



Golden South Wind CLC Meeting #2

February 11, 2020

6:30 – 8:00 pm

St. George's Roman Catholic Parish – Knight's Hall



Golden South CLC

Community Liaison Committee (CLC) Meeting Agenda

1. Introductions
2. Refresher on Role of the Community Liaison Committee (CLC)
3. Project Background and Construction Update
4. Review of Action Items from Previous Meeting
5. Review of Submitted Questions
6. CLC Members Open Discussion and New Questions
7. Opportunities for the Public to Speak (if time allows)
8. Timing of Next CLC Meeting
9. Review of Action Items
10. Adjournment





Project Background and Construction Update



Golden South CLC

Golden South Wind Energy Facility

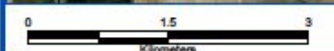
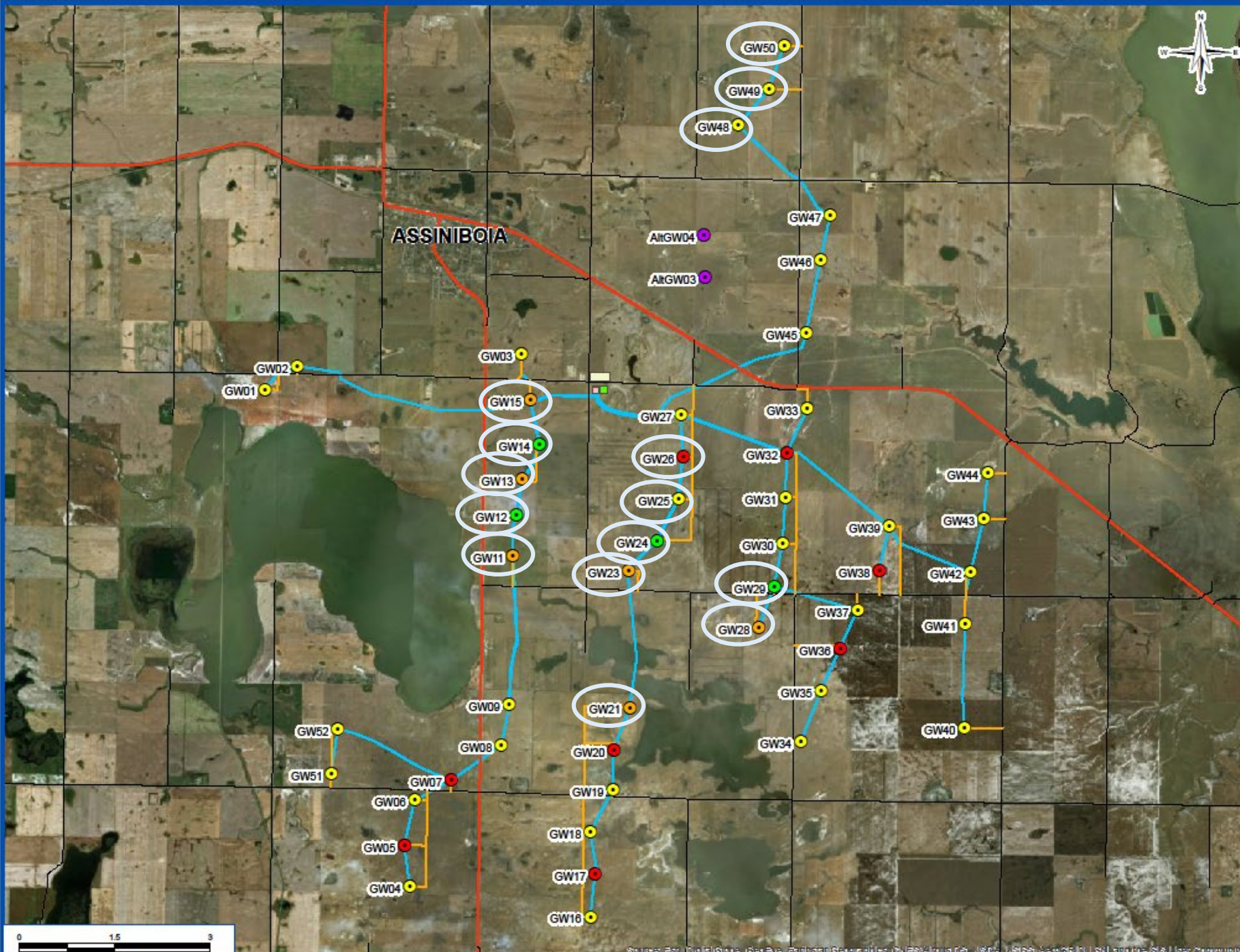
Proposed Infrastructure Layout

