D

Detailed Dwelling Assessments

D.1 Q13-1 Dwelling Assessment

Dwelling Q13-1			
Nearest proposed turbine (km):	**1.58 km** (Turbine 51)	**Visibility Distance Zone:**	**FF (Far Foreground)**
Number of turbines within Black Line (3,350 m):	**14**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**27 turbines** 23 at hub 4 at blade tip	**Landscape Character Unit:**	**LCU01: Yarrabin / Hargrave Hills**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Five (5)**	**Scenic Quality Rating:**	**Low - Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**Five (5)**	**Visual Influence Zone:**	**VIZ1**
Visual Impact Rating:	**High**		

Assessment Notes:

Moir LA undertook a photographic assessment of the property in March 2023 to undertake a site assessment for the visual assessment. The dwelling is located on a cleared section of land, surrounded by vegetation. The dwelling (Q13-1) appears to be orientated to the east. The proposed wind turbines surround the dwelling (in up to five 60 degree sectors). A rise in topography is likely to screen views to a number of turbines to the south west. It is likely existing vegetation will screen views to a large percentage of the Project when viewed from the dwelling. **The visual impact has been assessed as high.**

Visual Performance Objectives Evaluation (VIZ1):

Visual Magnitude: The house is located within the black line of visual magnitude. 14 turbines are located within the black line of visual magnitude, however due to vegetation the majority of these turbines will be screened.

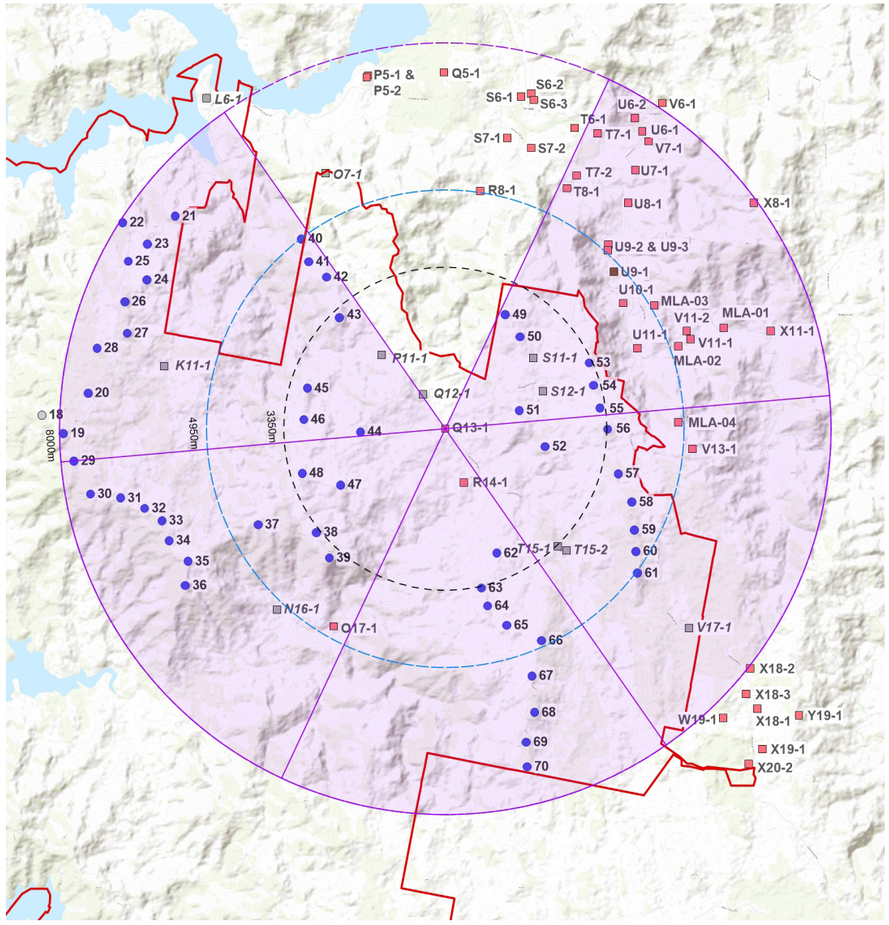
Multiple Wind Turbine Effect: The project will be theoretically visible in up to five (5) 60 degree sectors, which is deemed unacceptable for a receptor with Level 2 Sensitivity (Rural Dwelling). Intervening vegetation is likely to reduce the number of visible turbines to one (1) 60 degree sector.

Landscape Scenic Integrity: The proposed turbines would be a visible element in the landscape, however the scenic integrity will remain intact.

Key Feature Disruption: Views from the dwelling are largely contained by surrounding vegetation and has limited views to surrounding landscape features, therefore it is unlikely the Project would disrupt views to key features from this dwelling.

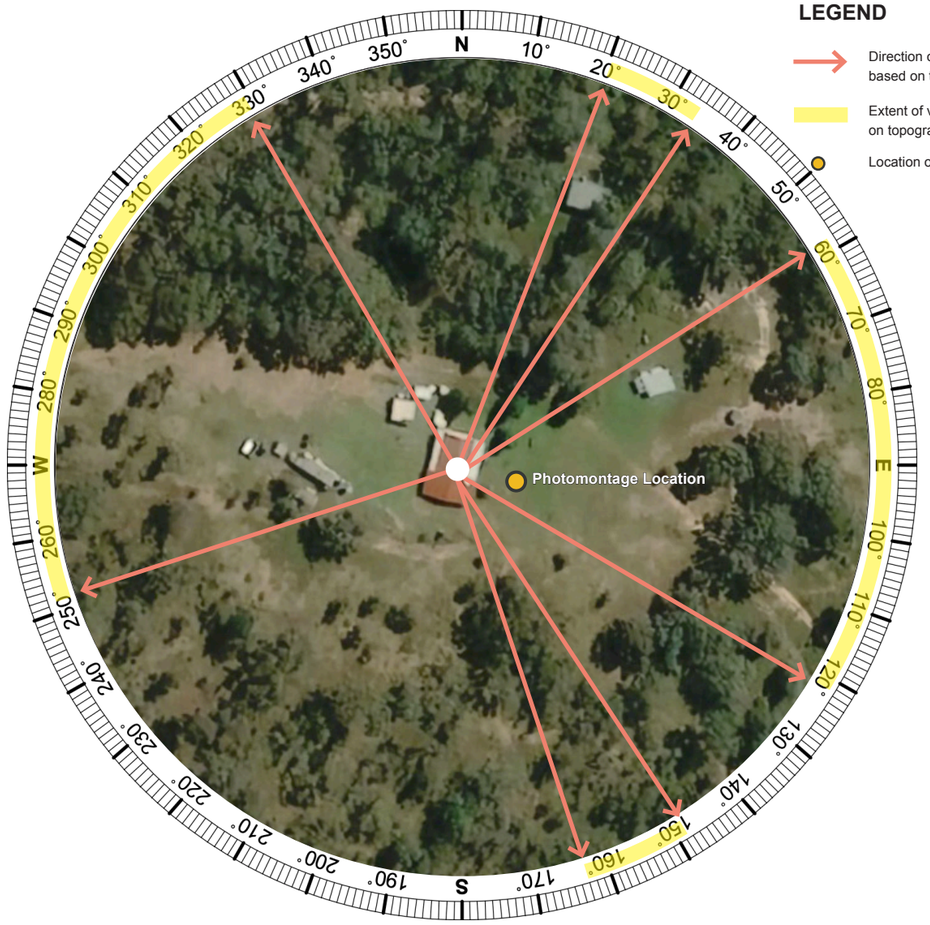
Mitigation Measures:

