



Preliminary Land Use Risk Assessment

P-LUCRA

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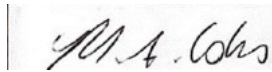
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Preliminary Land Use Risk Assessment

P-LUCRA



Meg Coles
Consultant



Adam Smith
Principal Consultant



Mark Davey
Partner

Environmental Resources Management Australia Pty Ltd
Level 14 207 Kent Street,
Sydney NSW 2000

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Acronyms and Abbreviations

Abbreviation	Description
BSAL	Biophysical Strategic Agricultural Land
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy
GDE	Groundwater Dependent Ecosystem
LEP	Local Environment Plan
LGA	Local Government Area
LSC	Land and Soil Capability
LUCRA	Land Use Conflict Risk Assessment
O&M	Operation and Maintenance
PCT	Plant Community Type
SWMP	Stormwater Management Plan
TEC	Threatened Ecological Community
WSP	Water Sharing Plan
WTG	Wind Turbine Generator

1. LAND USE CONFLICT RISK ASSESSMENT (LUCRA)

1.1 Introduction

Environmental Resources Management (ERM) Pty Ltd has been commissioned by RES Australia Pty Ltd (RES) (the Applicant) to conduct a preliminary Land Use Conflict Risk Assessment (LUCRA) for the approvals process for the Kerr's Creek Wind Farm Project (the Project). The Project Area is located approximately 26 km north of Orange, NSW and is located within the Dubbo Regional Council Local Government Area (LGA). The regional context of the site is depicted in **Figure 1-1** of the Scoping Report.

The proposed development involves the construction, operation and decommissioning of:

- Up to 63 wind turbine generators (WTGs) with a maximum height (tip height) of 280 m; and
- Ancillary infrastructure including electrical connections between the wind turbines, a substation and connection hubs, internal access roads and tracks, operation and maintenance (O&M) buildings and construction facilities, temporary on-site concrete batching plant and borrow pit.

Land use conflicts occur when one land user does, or is perceived to, infringe upon the rights, values or amenity of another. LUCRA is a system that is used to identify and assess the potential for land use conflict to occur between neighbouring land uses. It is designed to help proponents of developments and the consent authorities assess the possibility for and potential level of future land use conflict.

1.2 Objective and Scope

The purpose of this preliminary LUCRA is to identify land use compatibility and potential conflict between neighbouring land uses, and the identification of conflict avoidance or mitigation measures. A LUCRA aims to:

- Accurately identify and address potential land use conflict issues and risk of occurrence before a new land use proceeds or a dispute arises;
- Objectively assess the effect of a proposed land use on neighbouring land uses;
- Increase the understanding of potential land use conflict to inform and complement development control and buffer requirements, and
- Highlight or recommend strategies to help minimise the potential for land use conflicts to occur and contribute to the negotiation, proposal, implementation and evaluation of separation strategies.

This section identifies to document the nature of the proposed land use change and the nature of the precinct in which the change will occur. *In this case, the proposed change of land use RU1 will require rezoning approval for electricity generation.*

1.3 Methodology

The approach taken in this LUCRA is based on the *NSW DPI Land Use Conflict Risk Assessment Guide* published in October 2011 (DPIE, 2011). The approach essentially includes four key steps:

- Gather information about proposed land use change and associated activities;
- Evaluate the risk level of each activity;
- Identify risk reduction management strategies; and
- Record LUCRA results.

The LUCRA process uses a “probability and consequence” matrix to estimate the potential for land use conflict. It assesses the environmental, public health and amenity impacts according to the probability of occurrence consequence of the impact.

The risk-ranking matrix used by the Land Use Conflict Risk Assessment Guide has been shown below in **Table 1**. Shaded scores indicate those identified activities which should be at a higher priority for implementing reduction strategies in step 3 of the assessment.

Table 1 Risk Ranking Matrix

Probability	A	B	C	D	E
Consequence					
1	25	24	22	19	15
2	23	21	18	14	10
3	20	17	13	9	6
4	16	12	8	5	3
5	11	7	4	2	1

Source: LUCRA Guide, DPIE 2011

The risk ranking matrix provides a risk ranking from 25 to 1. It covers each combination of five levels of 'probability' (a letter A to E as defined in **Table 2**) and five levels of 'consequence' (1 to 5 as defined in **Table 3**) to identify the risk ranking of each impact. For example, an activity with a 'probability' of C and a 'consequence' of 4 creates a risk rank of 8.