- PROPOSED TURBINE (136RD - NO LIGHT)
- PROPOSED TURBINE (136RD - LIGHT)
- PROPOSED TURBINE (155RD - NO LIGHT)
- PROPOSED TURBINE (155RD - LIGHT)
- PROPOSED ALTERNATE TURBINE
- PROPOSED LAYDOWN AREA
- PROPOSED COLLECTOR SUBSTATION
- PROPOSED O AND M BUILDING
- PROPOSED UNDERGROUND COLLECTION
- PROPOSED ACCESS ROAD
- EXISTING ROAD
- HIGHWAY

August 2019 1:55,000

Source(s): World Imagery 2019, Canvec

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Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Upcoming Construction Activities in 2020

- Equipment entering the fields to put down collector lines – 2 excavator, 4 dozer, 2 directional drilling rig
- Cranes entering the fields to crawl from site to site and install turbines – 3 main crawler cranes and 6 smaller cranes
- Rotors assembly at the turbine towers – Rotor diameter of up to 155m
 - Some rotor lifts will happen at night
- Blades coming to site – Blade length 75m
- There will be approximately 18 trucks hauling equipment, including blades, to each of the wind turbine locations
 - This does not include the off-loading equipment and personnel vehicles
- All employees will go through an orientation including 1 hour safety
- All visitors must go to the main office and no wander around the work areas



Upcoming Construction Activities in 2020

- Directional drilling will take place Spring 2020 under wetland and environmentally sensitive areas
- RM roads will be completed early Summer 2020
 - Existing RM roads will also be upkept
- O&M building will be built by October 2020
- Substation will be built by October 2020
- Spur Line will be built by SaskPower by 2020
- Around 250 persons will be onsite at the height of the construction in 2020





Review of Submitted Questions



Golden South CLC

Review of Submitted Questions

Questions sent in advance of the CLC meeting:

1. What voltage do the Golden South turbines generate?
2. What is the slowest wind speed that the Golden South turbines can operate at?
3. What is the fastest wind speed that the Golden South turbine can operate at?
4. Is there a ladder or a lift inside the turbines?
5. Where are the turbines manufactured?
6. What kind of cables run from the turbines to the substation?

Responses to Submitted Questions - #1

What voltage do the Golden South turbines generate at?

The Turbine output voltage is 690V and this is usually stepped up to higher voltage via a transformer to match the collection system voltage, which is 34,500 volts. This is then further stepped up at our substation to match the SaskPower grid voltage which is 240,000 volts.

Responses to Submitted Questions - #2

What is the slowest wind speed that the Golden South turbines can operate at?

Approximately 2.5m/s or 9 km/hr.

Responses to Submitted Questions - #3

What is the fastest wind speed that the Golden South turbine can operate at?

Approximately 25m/s or 90 km/hr.

Responses to Submitted Questions - #4

Is there a ladder or a lift inside the turbines?

There is usually a ladder inside the turbine with a climb assist, which counters the weight of the climber to allow easier access when carrying extra gear.

Responses to Submitted Questions - #5

Where are the turbines manufactured?

Like most large complex machines the parts are manufactured in multiple locations and countries. This includes North America, Germany, Denmark, Korea, and China. The turbines are assembled in China into major subassemblies and then shipped to the project site using approximately 18 trailers for each wind turbine. The final assembly is completed at the project site.

Responses to Submitted Questions - #6

What kind of cables run from the turbines to the substation?

Usually medium voltage underground cables that run back to the substation.