

# Kerrs Creek Wind Farm Landscape Character & Visual Impact Assessment



**moir**  
landscape architecture



# Moir Landscape Architecture

## Landscape Character & Visual Impact Consultants

### Project Experience:

- Bodangora Wind Farm
- Crudine Ridge Wind Farm
- Ungula Wind Farm
- Burrendong Wind Farm

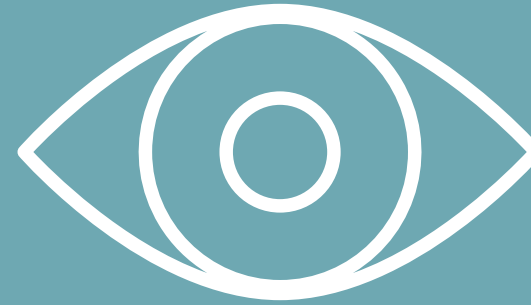


## Landscape Character Assessment



## LCVIA

## Visual Impact Assessment



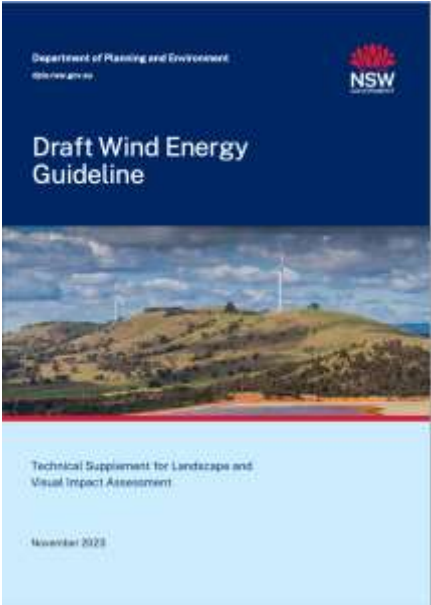
“The process for determining the overall impact of a project on an **area’s character**”.

“The **day-to-day visual effects of a project on people’s views** (what people see at a place, when they are there) from the private and public domain”

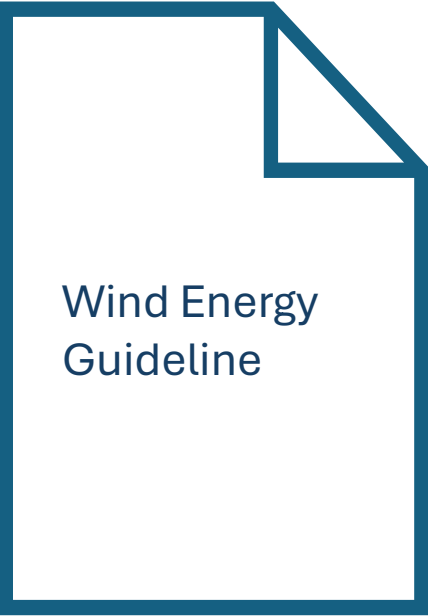
# Relevant Guidelines



Dec 2016



Nov 2023



Expected Late 2024

# Visual Impact Assessment Process Undertaken to date



## Baseline Character Analysis

Extensive field work and viewpoint analysis to assess landscape character for baseline.



## Desktop Dwelling Assessment

Determine dwellings that require detailed assessment.



## Detailed Dwelling Assessment

Undertake site visit and prepare photomontage to accurately assess impact and determine effectiveness of proposed screening.



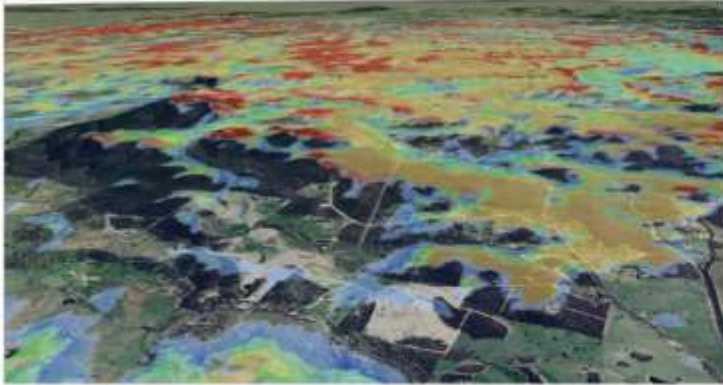
## Recommendations

Recommendations for layout design / mitigation.



