# **Crudine Ridge Wind Farm**

# Aarons Pass Road - Passing Bay Assessment



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Prepared for Crudine Ridge Wind Farm Pty Ltd by Wind Prospect CWP Pty Ltd

# CRUDINE RIDGE WIND FARM PASSING BAY ASSESSMENT

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#### 1. Introduction

The Crudine Ridge Wind Farm (the Project) is situated 45 km south of Mudgee and 45 km north of Bathurst, NSW. The ridgeline is of moderate-to-high elevation (890 to 1,000 m Australian Height Datum (AHD)). The nearest locality is Pyramul, which is located approximately 5 km to the North west along Aarons Pass and Pyramul Roads. The Project comprises two potential layouts; one consisting of up to 106 wind turbine generators (WTGs), and the other up to 77 WTGs together with ancillary structures including compounds and overhead transmission lines.

Downer Infrastructure have prepared a heavy haulage route survey to ascertain the route requirements to transport WTG components (over-dimensional vehicles) from Port of Import to the Project Site.

Aarons Pass Road was identified as a viable over-dimensional vehicle route option with recommended upgrades to a 6 m unsealed gravel road. This road is approximately 20 km from the turnoff at the Castlereagh Highway driving west to the northern site access point. Downer Infrastructure have identified the recommended upgrades along the road in order for it to accommodate over-dimensional vehicles.

In addition to this survey and assessment, Wind Prospect CWP (WPCWP), on behalf of Crudine Ridge Wind Farm Pty Ltd, have assessed the potential for location of passing bays along the Aarons Pass Road route, in order to address one aspect of the traffic management that will be implemented during construction.

#### 2. Aarons Pass Road - Passing Bay Assessment

An assessment of Aarons Pass Road was undertaken with respect to the proposed route, approximately 20 km long, from the turnoff at the Castlereagh Highway to the northern site access point (Figure 1).

#### 2.1 Local Access

To identify local road use, gateways located along Aarons Pass Road were considered. Approximately 38 gateways / driveways off Aarons Pass Road were identified, approximately 15 of which appeared to be driveways to residences (where a residence could not be seen from the roadside, a conservative approach was taken to classification of driveways).

#### 2.2 Assessment Methodology

WPCWP have identified 42 potential passing bays along the Aarons Pass Road route, with minimum approximate dimensions of 15 x 3 m (Figure 1). These were assessed with respect to the location of existing driveways and gateways, and also with regard to minimising vegetation clearance and levelling and utilising straight sections of road where possible. To this end, the locations identified were graded from one to three, with one being a preferred passing bay and three being a lower quality passing bay.

Of the 42 passing bays identified, based on preliminary grading, 16 locations were considered very good, 13 were considered good, and a further 13 were rated as average.

#### 2.3 Conclusion

Downer have reviewed these passing bay locations and confirm that they are all generally suitable, with only minor works required for use.

Not all passing bays are proposed to be used, and the final number and selection of passing bays will be agreed upon with Mid-Western Regional Council.

#### 3. Potential Passing Bay Locations

Passing Bays were labelled from PB01 to PB42 heading from the east, at the turnoff at the Castlereagh Highway, to the west to the northern site access point. The terms 'Left Hand Side (LHS)' and 'Right Hand Side (RHS)' are also based on this direction of travel.

The passing bays are described below, graded 1 (very good), 2 (good) and 3 (average). Figures 2 - 5 detail the grading of the passing bay locations.

#### **PB01**



**Grade 3:** Left hand side (LHS) - Located at a driveway. Minor clearing required, located on a right bend.



**Grade 1:** Right hand side (RHS) - Located at a driveway. Minor clearing required, straight section of road.



**Grade 2:** LHS - Straight section of road. Not as wide as other locations.



**Grade 1:** LHS - Minor clearing required, large area and straight section of road.



**Grade 1:** LHS - Located at a driveway. Straight section of road.



**Grade 1:** LHS - Large existing clearing, some levelling required.



**Grade 3:** RHS - Located at a driveway. Minor clearing required, on a left bend.



**Grade 1:** LHS - Some clearing may be required, straight section of road.



**Grade 3:** LHS - Some clearing required, located on a straight section of road, however the road is sloped at this location.



**Grade 2:** LHS - Would require some clearing and levelling, straight section of road.



Grade 2. RHS - Low level of clearing and levelling (fill) required, on a slight right bend



**Grade 1:** RHS - Located at a driveway. Some clearing may be required.



**Grade 1:** LHS - Large existing clearing, some levelling and minor clearing required.



**Grade 1:** LHS - Straight section of road. Some levelling and clearing required.



**Grade 3:** LHS - Minor clearing required. Some levelling required. Not as wide as other locations.



**Grade 2:** LHS - Some levelling required, minor clearing required. On a slight right bend.



**Grade 3:** RHS - Levelling required, not a wide roadside area. On a slight bend.



**Grade 1:** LHS - Large existing cleared area. Some levelling required.



**Grade 3:** RHS - Some clearance and levelling required. On slight right bend



**Grade 2:** RHS - Clearance and levelling required, on straight section of road.



**Grade 1: LHS -** Located at a driveway. Large existing cleared area.



**Grade 3:** RHS - Clearance and levelling required, on straight section of road.



**Grade 1:** LHS - Located at a driveway. Cleared section exists, some clearance may be required.



RHS Opposite PB23 above.



**Grade 3:** LHS - Located opposite a driveway. Clearance and levelling required, straight section of road.



**Grade 3: LHS -** Clearance and levelling required, straight section of road.



**Grade 1:** RHS - Located at a driveway, large existing cleared area, straight section of road.



**Grade 2:** LHS - Large cleared area. Minor additional clearing and some levelling may be required.



**Grade 1:** LHS - Clearance and levelling required, on straight section of road.



**Grade 1:** RHS - Located at a driveway. Large cleared area.



**Grade 1:** RHS - Located at a driveway. Large cleared area.

**PB31 Perke Road Intersection** 



**LHS of intersection** 



**RHS of intersection** 

**Grade 2:** Some clearance and levelling of either side would be sufficient to create a passing bay at this intersection.



**Grade 2:** LHS - Large cleared area, some levelling required, on a slight left bend.



**Grade 3** RHS - Would require clearing and levelling, straight section of road.



**Grade 2:** LHS - Would require minor clearing and levelling, straight section of road.



**Grade 3:** LHS - Would require some clearing and levelling.



**Grade 3:** LHS - On slope. Some clearing and levelling possibly required.



**Grade 3:** LHS – Located at a driveway, smaller cleared area.



**Grade 1:** LHS - Long cleared section, levelling required.



**Grade 2:** LHS - Located at a driveway. Existing cleared area, some levelling may be required.



RHS of PB39 above (also could be used as an alternative passing bay).



**Grade 2:** Both sides of road would be suitable. Some levelling required.



**Grade 2:** LHS – Located at a driveway. Small cleared area available.



RHS of PB41 above.

# PB42 - No photo

**Grade 2:** Existing cleared area, some levelling may be required.