TO:

**Municipal Planning Commission** 

FROM:

Roland Milligan, Director of Development and Community Services

SUBJECT:

Development Permit Applications No. 2018-49 through 2018-52

## 1. Application Information

Applicant:

Pincher Creek, L.P. c/o Enel Alberta Wind Inc.

# Permit Application No., Landowner, and Land Location

Permit No.	Land Location - Parce	<b>Proposed Development</b>	
2018-49	NW 15-7-30 W4M	(Stacey and Michel Stauffer)	Turbines T1 and T2
2018-50	SE 15-7-30 W4M	(Stacey and Michel Stauffer)	Turbines T3 and T4
2018-51	NW 14-7-30 W4M	(Stauffer Ranches)	Turbine T5
2018-52	SE 14-7-30 W4M	(Stauffer Ranches)	Turbines T8 and T9

Division:

4

Zoning:

Wind Farm Industrial - WFI

**Development:** 

Castle Rock Ridge Phase II Wind Power Plant (7 Category 3 WECS)

### 2. Background/Comment

- The applicant is submitting Development Permit Applications 2018-49 through 2018-52 for the Castle Rock Ridge Phase II Wind Power Plant (the Project).
- The project lands were rezoned to Wind Farm Industrial in 2010 when the existing Castle Rock Ridge project lands were rezoned. Bylaw 1196-10.
- The original Castle Rock Ridge Phase II project was first permitted in 2011 with the issuing of DPs 2010-77 through 2010-82.
- Phase two was to be 14 Enercon E70, 2.3MW turbines, as was utilized in Castle Rock Ridge Phase I. The E70 turbines have a rotor diameter of 71 m, hub height of 64 m, and a total height of 99.5 m.
- Phase II remains on the books but has not been constructed. DPs 2010-77 through 2010-82 remain valid. They last received a timeline suspension from the MPC in November of 2016. Pursuant to Section 53.19(d) of the LUB, a two year timeline suspension was granted to December 17, 2018.
- The developer has redesigned this phase of the project. Reducing the number of turbines from 14 to 7.
- The project will consist of seven (7) Vestas V136 4.2 MW wind turbines.

- The turbines to be used will have a hub height of 82 m.
- The rotor diameter is 136 m. Resulting in a total height of 150 m.
- The project will be using the existing Castel Rock Ridge substation located on SE 14-7-30 W4M.

#### Discussion

 The following is a review of the information supplied by the applicant to meet the requirements outlined in Section 53 of the LUB.

WECS Application for Each Titled Parcel with Turbines

#### Submitted

# LUB REQUIREMENTS FOR CATEGORY 3WECS APPLICATIONS

The following required information was supplied by the applicant and is within Castle Rock Ridge Phase II Development Permit Application Report. All Appendixes referred to form part of the Application Report. (*Enclosure No. 1*):

An Accurate Site Plan

There is a site plan with all separate Development Permit Applications.

These were taken from Appendix A of the Application Report

Appendix C contains the permit coordinates that were input into the MD GIS.

A Visual Representation of the Wind Farm

Section 11.0 (pg. 11.18) Application Report

Appendix K, Visual Impact Assessment

**Turbine Specifications** 

Section 4.1 (pg. 4.10) Application Report

Appendix N, Vestas Brochure

Noise Analysis

Section 9.0 (pg. 9.16) Application Report

Appendix I, Noise Impact Assessment

Potential for Shadow or flicker Analysis

Section 10.0 (pg. 10.17) Application Report

Appendix I, Shadow Flicker Analysis (No information available at the time of preparing this report)

Report Regarding Any Public Information Meetings

Section 12.0 (pg. 13.21) Application Report

# Appendix L, Public Consultation Brochure

Impacts to the Local Road System

Section 13.0 (pg. 13.21) Application Report

Road Use Agreement will be required.

Post-Construction Reclamation Plan

Section 14.0 (pg. 14.22) Application Report

Appendix O, the Environmental Protection Plan, has further details.

**Decommissioning Plans** 

Section 15.0 (pg. 15.22) Application Report

PRIOR TO MAKING A DECISION ON A DEVELOPMENT APPLICATION FOR A WECS, THE DEVELOPER SHALL PROVIDE COPIES OF APPROPRIATE REPORTS, COMMENTS AND REQUESTS FOR APPROVALS FROM THE FOLLOWING:

Transport Canada

Appendix H, No information at the time of preparing this report

**NAV** Canada

Appendix G, NAV Canada Submission

Submitted to NAV Canada on May 30, 2018

(Will require approval as condition of Permits)

Alberta Culture and Tourism (Formerly Alberta Culture and Community Spirit)

Appendix E, June 24, 2010, Letter from Culture and Community Sprit granting permission to proceed.