## 01 Viewshed Mapping

Viewshed mapping is undertaken to identify dwellings within the Study Area (8 km) with views to the Project. Viewshed mapping is undertaken on a 'bareground' scenario based on topography alone and does not take into account vegetation.



If views to project are obstructed by topography no further assessment is required.

## 02 Simple Assessment

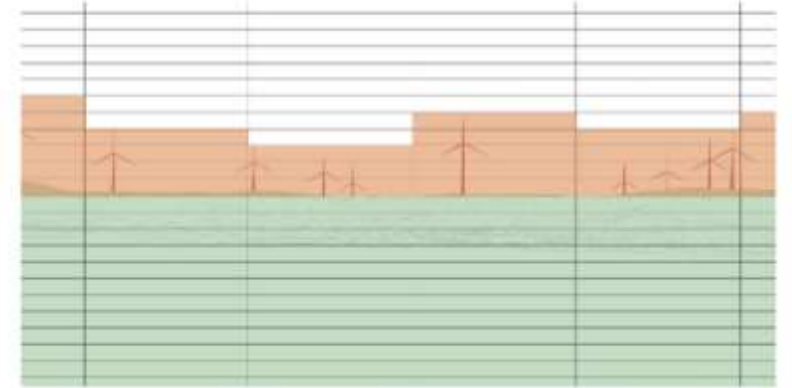
All dwellings with the potential to view the Project are considered for assessment. A simple assessment is undertaken to eliminate dwellings with visibility limited by factors such as distance and / or intervening vegetation.



If visibility is limited by distance / dense vegetation no further assessment is required.

## 03 Intermediate Assessment

This assessment is undertaken using wire frame diagrams to determine the visual magnitude resulting from the Project. Any dwellings that return a moderate or high visual impact rating through this process require a site assessment.



A moderate or high visual impact rating required a site inspection.

## 04 Site Assessments

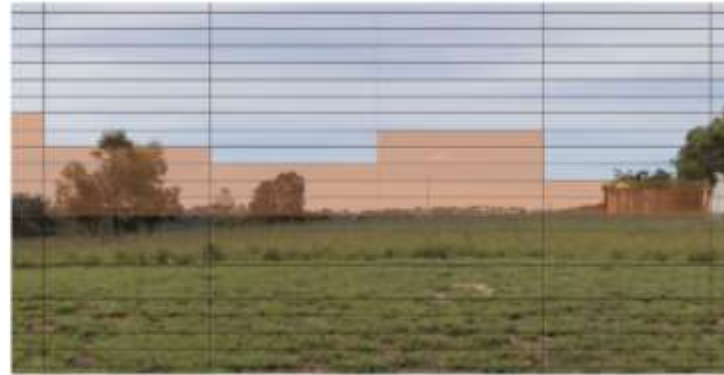
Site inspections including photographic assessments are undertaken to accurately assess existing site conditions including: scenic quality, orientation of the dwelling and identify opportunities for mitigation (if required).



Site inspection will ground truth viewer sensitivity and scenic quality. Photomontage is prepared to ascertain views.

## 05 Detailed Dwelling Assessment

A photomontage of the Project is prepared to aid the detailed assessment of the Project. The visual magnitude is re-assessed to account for existing mitigating factors (ie. vegetation or built elements). Any dwellings that return a moderate or high visual impact rating through this process require further consideration.



View is re-assessed with consideration of intervening elements to determine impact rating.