Table 2 Probability Table

Level	Descriptor	Description
A	Almost Certain	Common or repeating occurrence
B	Likely	Known to occur or 'it has happened'
C	Possible	Could occur, or 'heard of it happening'
D	Unlikely	Could occur in some circumstances, but not likely to occur
E	Rare	Practically impossible

Source: LUCRA Guide, DPIE 2011

Table 3 Consequences Table

Level	Descriptor	Description
1	Severe	<ul style="list-style-type: none"> ■ Severe and/or permanent damage to the environment; ■ Irreversible; ■ Severe impacts on the community; ■ Neighbours are in prolonged dispute and legal action involved.
2	Major	<ul style="list-style-type: none"> ■ Serious and/or long-term impact to the environment; ■ Long-term management implications; ■ Serious impact on the community; ■ Neighbours are in serious dispute.
3	Moderate	<ul style="list-style-type: none"> ■ Moderate and/or medium-term impact to the environment and community; ■ Some ongoing management implications; ■ Neighbour disputes occur.
4	Minor	<ul style="list-style-type: none"> ■ Minor and/or short-term impact to the environment and community; ■ Can be effectively managed as part of normal operations; ■ Infrequent disputes between neighbours.
5	Negligible	<ul style="list-style-type: none"> ■ Very minor impact to the environment and community; ■ Can be effectively managed as part of normal operations; ■ Neighbour disputes unlikely.

Source: LUCRA Guide, DPIE 2011

2. PROJECT INFORMATION

2.1 Site Location and Zoning

The Project Area boundary is located approximately 26 km north of Orange, NSW, and 1.6 km the Euchareena town centre. The underlying geology of the Project Area comprises of undulating topography of low peaks, with creeks and gullies scattered throughout. The site is split into two distinct areas (East and West), with the Great Western Railway corridor located adjacent to each Project Area boundary.

The site is located within the locality of Euchareena, part of the Dubbo Regional Council LGA and along the border of the Cabonne Shire Council LGA. The whole Project Area is zoned as *RU1 – Primary Production* under the Dubbo Local Environment Plan (LEP) 2022, although areas directly adjacent to the site are zoned *E2 – Ecological Conservation* and *SP2 – Infrastructure*.

The objectives of the RU1 zoning are (Dubbo LEP, 2022):

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base;
- To encourage diversity in primary industry enterprises and systems appropriate for the area;
- To minimise the fragmentation and alienation of resource lands;
- To minimise conflict between land uses within this zone and land uses within adjoining zones; and
- To encourage a range of development for the purposes of tourism that supports the agricultural industry.

Permissibility with the above land use objectives is discussed **Section 4.2** of the Scoping Report.

2.2 History and Land Use

The Project Area encompasses 9 freehold properties that are primarily used for sheep and cattle grazing. There are a small number of Crown Land paper roads present within the Project Area. The dwellings where Project infrastructure is anticipated to be installed have entered into an agreement in relation to the Project are referred to as 'associated dwellings'. Other dwellings in proximity to the Project Area are referred to as 'non-associated dwellings'. There are 15 associated dwellings, and 137 non-associated dwellings within or in proximity to the Project Area.

The Project Area is predominately used for cattle and sheep grazing. A review of the NSW Landuse 2017 v1.2 mapping from the DPIE SEED Portal identified the following land uses within the Project Area:

- Grazing native vegetation;
- Grazing modified pastures;
- Cropping;
- Residual nature cover;
- River;
- Forest plantation;
- Residential and farm infrastructure; and
- Intensive animal production.

An outline of the different land uses and potential impacts is presented in **Table 4** below.

