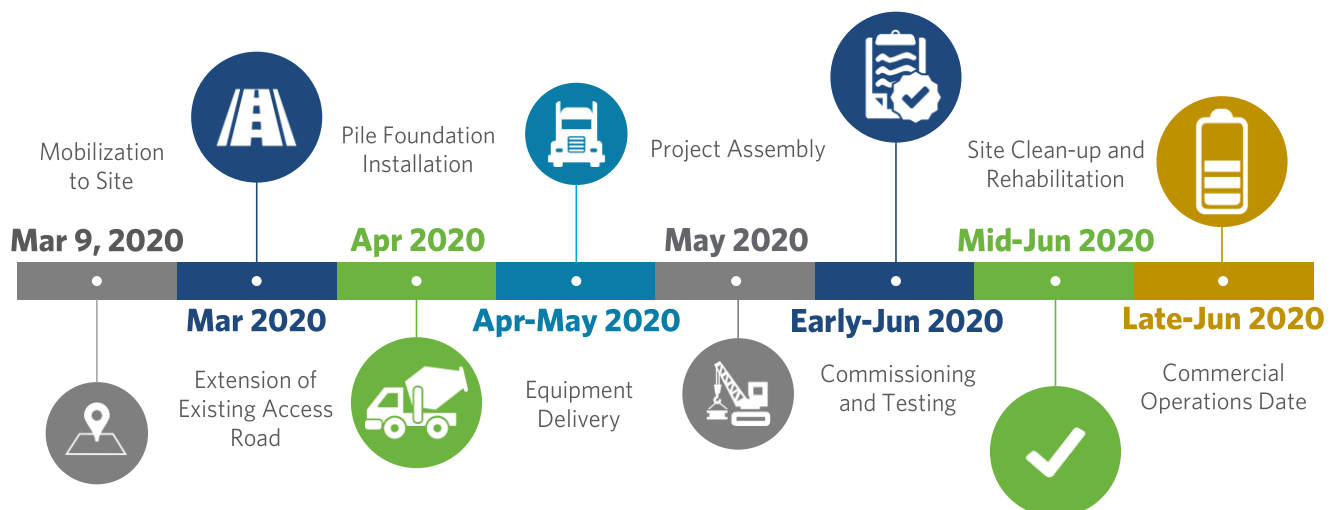
The Project batteries will be delivered fully assembled and will be situated on top of structural steel, supported by pile foundations. Transformers will be installed to connect the batteries to the Summerview Substation. An on-site crane will be used to facilitate the placement of the batteries on their foundations.

## Commissioning

Commissioning of the Project will involve testing, inspection and verification of the newly installed equipment and integration into TransAlta's operations procedures and processes. The Project is expected to be fully operational by the end of June 2020.

## Site Cleanup and Rehabilitation

After major construction work is completed, disturbed areas will be graded, and the Project area will be fenced. Equipment and debris will be removed and transported off site.



# TESLA TECHNOLOGY

Tesla is a leader in the battery storage industry. For over 10 years, Tesla has been building battery systems for cars. Their expertise in this field has informed their process for developing high-performance and reliable batteries for the grid.

The Project **utilizes Tesla's lithium-ion Megapack battery technology**, which was introduced in July 2019. This state-of-the-art technology solution is capable of generating a maximum of 10 MW for 2 hours with 20 MWh of storage capacity.

The Tesla Megapack batteries will be charged by electricity produced by TransAlta's Summerview Wind Farm, which makes the battery a true renewable project.

Power discharged from the Megapack can be controlled as required to meet demand and has been designed to accommodate Alberta's electric needs .



# SAFETY RESPONSIBILITIES

**Obey Signs and Safety Personnel** - Signage to delineate work areas and safety zones will be in place. During the transportation of equipment, flag personnel may be used to direct and control traffic in the area. Please obey all signage and be respectful of safety personnel.

**Reduce Your Speed** - Please reduce your speed during construction for both your protection and the safety of our workers.

**No Unauthorized Entry** - Entry to the construction and equipment storage areas and within 100m of the Summerview Substation will be strictly prohibited and enforced.

**Observe Safety Setbacks** - Please manage a safe distance from equipment being transported, wide loads, equipment lifting, construction workers and other construction areas as marked.