Screen planting close to the eastern side of the dwelling would be an acceptable form of mitigation to reduce the visibility of turbines. This is a long-term solution which would require consultation with the landowner. It is estimated that the tree plantings would take 5 - 10 years to effectively screen the Project and once established could reduce the potential visual impact to **Low**. **Refer to Appendix G.1.**



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine



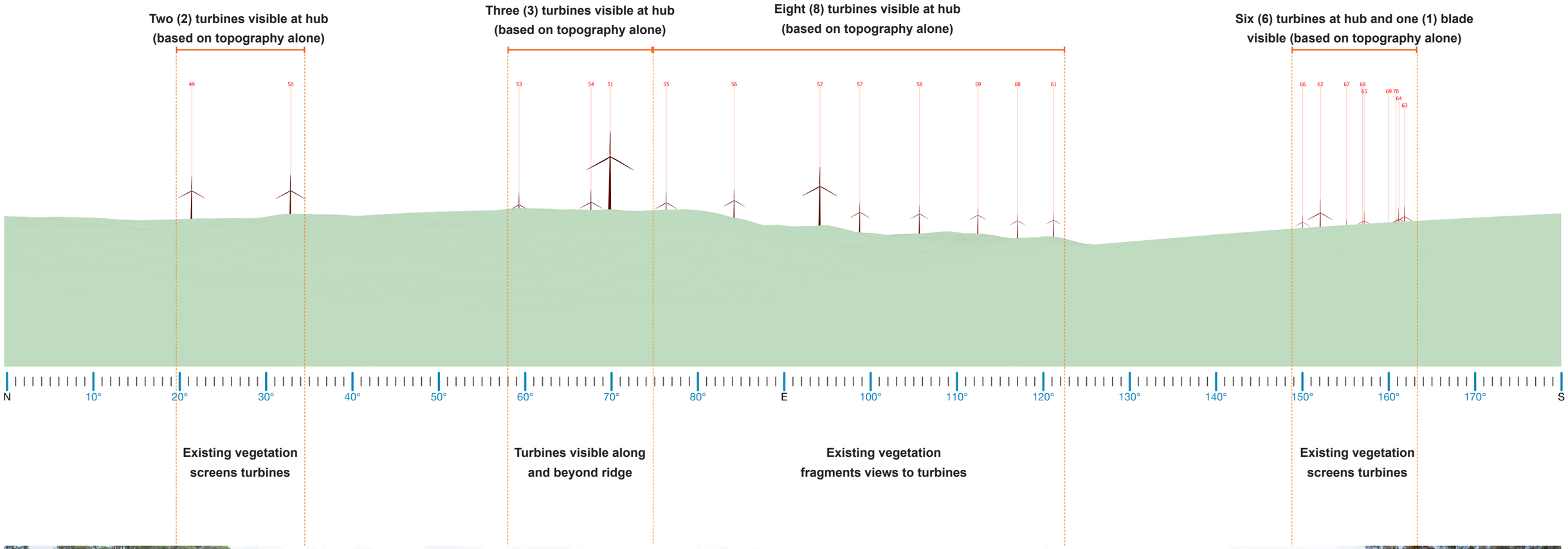
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Preliminary Assessment Tools - Dwelling Q13-1

D.1 Q13-1 Dwelling Assessment

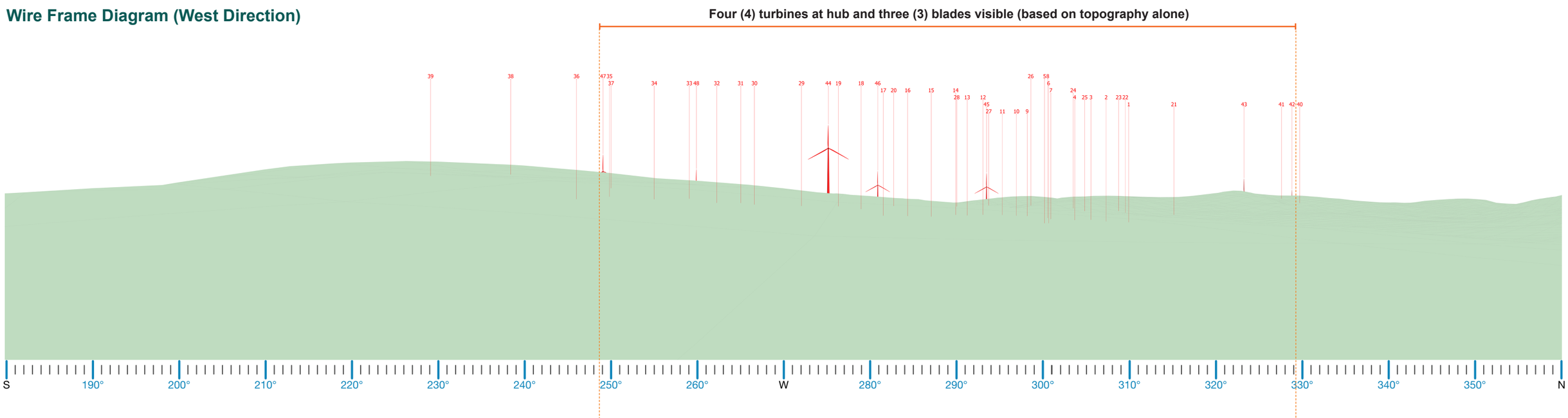
Wire Frame Diagram (East Direction)



Photomontage (East Direction)

D.1 Q13-1 Dwelling Assessment

Wire Frame Diagram (West Direction)



Dwelling and existing vegetation screens views to turbines to the west.

Aligned 180º Panorama

D.2 R14-1 Dwelling Assessment

Dwelling R14-1			
Nearest proposed turbine (km):	**1.61 km** (Turbine 62)	**Visibility Distance Zone:**	**FF (Far Foreground)**
Number of turbines within Black Line (3,350 m):	**14**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**37** 34 at hub 3 at blade tip	**Landscape Character Unit:**	**LCU01: Yarrabin / Hargrave Hills**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Five (5)**	**Scenic Quality Rating:**	**Low - Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**Five (5)**	**Visual Influence Zone:**	**VIZ1**
Visual Impact Rating: High			

Assessment Notes:

Moir LA undertook a site inspection on the 5th of March 2021. R14-1 is an isolated weekender which is accessed via a track through private property. The dwelling is orientated to the north with a wrap around verandah on all sides. Views to turbines associated with the Project are likely to be limited to the north and north west as vegetation to the west and south contains views. ***The visual effect has been assessed as high.***

Visual Performance Objectives (VIZ1):

Visual Magnitude: The house is located within the black line of visual magnitude. Six (6) turbines are likely to be visible within the black line of visual magnitude.