Table 4 Existing Land Uses Description

Land use	Description
Primary Land Use	
Residential and Farm Infrastructure	<ul style="list-style-type: none"> The site includes agricultural related infrastructure, including fences, dams and buildings (such as sheds). A search of the Australian Groundwater Explorer (BoM, 2022) identified 1 bore within the Project Area, although there are several associated with townships and villages in proximity to the Project Boundary.
Agriculture	<ul style="list-style-type: none"> The site is currently used for sheep and cattle grazing. The site is predominantly covered by native or modified pastures, and residual nature cover (predominantly along the ridges). The Dubbo Regional LGA estimates the total value of agriculture within the region to be \$143 million (REMPPLAN, 2022).
Infrastructure	
Roadways	<ul style="list-style-type: none"> Key roads that will be utilised for Project access include Burrendong Way and Shepard's Creek Road.
Rail Corridors	<ul style="list-style-type: none"> The Great Western Railway corridor runs adjacent to the Eastern and Western portions of the site.
Electrical Infrastructure	<ul style="list-style-type: none"> Two overhead electrical transmission lines run through the Project Area. These lines are 132 kV (Orange North to Burrendong Tee) and 330 kV (Wellington to Mount Piper).
Access Tracks	<ul style="list-style-type: none"> It is envisioned that the access tracks will cross some local waterways (non-perennial watercourses).
Reserves and Water Sources	
Plantation Forests	<ul style="list-style-type: none"> There is one plantation forest located within the project Area (0.89 ha). Mullions Range Station Forest is located 2.4 km from the Project Area boundary.
Rivers / Creeks	<ul style="list-style-type: none"> There are numerous perennial and non-perennial watercourses across the site, as well as small creeks (Muddy Creek, Shepherds Creek, Kerr's Creek). Lake Burrendong is located approximately 25 km from the Project Area boundary. Although not located within the Project Area, Lake Burrendong is used for recreational activities and water supply.
Exploration	
Mining / Exploration Titles	<ul style="list-style-type: none"> Three exploration titles were identified within the Project Area (MinView, 2022). These exploration licenses are
Utilities	
Electricity and Telecommunications	<ul style="list-style-type: none"> There are two overhead transmission lines and a major fibre optic cables through the Project Area. No gas or water transmission lines were reported within the Project Area.
Aviation	
Flight Paths	<ul style="list-style-type: none"> There are no airstrips located within the Project Area (or within 10 km proximity), however, the site is located within 30 NM of 6 airports. Therefore, there is potential for flights paths to be impacted by the Project.
Crown Lands	
Crown Land Reserves	<ul style="list-style-type: none"> Euchareena Cemetery is located 1.2 km from the Project Area boundary. Crown Land Reserve (90326) is 1 km from the Project boundary. There are three Crown Land Reserves located within the township of Euchareena (2 km north of the Project Boundary).
Native Title	
Native Title	<ul style="list-style-type: none"> There are no Native Title Determination for the site.

2.2.1 Future Land Uses

The Project Area would require re-zoning from rural and use to electricity generation. However, it is envisioned that sheep grazing could still occur within the Project Area. The site should be able to support the above land uses following construction and decommissioning.

2.3 Environmental Features

Environmental features on or in proximity to the Project area are included in **Table 5**.

Table 5 Environmental Features

Environmental Feature	Description
Vegetation	<ul style="list-style-type: none"> ■ Areas within the Project Area have been subject to extensive clearing for agricultural purposes including cropping and modified pastures for livestock grazing. ■ Large areas of the lower slopes and flats have had the overstorey removed. The majority of the higher ridgelines contain remnant vegetation and rocky outcrops that provide connectivity throughout the fragmented landscape. ■ NSW State Vegetation Mapping and preliminary field surveys recorded 15 Plant Type Communities (PCTs) within the Project Area (refer to Section 6.4 of the Scoping Report). ■ Eight of the 15 PCTs had threatened ecological communities (TECs) associated with them.
Fauna	<ul style="list-style-type: none"> ■ 23 threatened fauna species were identified within the Project Area during field surveys. ■ A further eight species were determined likely to occur within the Project Area through a Likelihood of Occurrence Assessment.
Biophysical Strategic Agricultural Land (BSAL)	<ul style="list-style-type: none"> ■ The Project is not located on any Biophysical Strategic Agricultural Land (BSAL) land. The closest BSAL land to the Project Area is 2 km west (of the western portion) of the boundary.
Land and Soil Capability (LSC)	<ul style="list-style-type: none"> ■ A review of Land and Soil Capability (LSC) mapping found the presence of LSC Class 3, 5, 6 and 7 within the Project Area. No Class 1, 2 or 4 soils were identified within the Project Area. Australian Soils Classification mapping shows the presence of kandosols (KA), kurosols – natric (KUn) and sudosols (SO) within the Project Area. ■ These search results suggest that there are moderate to severe to extremely severe limitations associated with the soil in the area.
Climate	<ul style="list-style-type: none"> ■ The Project Area is located within the Southern Eastern Highlands Bioregion and the South West Slopes Bioregion. This area is dominated by a sub-humid climate characterised by hot summers and no dry season. A temperate climate, with warm summers, occurs at higher elevations along the eastern boundary of the bioregion adjacent to the South Eastern Highlands Bioregion. ■ The closest weather station to the site is located in Stuart Town (15 km from the Project Area). ■ The yearly average rainfall for the area (from 1935 to 2022) is 686 mm.
Surface Water	<ul style="list-style-type: none"> ■ The Project is part of the Water Sharing Plan (WSP) for the Macquarie Bogan Unregulated Rivers Water Sources 2012. ■ The site contains many tributaries of the Burrendong Dam. ■ Multiple dams (assumed to be associated with grazing) were noted throughout the Project Area.
Groundwater	<ul style="list-style-type: none"> ■ The Project Area is part of the NSW Murray Darling Basin Fractured Rock Groundwater Sources 2020 and the ■ A search of the Groundwater Dependent Ecosystem (GDE) Atlas (BoM, 2022) determined that there were no GDE located within the Project Area.