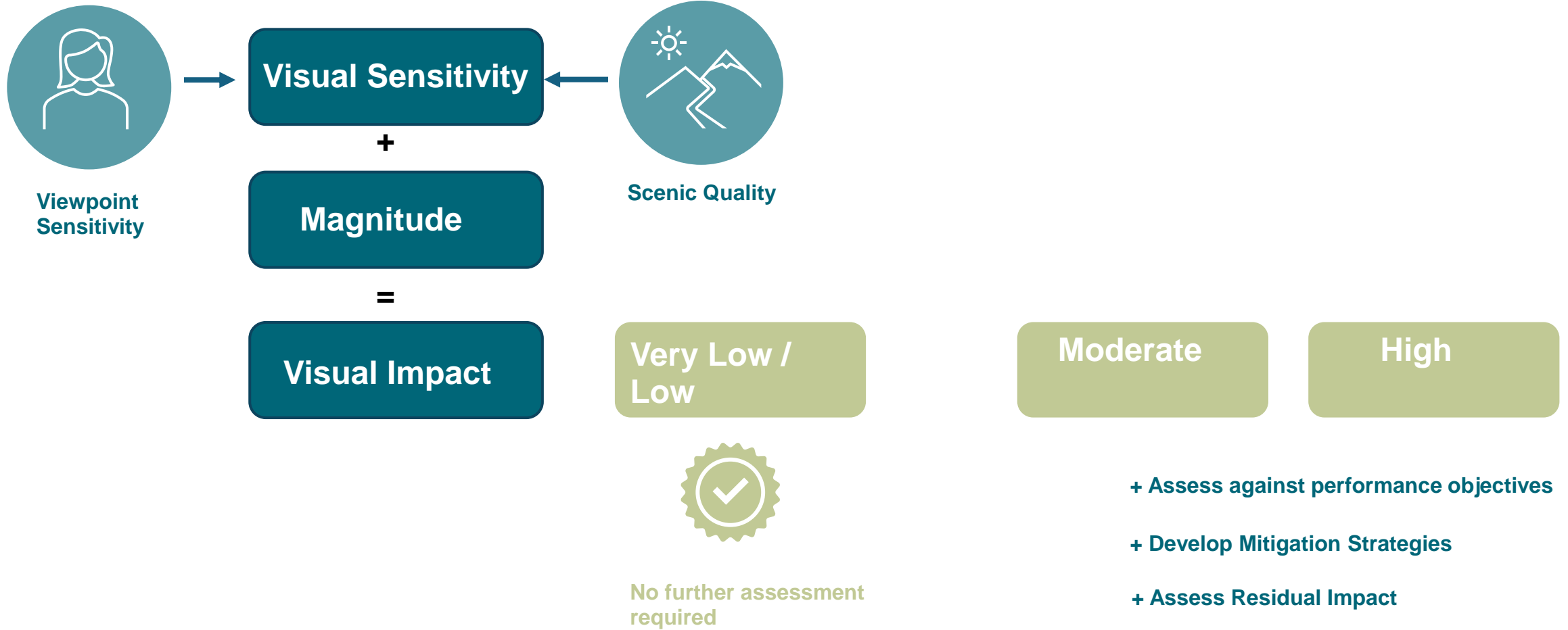
## 06 Recommendations

Moir LA provides recommendations to RES for consideration. Recommendations may include: Visual screening proposed at the dwelling to reduce visibility, changes to project design, agreements with land owner.



Recommendations provided to RES.

# Visual Impact Rating Methodology



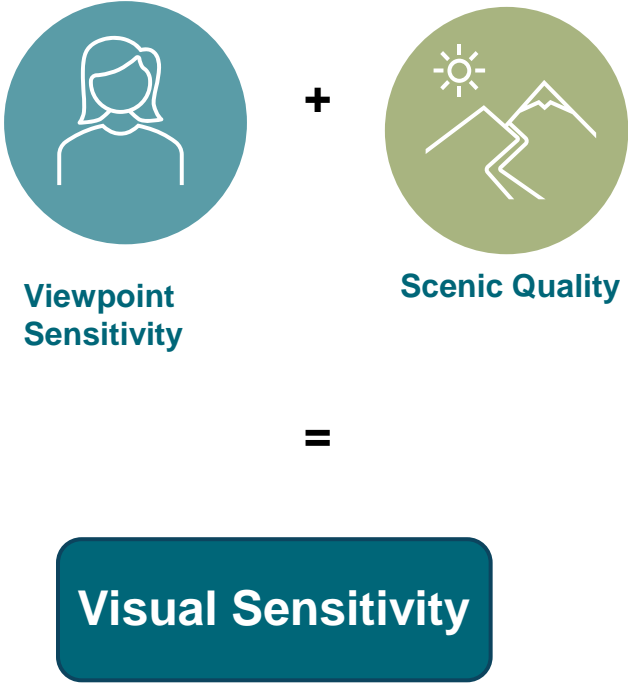


# Visual Sensitivity

Low: Highway

Moderate: Residential Dwelling

High: Rural Village



	High scenic quality	Moderate scenic quality	Low scenic quality
High viewpoint sensitivity	High	High	Moderate
Moderate viewpoint sensitivity	High	Moderate	Moderate
Low viewpoint sensitivity	Moderate	Low	Low
Very low viewpoint sensitivity	Very low	Very low	Very low