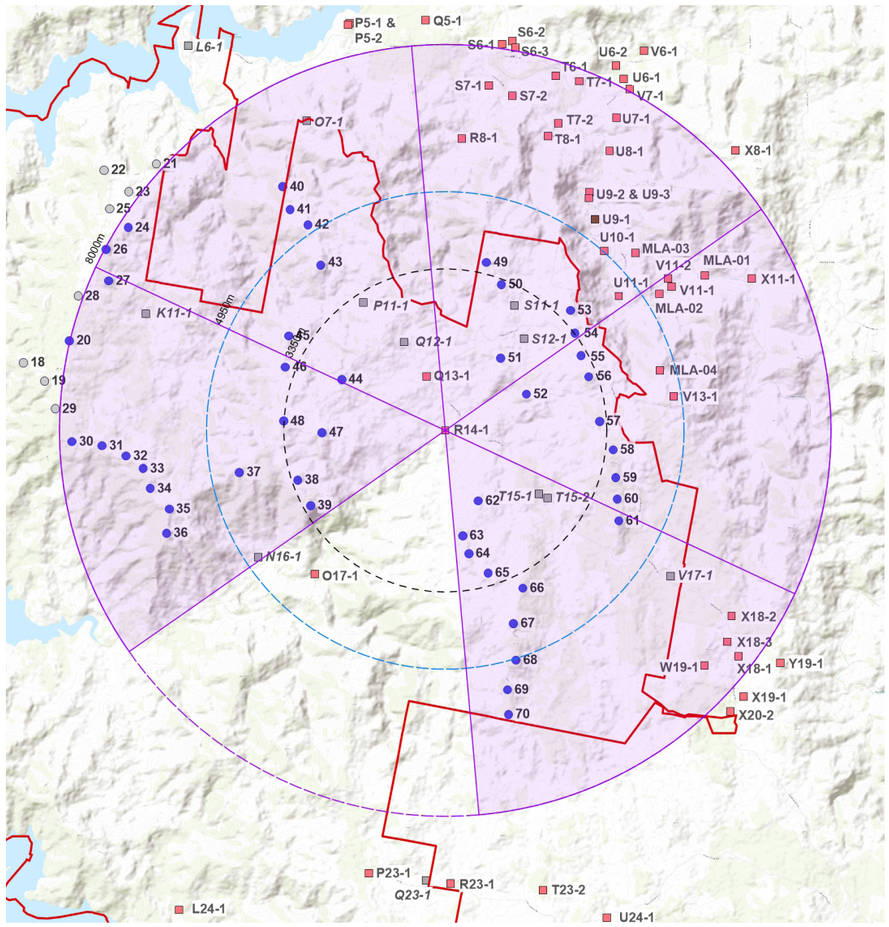
Multiple Wind Turbine Effect: The project will be theoretically visible in up to five (5) 60 degree sectors, however vegetation is likely to reduce views to turbines significantly reducing the number of turbines to one (1) sector.

Landscape Scenic Integrity: The proposed turbines would be a major element in the overall landscape from this dwelling.

Key Feature Disruption: Views from the dwelling are orientated to the hills to the north will be altered by the addition of proposed turbines to the north.

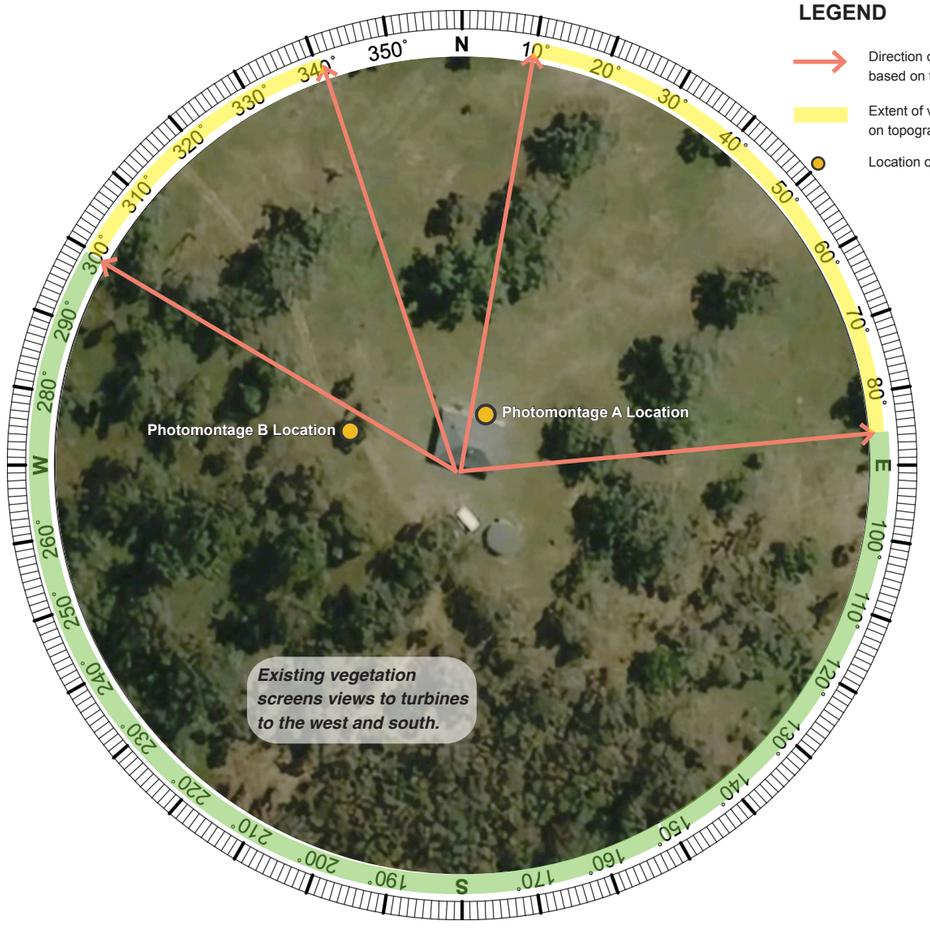
Mitigation Methods:

Screen planting close to the northern side of the dwelling would be an acceptable form of mitigation to reduce the visibility of turbines. This is a long-term solution which would require consultation with the land-owner. It is estimated that the tree plantings would take 5 - 10 years to effectively screen the Project and once established could reduce the potential visual impact to **Low**. **Refer to Appendix G.2.**