Environmental Feature	Description
Flooding	<ul style="list-style-type: none"> ■ The Project Area is not located within a flood prone area. However, access roads will cross non-perennial water sources, which may cause localised flooding across access tracks, and subsequently, erosion and sedimentation.
Contaminated Land	<ul style="list-style-type: none"> ■ This Project Area is not listed as a Contaminated Site on the NSW EPA Contaminated Land Register.
Heritage	<ul style="list-style-type: none"> ■ Three Aboriginal sites (artefacts) were identified within the Project Area, and a further three sites within 100 m of the Project boundary. ■ No historic heritage sites were located within the Project Area, although seven were listed within 2 km of the Project boundary. These sites were typically associated with the towns of Euchareena, Boomey and Kerr's Creek.

3. LAND USE CONFLICT RISK ASSESSMENT

3.1 Initial Risk Evaluation

LUCRA is a framework formulated by NSW DPI to support land managers categorise the potential sources of land use conflicts based on risk level and implement the necessary strategies to reduce their impacts.

This section provides a record of each activity on the risk assessment matrix and identify the level of risk of a land use conflict arising from the activity. It includes:

- Activities that may cause a conflict;
- Potential conflicts that may arise from the identified activity; and
- Risk rating without mitigation or management measures.

A list of the potential sources of conflict arising from the project have been developed and are presented in **Table 6** below.

Table 6 Initial Risk Evaluation

Activity	Identified Potential Conflict	Risk Ranking
Change in land use	<ul style="list-style-type: none"> ■ Change from residential and cropping/grazing agriculture to electricity generation. 	Probability: A Consequence: 5 Overall Score: 11
Adjacent land uses	<ul style="list-style-type: none"> ■ Cumulative impacts from neighbouring activities. 	Probability: B Consequence: 3 Overall Score: 17
Agricultural productivity	<ul style="list-style-type: none"> ■ Reduction in productivity of the land for agricultural activities through decreasing the extent of land available for farming/grazing. 	Probability: A Consequence: 3 Overall Score: 20
Visual impact	<ul style="list-style-type: none"> ■ Visual amenity issues arising from views of the wind farm in its current agriculturally dominant landscape. ■ Visual impact of fences on local amenity. 	Probability: A Consequence: 3 Overall Score: 20
Traffic impact on public roads and local access roads	<ul style="list-style-type: none"> ■ During the construction phase, an increase in vehicle movements may be caused on local roads. ■ Upgrade to rural roads may be required during the construction and operation phase. 	Probability: A Consequence: 3 Overall Score: 20
Noise generation	<ul style="list-style-type: none"> ■ During the construction phase, of 24 months, noise may impact sensitive receivers. ■ During the operation phase, associated noise impacts from ancillary infrastructure is anticipated. 	Probability: A Consequence: 4 Overall Score: 16
Contamination or sedimentation of adjacent watercourses	<ul style="list-style-type: none"> ■ Degradation of health and quality of the watercourse will affect the health of neighbouring livestock using it as a water source. ■ Sediment run off onto neighbouring properties, particularly during rain events, altering the topography of the land. 	Probability: D Consequence: 3 Overall Score: 9
Weed and Pest Management	<ul style="list-style-type: none"> ■ Spread of high threat weeds and pests to neighbouring properties. 	Probability: D Consequence: 3 Overall Score: 9
Decrease in air quality – generation of dust	<ul style="list-style-type: none"> ■ During construction activities, dust generation can affect human health, animal health and viability of grazing activities. 	Probability: B Consequence: 4 Overall Score: 12
Aviation	<ul style="list-style-type: none"> ■ Wind turbine structures may impact to the flight path and present a direct hazard to an aircraft. 	Probability: D Consequence: 1 Overall Score: 19
Flooding	<ul style="list-style-type: none"> ■ Concerns regarding effect of wind turbines and associated structures on the direction and flow of the flood waters. 	Probability: D Consequence: 3 Overall Score: 9