Viewpoint type	Low scenic quality	Moderate scenic quality	High scenic quality
Landform			
Vegetation			
Waterbodies			
Social / cultural			
Human presence			

# Visual Magnitude Rating

3 ✓

Identify occupied cells

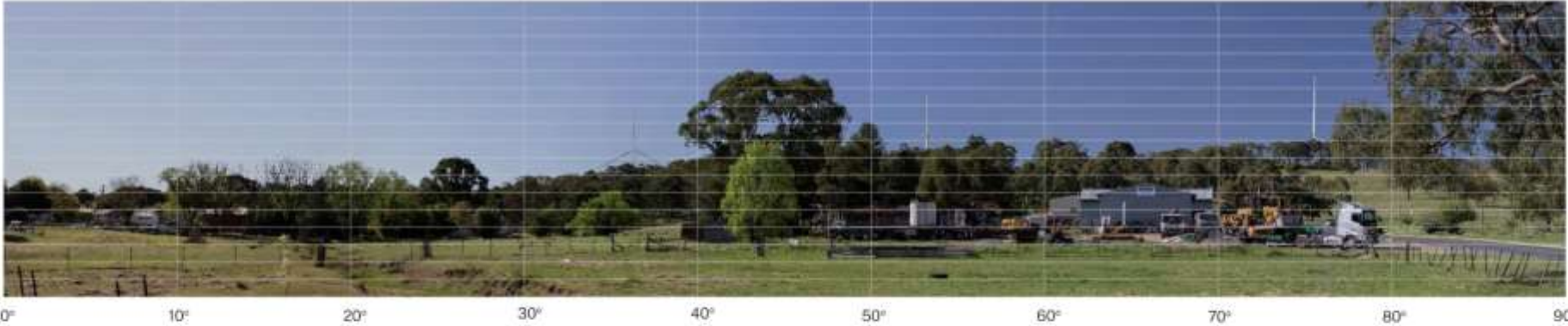


4 ★★☆☆

Determine magnitude rating

Magnitude Rating	Very Low	Low	Moderate	High	Very High
No. Cells	1-5	6-11	12-19	20-27	28+

# Visual Impact Rating Example - LOW

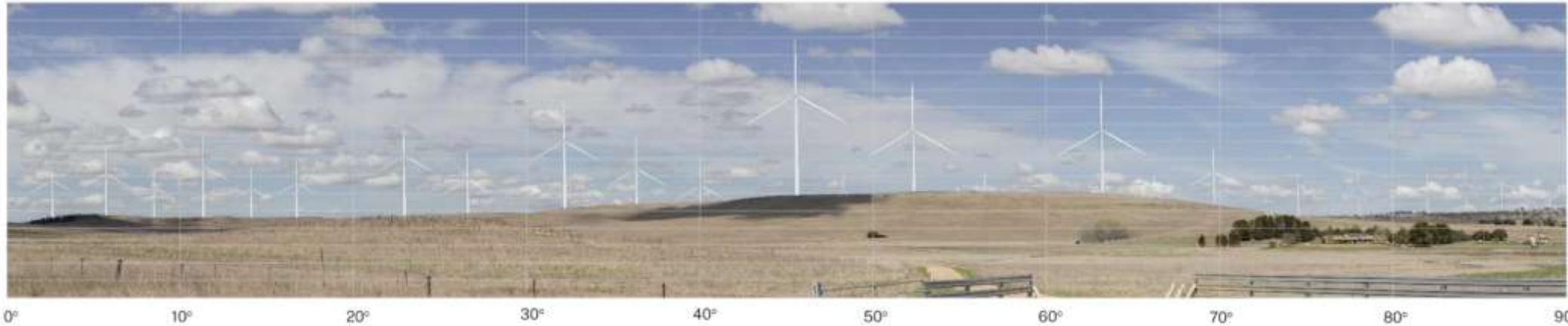


Distance to development	Viewpoint type	Viewpoint sensitivity	Scenic quality	Overall sensitivity	Occupied cells	Magnitude rating	Impact rating
1,714 m	Classified main road	Very low	Low	Very low	14	Moderate	Low

	High visual sensitivity	Moderate visual sensitivity	Low visual sensitivity	Very low visual sensitivity
Very high magnitude	High	High	Moderate	Moderate
High magnitude	High	Moderate	Moderate	Low
Moderate magnitude	Moderate	Moderate	Low	Low
Low magnitude	Moderate	Low	Low	Very low
Very low magnitude	Low	Low	Very low	Very low