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine



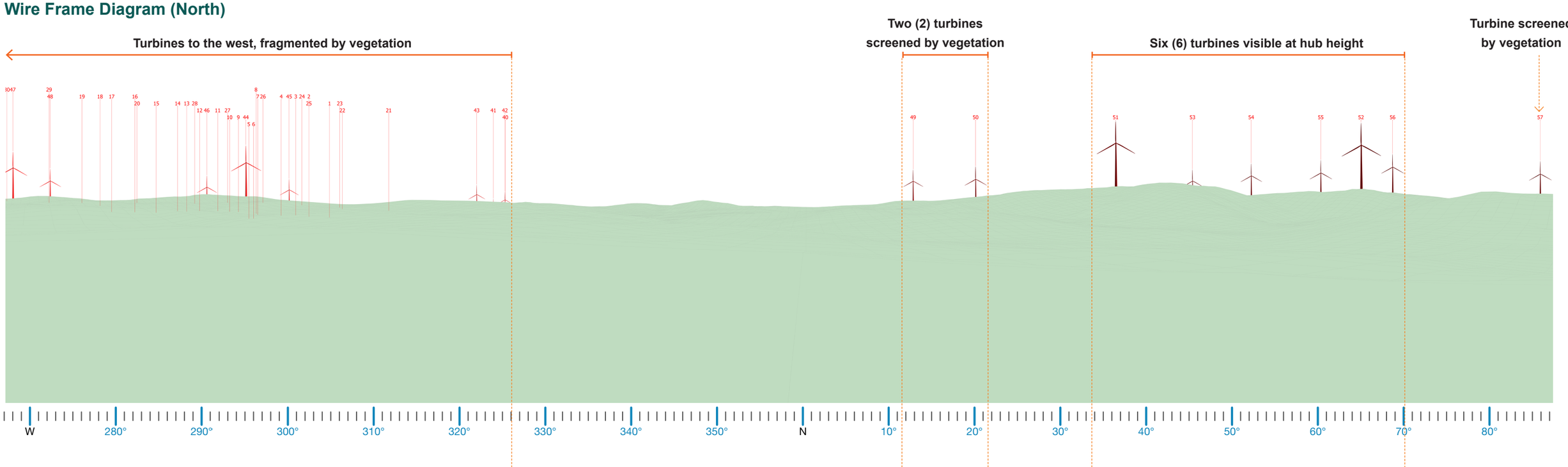
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Preliminary Assessment Tools - Dwelling R14-1

D.2 R14-1 Dwelling Assessment

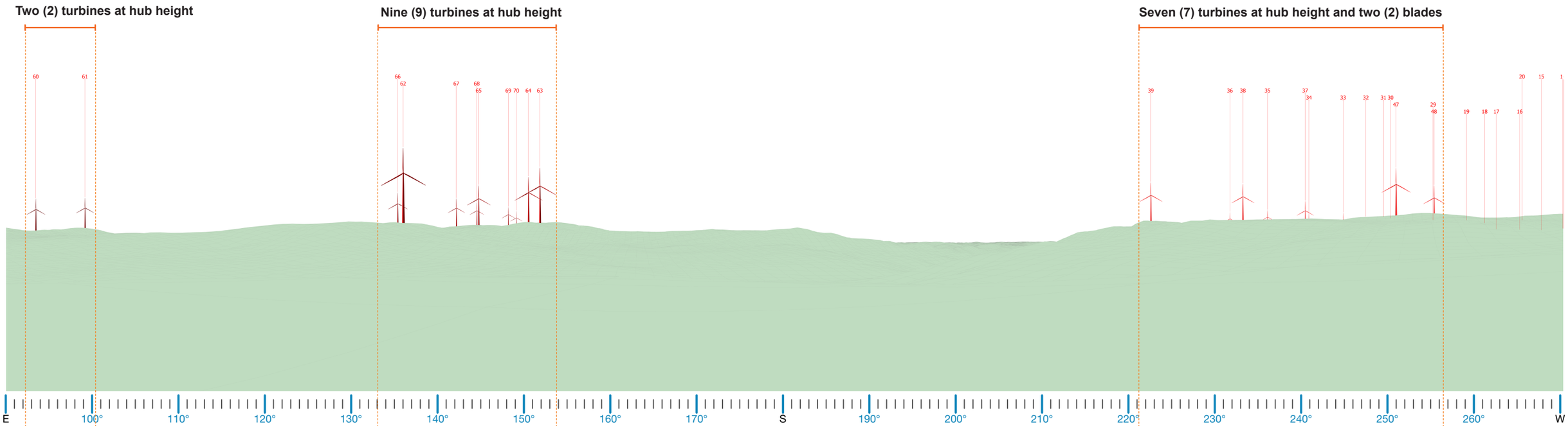
Wire Frame Diagram (North)



Photomontage A (North)

D.2 R14-1 Dwelling Assessment

Wire Frame Diagram (South)



Existing vegetation screens views to turbines.

Existing vegetation screens views to turbines.

Existing vegetation screens views to turbines.

Photomontage B (South)

D.3 R8-1 Dwelling Assessment

Dwelling R8-1			
Nearest proposed turbine (km):	**2.61 km** (Turbine 49)	**Visibility Distance Zone:**	**FF (Far Foreground)**
Number of turbines within Black Line (3,350 m):	**2**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**2** (0 hubs, 2 blades)	**Landscape Character Unit:**	**LCU07: Worlds End**
Number of theoretical 60º Sectors (Based on 2D Plan):	**2**	**Scenic Quality Rating:**	**Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**2**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Very Low**		

Assessment Notes:

A site inspection was undertaken on the 4th of March 2021, which identified the dwelling is orientated to the north with a large decks to the north, east and south of the dwelling. A photomontage prepared from the dwelling indicates views of the Project will be limited to the blade tips of two (2) turbines on the ridge to the south (turbines 43 and 49). The remaining turbines will be completely screened by topography.

The visual impact has been assessed as very low from this dwelling.

Visual Performance Objectives (VIZ2):

Visual Magnitude: The house is located within the black line of visual magnitude. Seven (7) turbines are located within the black line of visual magnitude, however only three (3) are visible at hub height.