Activity	Identified Potential Conflict	Risk Ranking
Bushfire	<ul style="list-style-type: none"> Potential for bushfire during the construction, operational and decommissioning phases of the Project. 	Probability: C Consequence: 3 Overall Score: 13

3.2 Risk Reduction Controls

In accordance with the Land Use Conflict Risk Assessment Guide (DPIE, 2011) the process of risk reduction aims to identify management strategies that affect the probability of an event occurring, such as the implementation of certain procedures; new technology or scientific controls that might lower the risk probability values.

It is anticipated that the risk reduction controls and management strategies for each identified potential conflict that could help lower the risk level. It will also support in re-assessing the risk level based on the proposed management strategies. For each identified strategy or control measure, performance targets and details of how the effectiveness of the strategy will be proposed.

The objective of risk reduction controls is to lower the risk ranking score to 10 or below. A revised risk evaluation for the potential sources of conflict arising for the project is provided below in **Table 7**.

Table 7 Standard Management Strategy for Risk Reduction

Activity	Identified Potential Conflict	Typical Management Strategy
Change in land use	<ul style="list-style-type: none"> Change from residential and cropping/grazing agriculture to electricity generation. 	<ul style="list-style-type: none"> The Project development is reversible and the land can be returned to its former use upon decommissioning. Re-zoning of the current land use (agricultural) to electricity generation.
Adjacent land uses	<ul style="list-style-type: none"> Cumulative impacts from neighbouring activities. 	<ul style="list-style-type: none"> Consideration of neighbouring activities during the preparation of the Environment Management Strategy (EMS). Onsite dust suppression adoption to minimise the potential of dust dispersion generated from the Project impacting upon neighbouring land. Conversely, adjacent land uses may not significantly impact upon the operation and functionality of the Project.
Agricultural productivity	<ul style="list-style-type: none"> Reduction in productivity of the land for agricultural activities through decreasing the extent of land available for farming/grazing. 	<ul style="list-style-type: none"> The Project OEMP would deliberate on reducing impact on the project's land and soil capability. The Project Area would be rehabilitated to its original condition as far as reasonably practicable following the decommissioning of the Site.
Visual impact	<ul style="list-style-type: none"> Visual amenity issues arising from views of the wind farm in its current agriculturally dominant landscape. Visual impact of fences on local amenity. 	<ul style="list-style-type: none"> The layout and design of the Project could be minimised through controlling Project layout, turbine densities and turbine types to minimise visual impact to receivers. Uniform WTG colour, design, rotational speed, height and rotor diameter. Visual screen planting and supplementary planning landscaping to reduce the visual impact from the roads and to residents. Appropriate management methods for night lighting.
Traffic impact on public roads and local access roads	<ul style="list-style-type: none"> During the construction phase, an increase in vehicle movements may be caused on local roads. 	<ul style="list-style-type: none"> Targeted upgrades to local roads. Development of a Traffic Management Plan to specify the traffic volumes and construction vehicles details and management measures.
Noise generation	<ul style="list-style-type: none"> During the construction phase, of 24 months, noise will impact sensitive receivers. 	<ul style="list-style-type: none"> Noise control strategies during construction could be include the construction of temporary acoustic barriers, proprietary enclosures around machines and the use of silencers.