# Visual Impact Rating Example - HIGH



Distance to development	Viewpoint type	Viewpoint sensitivity	Scenic quality	Overall sensitivity	Occupied cells	Magnitude rating	Impact rating
1,871 m	Rural dwelling primary view	Moderate	Low	Moderate	59	Very high	High

	High visual sensitivity	Moderate visual sensitivity	Low visual sensitivity	Very low visual sensitivity
Very high magnitude	High	High	Moderate	Moderate
High magnitude	High	Moderate	Moderate	Low
Moderate magnitude	Moderate	Moderate	Low	Low
Low magnitude	Moderate	Low	Low	Very low
Very low magnitude	Low	Low	Very low	Very low

# Mitigation requirements

Visual Sensitivity

+

Magnitude

=

Visual Impact

Low

No action required

Moderate

Visual Screening

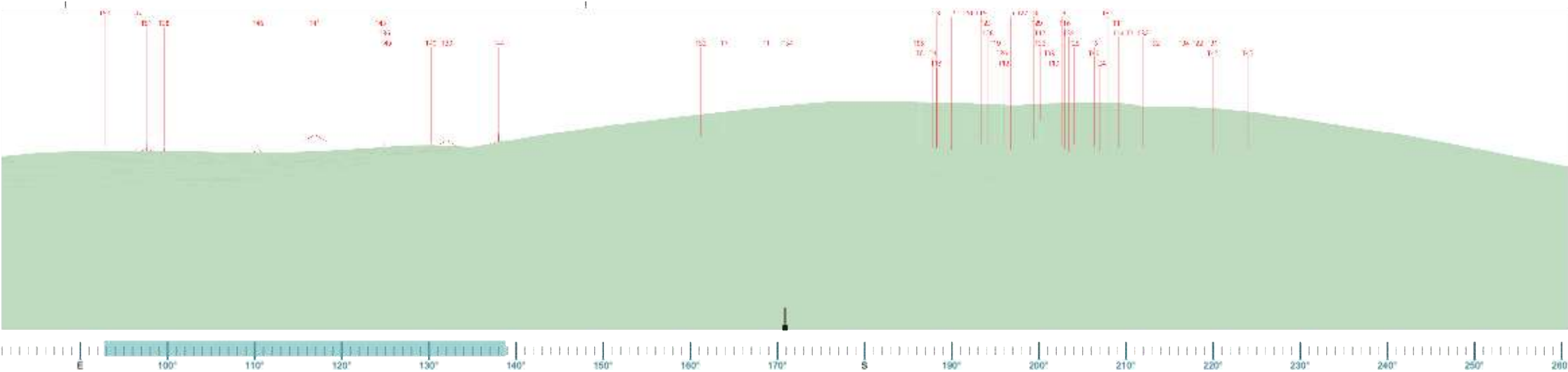
High

Neighbour Agreement





# Proposed view: Euchareena



180° Wireframe Diagram



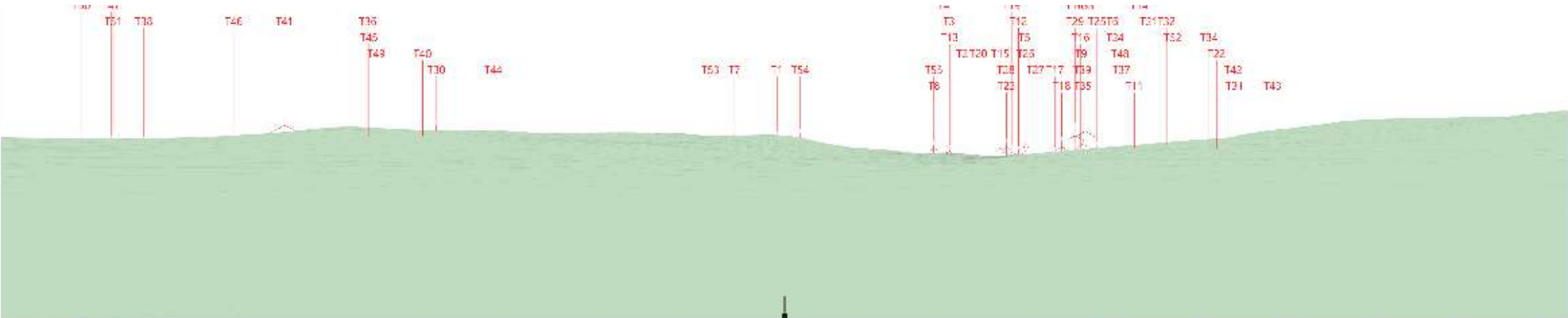
180° Proposed View



Proposed View | 60° Cropped 05A



# Proposed view: Euchareena

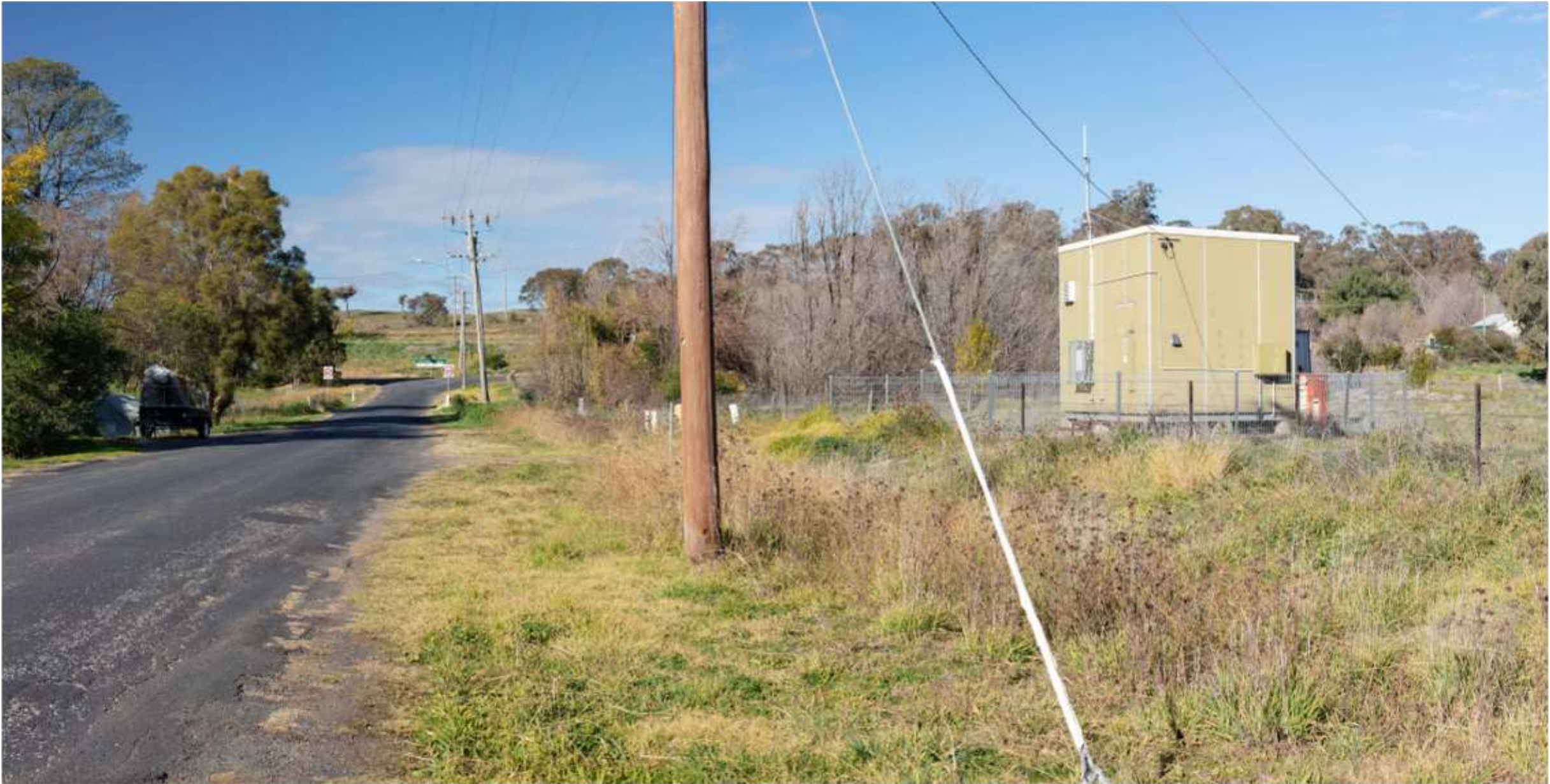


180° Wireframe Diagram