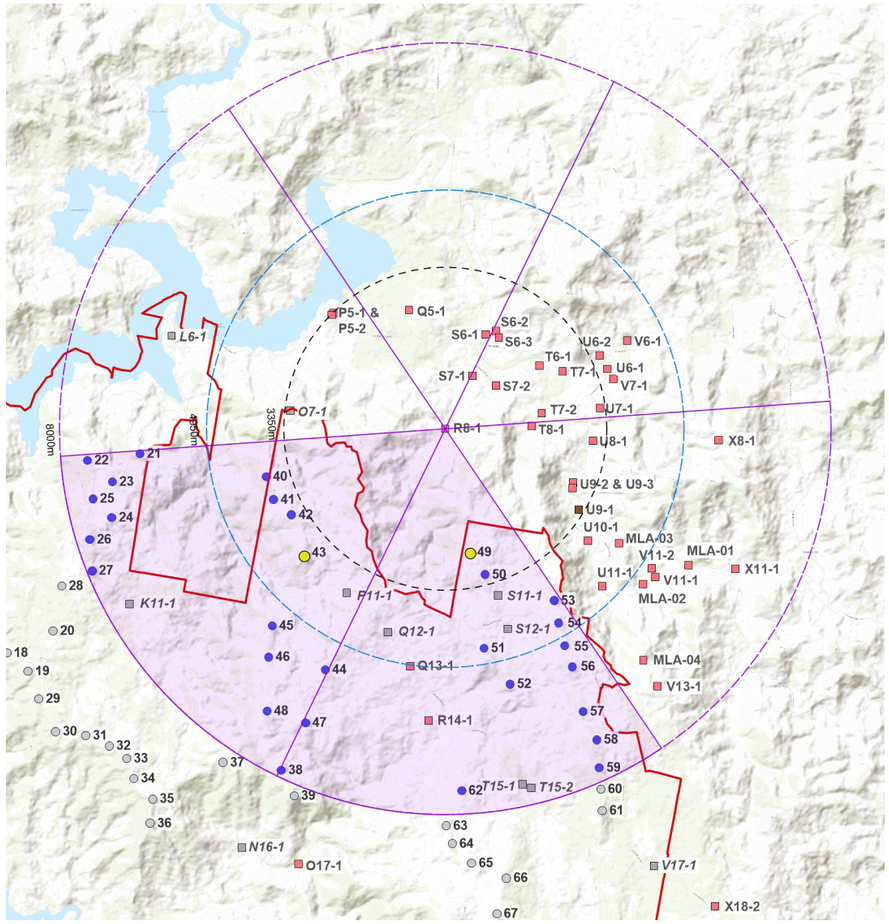
Multiple Wind Turbine Effect: The project will be theoretically visible in up to two (2) 60 degree sectors, however topography is likely to reduce the potential visible turbines to an acceptable level (one 60 degree sector of visibility).

Landscape Scenic Integrity: The proposed turbines would be a small element in the overall landscape from this dwelling. Views to the Project are limited to the south due to topography. The house is orientated north and views to the north will be unaffected.

Key Feature Disruption: Views from the dwelling are orientated to the north. Vegetated hills to the north, east and west will remain unaffected by the Project.

Mitigation Methods:

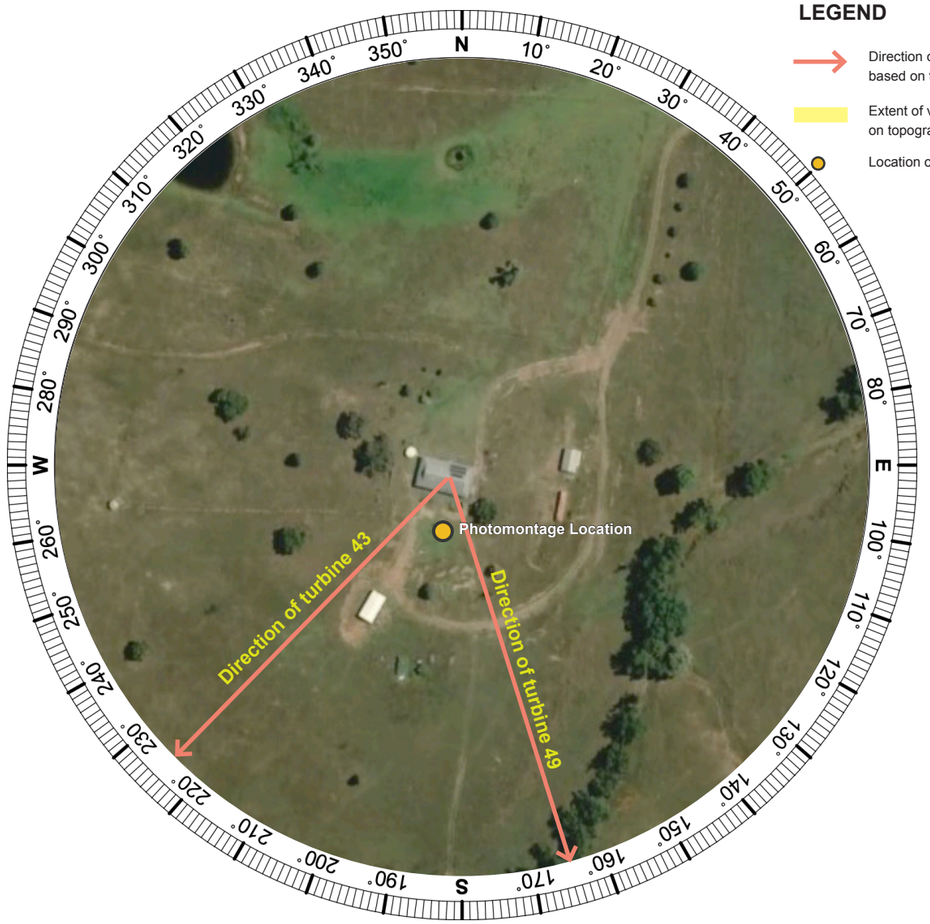
No mitigation measures are required from this dwelling due to the very low visual impact rating.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine

Preliminary Assessment Tools - Dwelling R8-1



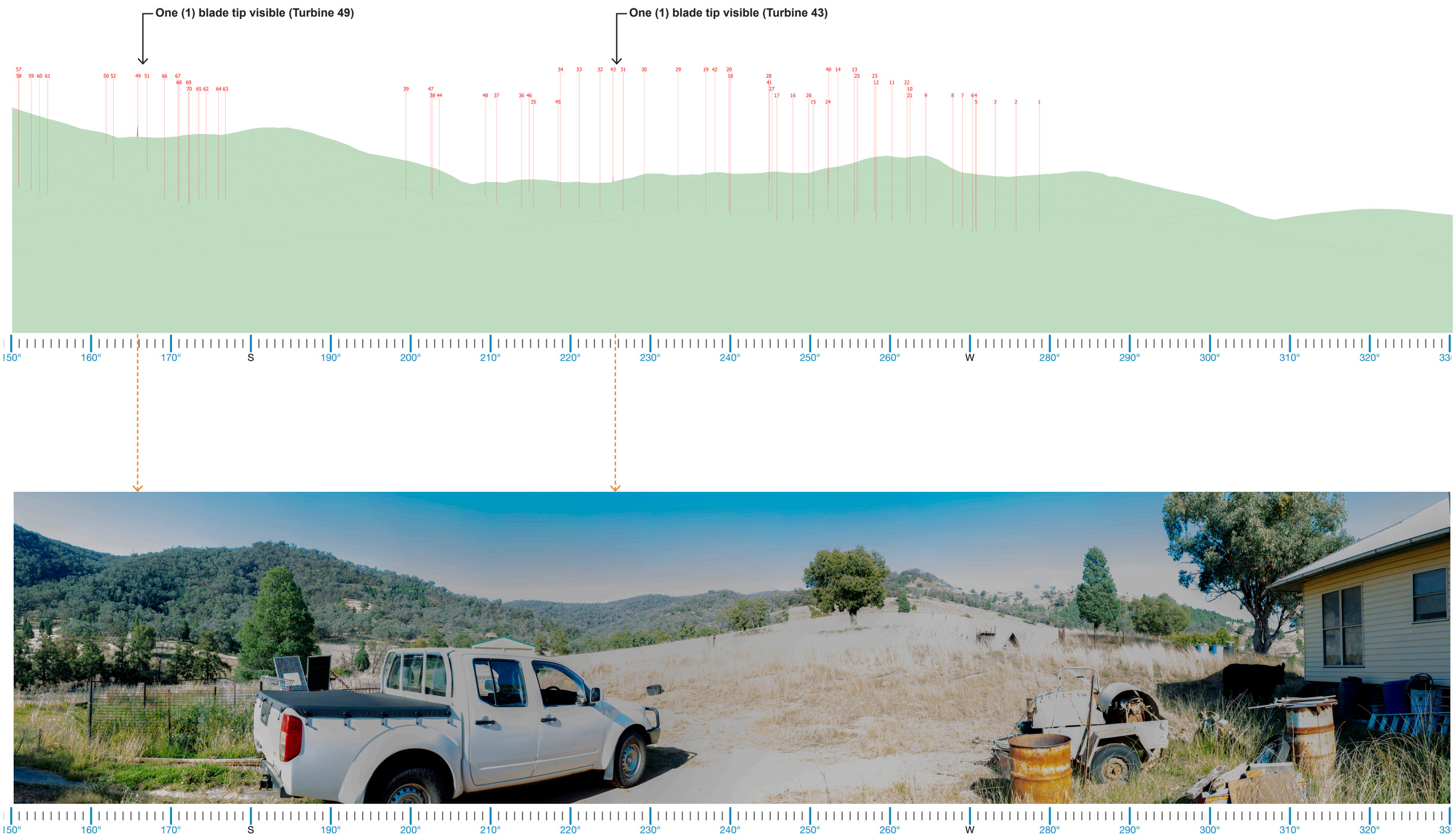
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Aerial Image - Dwelling R8-1 (Imagery Date: 09.13.2018)