Activity	Identified Potential Conflict	Typical Management Strategy
	<ul style="list-style-type: none"> ■ During the operation phase, associated noise impacts from ancillary infrastructure is anticipated. 	<ul style="list-style-type: none"> ■ Scheduling of noise works to reduce impacts to sensitive receivers. ■ Locate fixed noise sources at the maximum practicable distance to the nearest dwellings. ■ Employ the use of acoustic screens and enclosures for fixed infrastructure during construction.
Contamination or sedimentation of adjacent watercourses	<ul style="list-style-type: none"> ■ Degradation of health and quality of the watercourse will affect the health of neighbouring livestock using it as a water source. ■ Sediment run off onto neighbouring properties, particularly during rain events, altering the topography of the land. 	<ul style="list-style-type: none"> ■ Preparation of a Soil and Water Management Plan prior to the commencement of construction activities. ■ Project design should minimise the amount of land disturbance, the management of topsoil, staging of construction activities, stormwater diversion and installation of sediment control traps, silt fences and overland flow. ■ Appropriate controls to capture stormwater run-off.
Weed and Pest Management	<ul style="list-style-type: none"> ■ Spread of high threat weeds and pests to neighbouring properties. 	<ul style="list-style-type: none"> ■ A Weed Management Plan will be prepared and implemented as part of the EMS to prevent further weed dispersal into retained native woodland habitats. ■ Project machinery should follow best practice hygiene protocols to prevent the spread of weed seed, pathogens and fungi.
Decrease in air quality – generation of dust	<ul style="list-style-type: none"> ■ During construction activities, dust generation can affect human health, animal health and viability of grazing activities. 	<ul style="list-style-type: none"> ■ Employing water trucks for dust suppression particularly in the vicinity of adjacent residential dwellings throughout the construction and decommissioning phases.
Aviation	<ul style="list-style-type: none"> ■ Wind turbine structures may impact to the flight path and present a direct hazard to an aircraft. 	<ul style="list-style-type: none"> ■ Notification and reporting of 'as constructed' details of WTGs provided to regional aircraft operators. ■ Engagement with local aerial agricultural operators and firefighting operators. ■ Turbines should be white and may require lighting (dependent on aviation impact assessment). ■ Micro-siting of WTGs and met masts.
Flooding	<ul style="list-style-type: none"> ■ Concerns regarding effect of wind turbines and associated structures on the direction and flow of the flood waters. 	<ul style="list-style-type: none"> ■ Avoidance of local, overland flood paths. ■ Development and implementation of a Stormwater Management Plan (SWMP) to manage run-off from Project components.
Bushfire	<ul style="list-style-type: none"> ■ Potential for bushfire during the construction, operational and decommissioning phases of the Project. 	<ul style="list-style-type: none"> ■ Implementation of a Bushfire Emergency Management and Operational Plan will significantly reduce the potential for a bushfire arising during operation of the wind farm, and to reduce the threat of damaging Project assets.

3.3 Mitigation Measures

The mitigation measures for the above identified potential land use conflicts are subject to change the Environmental Impact Statement (EIS) after formal impacts assessments have been undertaken and any the environmental management plans prepared for construction, operational and decommissioning phases of the Project. The performance of the proposed mitigation and management measures would be evaluated through a process of internal auditing and consultation with affected receivers and stakeholders. Note that these mitigation measures are examples of potential management strategies, although specific management strategies could be tailored to the Project following impact assessments for the outlined activities.

Throughout all phases of the project, the activities within those phases would be checked against the commitments of the EIS, the conditions of consent and relevant environmental management plans by a suitably qualified environmental practitioner with view to assure compliance. The intention of this review is to decrease the extent of amenity impacts to neighbouring properties and affected stakeholders, in-turn reducing the potential for a land-use conflict.

Continuous consultation during all project phases will be carried out to ensure that the community and relevant agencies can address their concerns. Reasonable and practical efforts would be made to ensure that these concerns are addressed.

4. CONCLUSIONS

This Preliminary LUCRA has identified the effects of the proposed land use on neighbouring land uses and supported in evaluating the type and level of management strategies required to minimise such effects. During the assessment, it is acknowledged that the development would allow nearby existing land-uses to continue largely unaffected. The potential for land use conflict is manageable, considering the mitigation/management measures and environmental management plans that will be implemented to manage amenity and other off-site impacts.

The primary potential sources of land use conflict predicted for the project are a result of amenity impacts arising from the construction and operational phases of the project. These include:

- Change in Land use;
- Land and property values;
- Agricultural productivity;
- Visual impact;
- Traffic impact on public roads and local access roads;
- Noise generation;
- Contamination or sedimentation of adjacent watercourses;
- Weed and Pest Management;
- Decrease in air quality – generation of dust;
- Aviation; and
- Flooding.

With the application of relevant mitigation measures, each of the potential sources of conflict are considered *low*. The mitigation measures proposed in this Preliminary LUCRA are indicative of typical mitigation measures only and will be subject to change following formal and site-specific impact assessment during the EIS phase.

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ERM's Sydney Office

Level 14 207 Kent Street
Sydney NSW 2000

T: +61 2 8584 8888

F: +61 2 9299 7502

www.erm.com