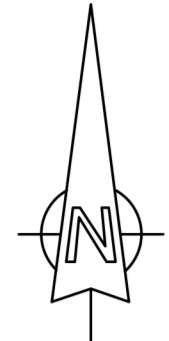
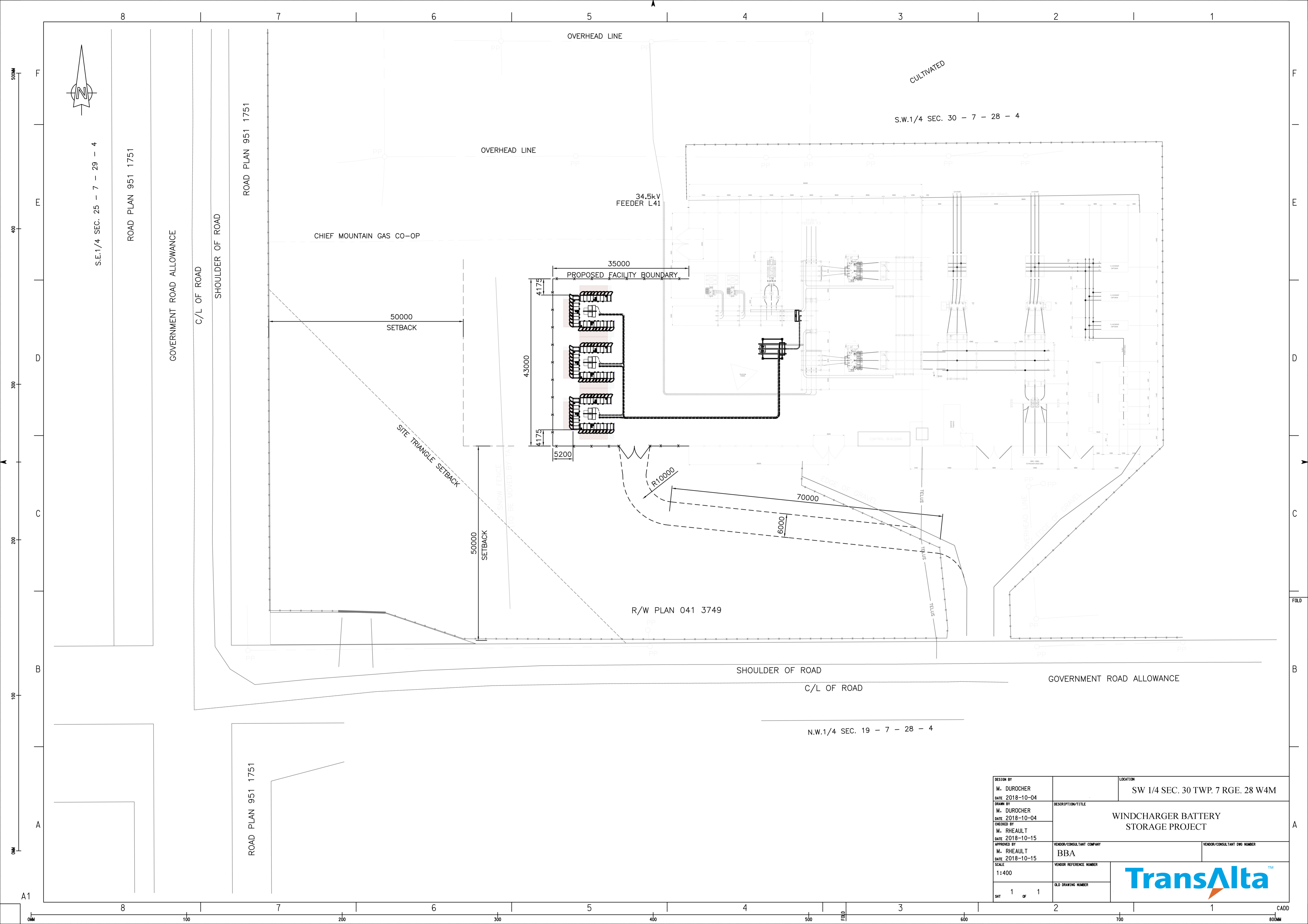
**Openings and Excavations** - Excavations and trenches will be appropriately fenced. We ask for your cooperation in staying away from marked excavation areas and observing signage in these areas.

**Vehicle Traffic Impacts** - Increase in vehicle traffic, large loads, wide loads, and construction near municipal roads will be encountered through the course of construction. We would ask for your patience and assistance is ensuring that you are driving safely and observing signage, flag personnel in the construction and transportation zones.

If you have any questions about construction of the Project, or if you would like to report an unsafe work condition, please contact us.

(877) 547-3365 Extension 1  
projects@transalta.com  
transalta.com





S.E.1/4 SEC. 25 - 7 - 29 - 4

ROAD PLAN 951 1751

GOVERNMENT ROAD ALLOWANCE

C/L OF ROAD

SHOULDER OF ROAD

ROAD PLAN 951 1751

CHIEF MOUNTAIN GAS CO-OP

SITE TRIANGLE SETBACK

50000 SETBACK

50000 SETBACK

35000 PROPOSED FACILITY BOUNDARY

4175  
43000  
4175

5200

34.5kV FEEDER L41

R/W PLAN 041 3749

R10000

SHOULDER OF ROAD

C/L OF ROAD

N.W.1/4 SEC. 19 - 7 - 28 - 4

S.W.1/4 SEC. 30 - 7 - 28 - 4

CULTIVATED

DESIGN BY M. DUROCHER DATE 2018-10-04	LOCATION SW 1/4 SEC. 30 TWP. 7 RGE. 28 W4M
DRAWN BY M. DUROCHER DATE 2018-10-04	DESCRIPTION/TITLE WINDCHARGER BATTERY STORAGE PROJECT
CHECKED BY M. RHEAULT DATE 2018-10-15	VENDOR/CONSULTANT COMPANY BBA
APPROVED BY M. RHEAULT DATE 2018-10-15	VENDOR/CONSULTANT DWG NUMBER
SCALE 1:400	VENDOR REFERENCE NUMBER
SHT 1 of 1	OLD DRAWING NUMBER



CADD