D.3 R8-1 Dwelling Assessment

Wire Frame Diagram



Photomontage

D.4 T7-2 Dwelling Assessment

Dwelling T7-2			
Nearest proposed turbine (km):	**3.25 km**	**Visibility Distance Zone:**	**NM (Near Middleground)**
Number of turbines within Black Line (3,350 m):	**5**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**2 turbines** 1 at hub 1 at blade tip	**Landscape Character Unit:**	**LCU07: Worlds End**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Two (2)**	**Scenic Quality Rating:**	**Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**One (1)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Very Low**		

Assessment Notes:

Dwelling is located off Worlds End Road in the valley associated with Highland Home Creek. Based on a desktop assessment, it appears views from the dwelling are expansive to the east towards the vegetated hills associated with the eastern side of the Meroo River. A desktop assessment identified two (2) turbines would have the potential to be visible from this dwelling beyond the ridgeline to the south.

The visual impact has been assessed as very low from this dwelling.

Visual Performance Objectives (VIZ2):

Visual Magnitude: The house is located within the black line of visual magnitude. One (1) partially visible turbine is located within the black line of visual magnitude.

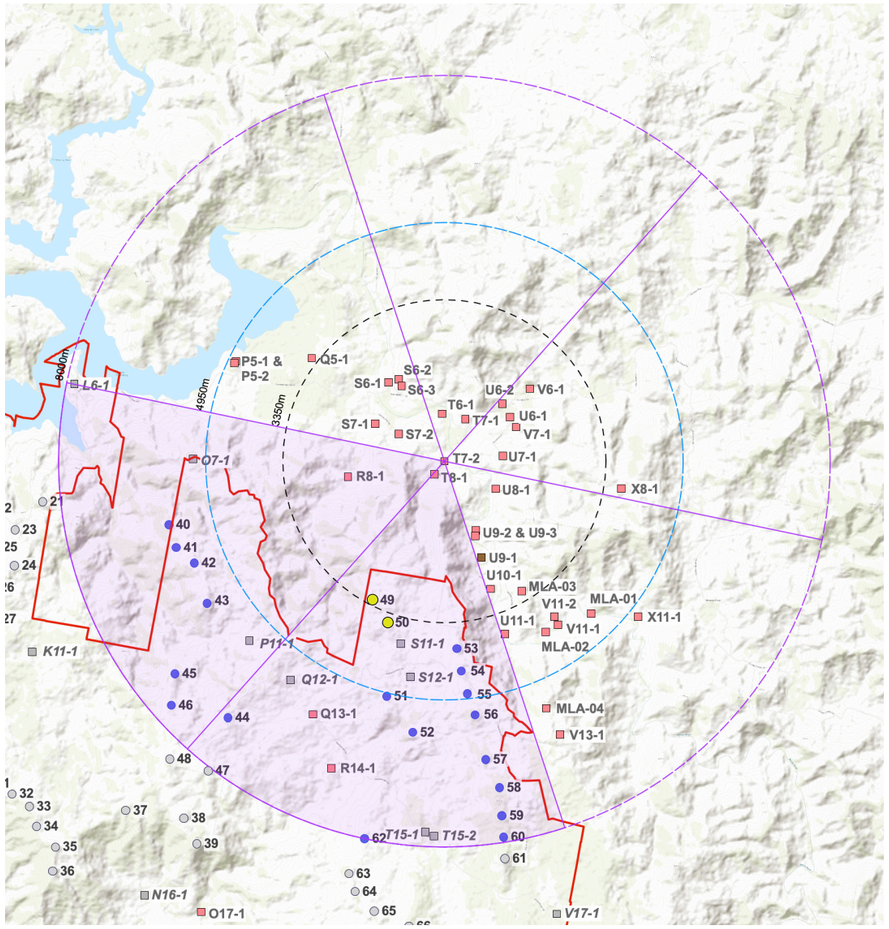
Multiple Wind Turbine Effect: The project will be theoretically visible in up to two (2) 60 degree sectors, however turbines visible in less than one (1) 60 degree sector.

Landscape Scenic Integrity: The proposed turbines would be a very minor element in the overall landscape setting when viewed from this dwelling. The house appears to be orientated north and views to the north will be unaffected.

Key Feature Disruption: Vegetated hills to the north, east and west will remain unaffected by the Project. The ridgelines will remain the dominant landscape character feature.

