LAFARGE

WIND FARMS

WHITLA WIND

FORTY MILE, AB

QUICK FACTS

CLIENT:
CAPITAL POWER

CONSTRUCTION VALUE:
$325,000,000

PROCUREMENT MODEL:
BID-BUILD
CUSTOM MIX DESIGN

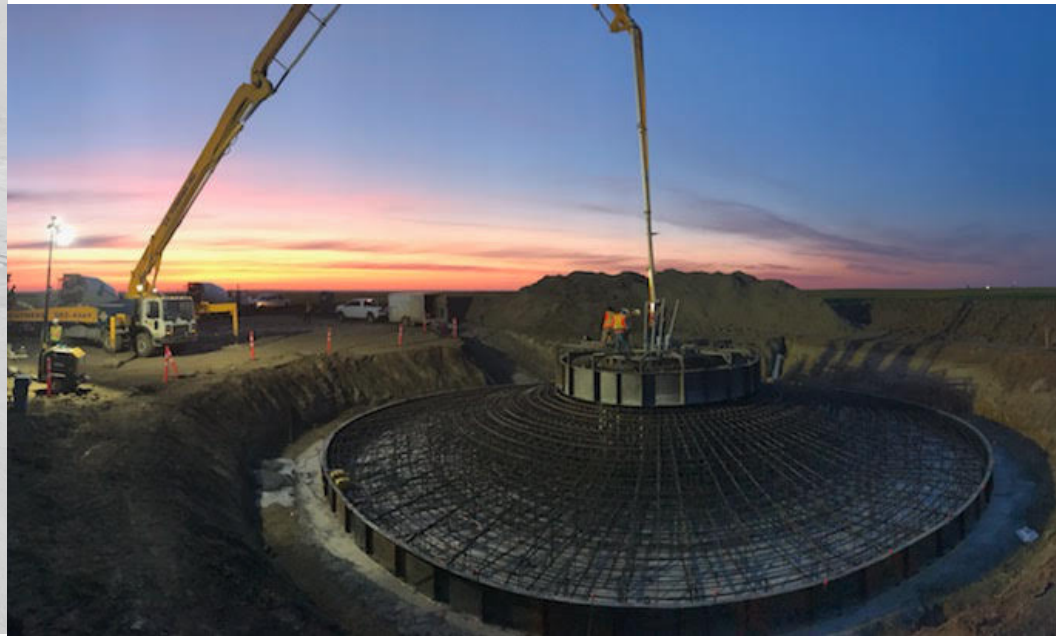
LAFARGE'S ROLE:
CUSTOM MIX CONCRETE DESIGN & FOUNDATION SLAB CONSTRUCTION

PROJECT OVERVIEW

Construction of Phase 1 of Whitla Wind began in September 2018 and is scheduled for completion in Q4 2019 with capacity of 201.6 MW. The full project, with planned capacity of 298.8 MW, is located on approximately 33,000 acres of land in the County of Forty Mile, Alberta.

The project consists of 56 ***Vestas V136 - 3.6MW*** wind turbines. Each turbine is 105m high, with blade rotor diameter of 136m - meaning that each one weighs more than 250 tons each - and requires a specially engineered and installed concrete base to support its massive structure and pressure.

Lafarge was retained as the dedicated concrete slab installation to provide highly engineered and massive supports required for the project. The project's remote location required the use of our massive portable concrete plants, along with locally-sourced aggregates and subbase.



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EFFECTIVE LEADERSHIP

PROJECT MANAGER
TREVOR JOYCE

SITE SUPERINTENDENT
DARRYL ERB

QUALITY ASSURANCE/ QUALITY CONTROL
MIKE BERNHART

WHITLA WIND

HIGHLY SPECIALIZED PERFORMANCE

As part of making sure the custom concrete blend for this unique project met the demanding specifications, our quality control team gathered local aggregate from the Lafarge facility closest to the project site. This material was then shipped our Edmonton research facility to establish mix design, and to ensure we began construction on time. Consequently, we maximized both logistics for the manufacturing and performance of the final product. Lafarge's enormous resource network made us the ideal team to get the job done, on time.

DEMANDING SITE CONDITIONS

With the extreme weather in the region, our teams began work between 02:00 and 05:00 each morning to make sure that we weren't impacted by the daytime's intense heat. In fact, ice was added to mix trucks prior to batching to ensure that performance and timing worked with the massive foundations' timelines.

Effective project management paired with concrete design is crucial to meeting project timelines and building durable structures. Our project managers have invaluable experience earned through on-site production and installation for mining, oil sands, wind farm and other large industrial projects across Western Canada. We apply our global network’s technical knowledge and experience in cement and aggregates, to optimize concrete mix design for your specific needs. Our managers meet challenging logistics while our portable plants provide consistent materials and effective quality control.

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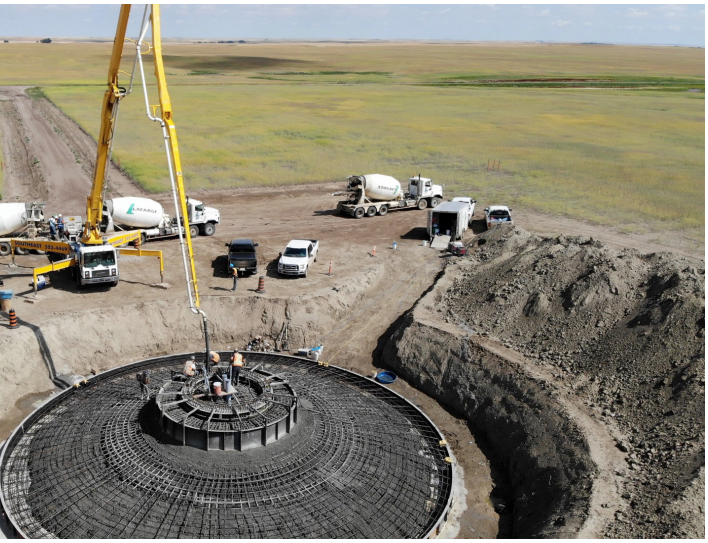
PROJECT IMAGES

WHITLA WIND



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