Alberta Environment and Parks (Formerly Alberta Environment)

Appendix D, AEP letter dated May 10, 2018

Appendix M, Enel Environmental Protection Plan

Alberta Transportation

No development within 300m of a Highway or within 800m of the intersection of two Highways.

Alberta Tourism, Parks, and Recreation (from 2010)

Alberta Electric System Operator (AESO)

Appendix F, Interconnection Documents

M.D. of Pincher Creek No. 9 Utility Permit

No applications at this time. Utility Permits will be required for any MD road crossings prior to commencement of construction.

**STARS** 

Appendix O, STARS consultation is underway.

#### **SETBACKS**

 The proposed locations for Turbines 8 and 9 do not meet the setback requirements of the Land Use Bylaw.

# Section 53.24 of the LUB states:

The minimum setbacks related to undeveloped or developed municipal roadways measured from the tower base shall be the total height (as defined in this section) plus ten (10) percent.

- Pursuant to Section 53.24, the 150m tall turbines are required to be 165m from a developed or undeveloped road allowance.
- Development permit No. 2018-52, for Turbines 8 and 9 within the SE 14-7-30 W4M, will require variances of the 165m setback.
- Turbine 8 is 116.9m from the undeveloped road allowance to the east. This turbine will require a 48.13m (29%) variance of the 165m required setback.
- Turbine 9 is 67.07m from the undeveloped road allowance to the east. This turbine will require a 97.93m (59%) variance of the 165m required setback. The applicant states that the turbine is constrained by the AltaLink 240kV line setback.

#### Section 53.26 of the LUB states:

At no time shall the modeled sound level of a WECS at the wind farm boundary exceed 45dBA unless:

- (a) an easement, as approved by the Municipal Planning Commission, is agreed to by the affected land owner and registered on the affected title
- The applicant's Noise Mapping analysis indicates that the modeled sound level of the proposed wind farm at the project boundaries will exceed 45dBA outside parcels with turbines located on them.
- Table 3 Listing of Sound Setback Waiver Requests is on page 1.2 of the Application Report.

Land Description	Title Number	Landowner	Comment
SW 13-7-30 W4M	141295861	Stauffer Ranches Inc.	Request for easement to be registered on the land title.
NW 13-7-30 W4M	141295860	Stauffer Ranches Inc.	Request for easement to be registered on the land title.
NE 13-7-30 W4M4	141295859	Stauffer Ranches Inc.	Request for easement to be registered on the land title.
NE 10-7-30 W4M	981076597	Michel and Stacey Stauffer	Request for easement to be registered on the land title.
SW 15-7-30 W4M	011338570	923602 Alberta Ltd.	Request for easement to be registered on the land title.
NW 15-7-30 W4M	011338570	923602 Alberta Ltd.	Request for easement to be registered on the land title.

 At the time of preparing this report, we were waiting for confirmation of the Caveat being registered on the affected lands.

# MINIMUM BLADE CLEARANCE FOR CATEGORY 3 WECS

The bottom of the rotor arc will be 14 m above ground (minimum required is 7.5m).

TOWER ACCESS AND SAFETY FOR CATEGORY 3 WECS

Tubular towers with locked doors.

**DISTRIBUTION LINES FOR CATEGORY 3 WECS** 

The applicant is proposing a 34.5kV underground system.

COLOUR AND FINISH FOR CATEGORY 3 WECS

The WECS will be finished in a non-reflective matte color. No advertising will appear on the towers or the blades.

**ROAD USE AGREEMENT** 

A Road Use Agreement will be required prior to construction.

ALBERTA UTILITIES COMMISSION APPROVALS

The Applicant us currently undergoing the AUC approval process

# Recommendation

That the Municipal Planning Commission review the information submitted with Development Permit Application Nos. 2018-49 through 2018-52, for the Castel Rock Ridge Wind Power Plant Phase II, and schedule the required public meeting pursuant to Section 53.17 of Land Use By-Law 1140-08.

## 3. Enclosures

Supporting Documents:

ENCLOSURE No. 1 Permit Application Nos. 2018-49 through 2018-52 and supporting documents

Respectfully Submitted,

Roland Milligan

Reviewed by Sheldon Steinke, Interim CAO:

June 28, 2108

# LOCATION OF PROJECT LANDS