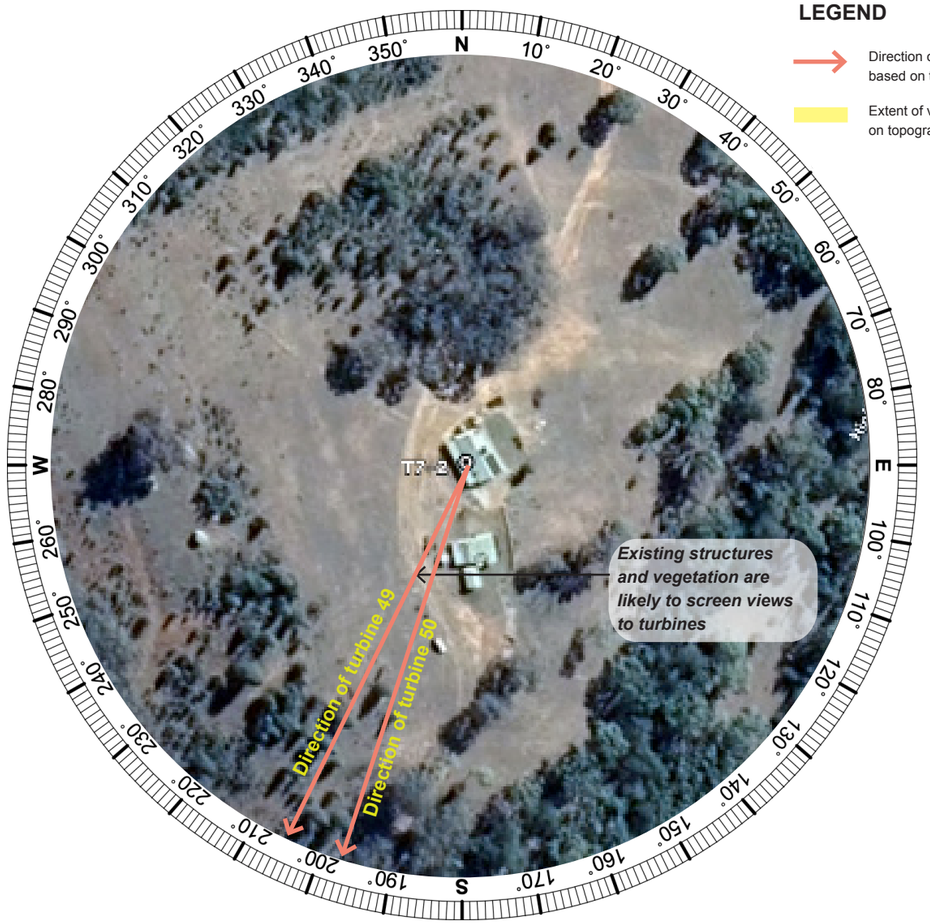
Mitigation Methods:

No mitigation measures are required from this dwelling due to the very low visual impact rating.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine



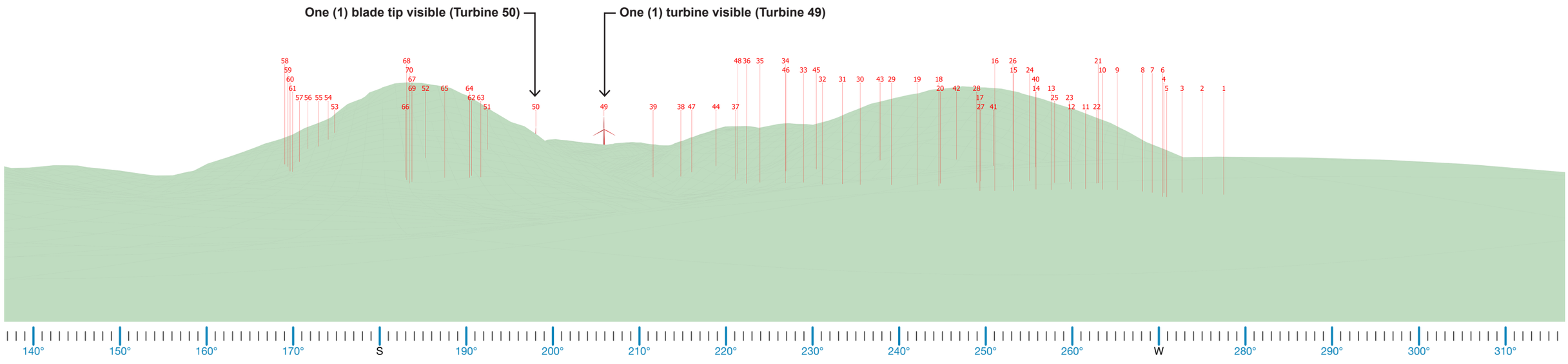
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography

Preliminary Assessment Tools - Dwelling T7-2

D.4 T7-2 Dwelling Assessment

Wire Frame Diagram



Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - ie. a landscape without screening, structures or vegetation. As accurate information on the height and coverage of vegetation and buildings is unavailable, it is important to note the wire frame diagram is based solely on topographic information.

Therefore this should be acknowledged as representing the absolute worst case scenario.

D.5 U8-1 Dwelling Assessment

Dwelling U8-1			
Nearest proposed turbine (km):	**3.41 km**	**Visibility Distance Zone:**	**NM (Near Middleground)**
Number of turbines within Black Line (3,350 m):	**Nil**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**8 turbines** 5 at hub 3 at blade tip	**Landscape Character Unit:**	**LCU07: Worlds End**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Two (2)**	**Scenic Quality Rating:**	**Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**One (1)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Low**		

Assessment Notes:

A site inspection was undertaken in March 2023, which identified the dwelling is orientated to the north with a deck to the west and south. Dwelling U8-1 is situated south of Yarrabin Road on Rockford Lane. Land in this area is densely vegetated and the dwelling is located amongst the vegetation. A photomontage prepared from the west facing deck identified up to five (5) turbines will be visible to the south of the dwelling.

The visual impact rating has been assessed as low from this dwelling.

Visual Performance Objectives (VIZ2):

Visual Magnitude: No turbines are located within the black line of visual magnitude.

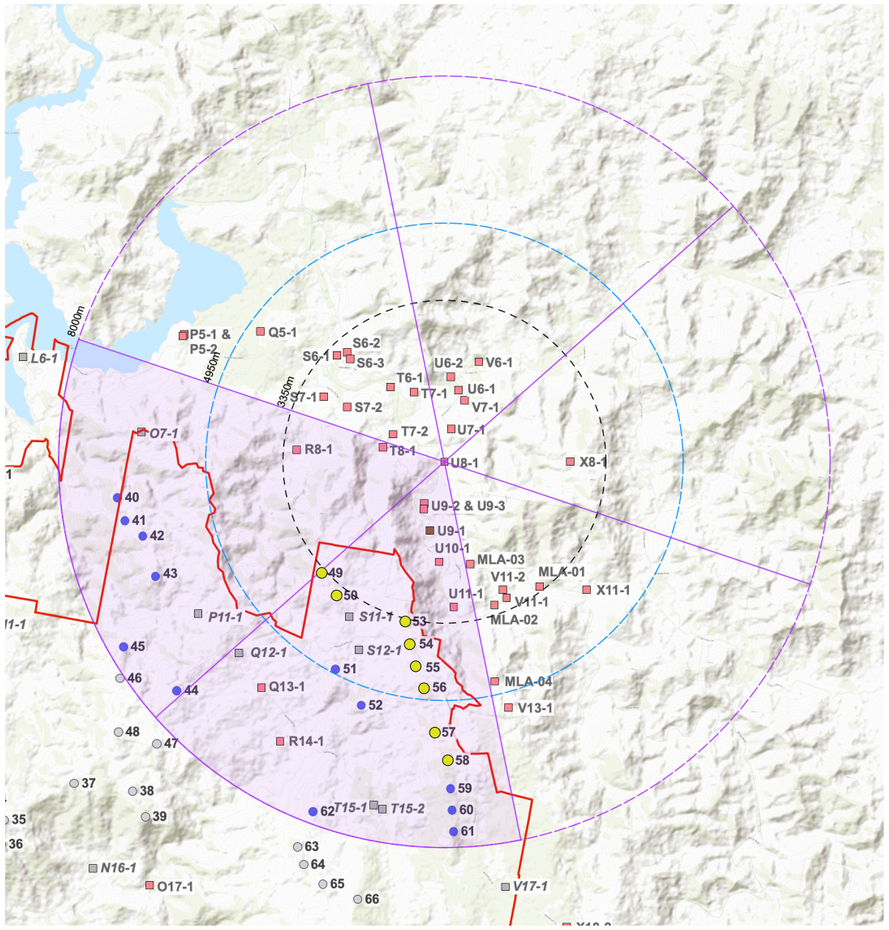
Multiple Wind Turbine Effect: The project will be visible in less than one (1) 60 degree sector, which is deemed acceptable in accordance with the Bulletin.

