



**Lanfine North and Lanfine South  
Wind Power Projects  
Proposed Project Map  
Option B: Vestas**

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Version: 1

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**Notes and Data Sources:**  
Project Land provided by BowArk (updated 08 Sep 2017). Buildable Area derived by WSP (updated 15 May 2017). Populated places, roads, Alberta Township System, and municipal boundaries from AltaLIS, licensed under the Open Government Licence - Alberta. Existing transmission lines and substations derived by WSP based on AESO AIES map provided by BowArk. Shadow flicker estimates and sound level contours based on Vestas 3.6 MW turbine with rotor diameter of 136 m and hub height of 105 m using 83 turbine locations. Sound level contours provided by RWDI (third-party sound sources not shown).

Coordinate System: NAD 1983 UTM Zone 12N  
Scale: 1:120,000 when printed at 11" x 17"

- |   |  |   |
|---|--|---|
| Project Land  | Existing ATCO Substation               | <b>Shadow Flicker (Worst Case)<br/>Hours per Year</b> |
| Buildable Area  | Existing Transmission Line (240 kV)    | Less than 8 hours                                     |
| Proposed Turbine Location                                     | Existing Transmission Line (138 kV)    | Between 8 and 15 hours                                |
| Proposed Underground Collector                                | Major Highway                          | Between 15 and 30 hours                               |
| Proposed Collector Right-of-Way (Underground or Above ground) | Minor Highway                          | More than 30 hours                                    |
| Proposed Road   | Road                                   | Sound Level (38.3 dBA)                                |
| Proposed Substation   | Waterbody                              |   |
| Proposed Permanent Meteorological Tower                       | Township Line                          |   |
| Residence   | Section Line                           |   |
|   | Municipal District and County Boundary |   |

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