180° Proposed View





Proposed View | 60° Cropped 04A

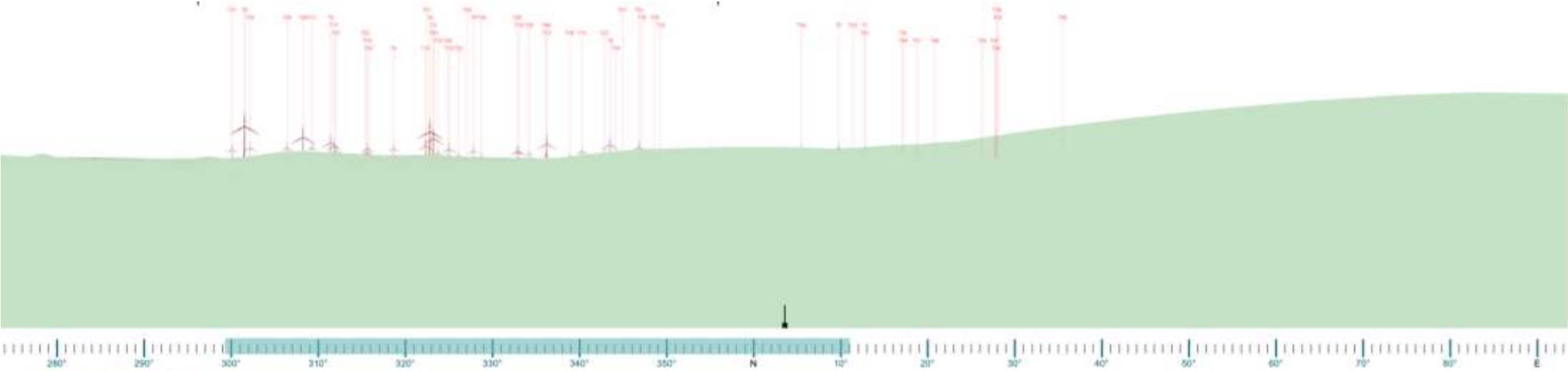




Proposed View | 60° Cropped 04B



# Proposed view: Kerrs Creek



180° Wireframe Diagram



180° Proposed View

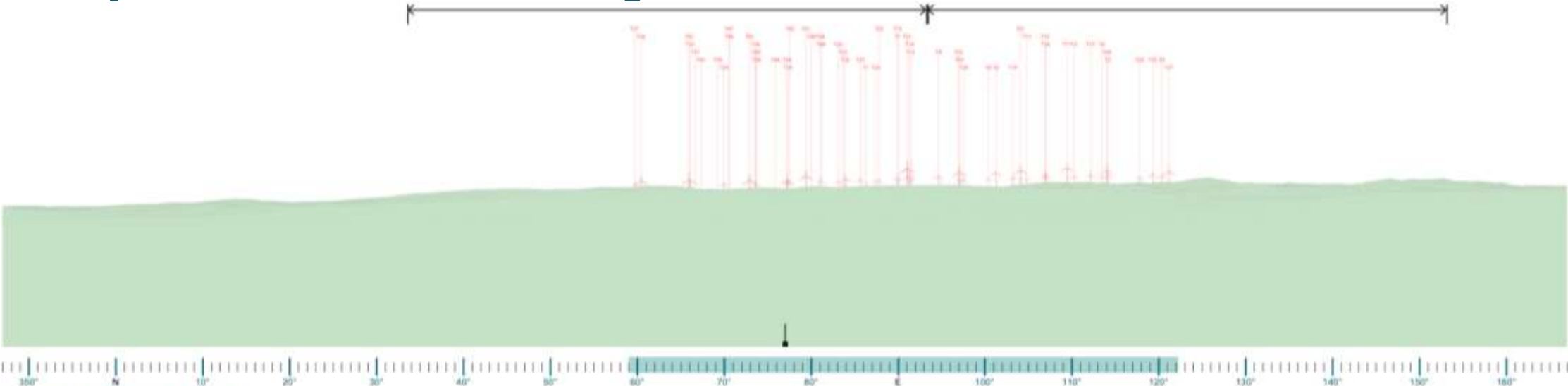




Proposed View | 60° Cropped 02A



# Proposed view: Boomey



180° Wireframe Diagram



180° Proposed View



Proposed View | 60° Cropped 03A





Proposed View | 60° Cropped 03B



# Next Steps

**Prepare LCVIA in accordance with adopted  
Wind Energy Guidelines**