Landscape Scenic Integrity: The proposed turbines will be visible from this dwelling however they will not alter the scenic integrity.

Key Feature Disruption: Views from this dwelling are characterised by the densely vegetated hills and valley associated with Meroo River. The turbines will be a visible element in the landscape viewed against a sky backdrop, the ridgeline will remain the dominating feature of the landscape.

Mitigation Methods:

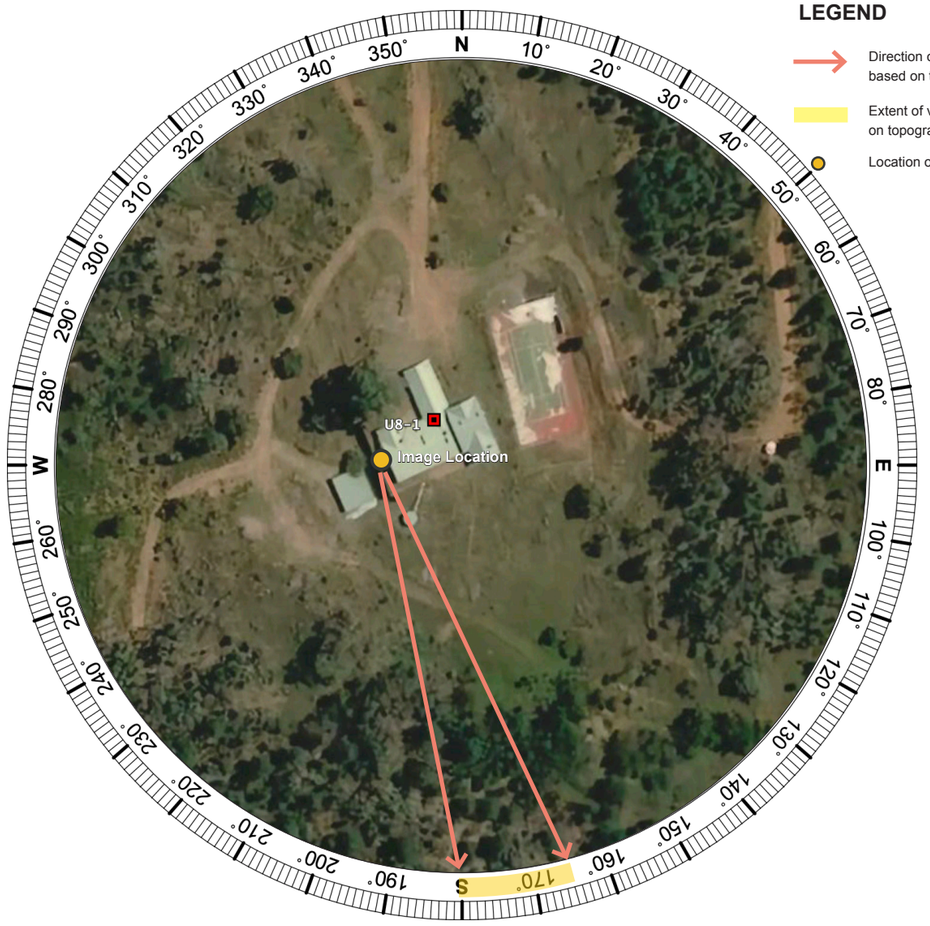
No mitigation measures are required from this dwelling due to the low visual impact rating.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine

N



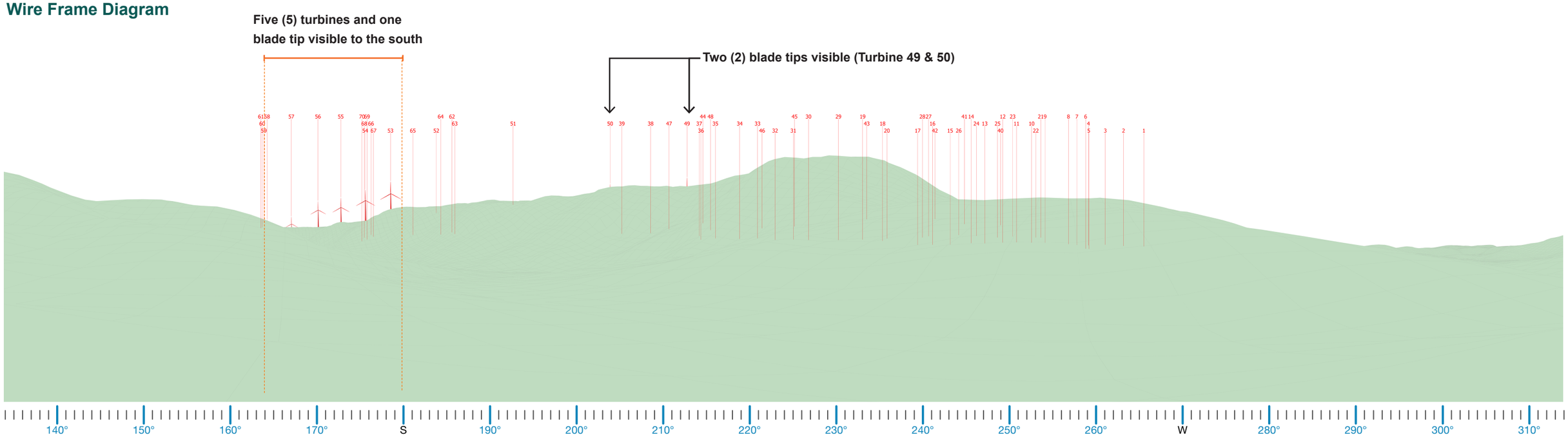
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Preliminary Assessment Tools - Dwelling U8-1

D.5 U8-1 Dwelling Assessment

Wire Frame Diagram



Photomontage

D.6 S7-2 Dwelling Assessment

Dwelling S7-2			
Nearest proposed turbine (km):	3.50 km	Visibility Distance Zone:	NM (Near Middleground)
Number of turbines within Black Line (3,350 m):	Nil	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Total number of visible turbines (Based on topography alone):	Nil	Landscape Character Unit:	LCU07: Worlds End
Number of theoretical 60º Sectors (Based on 2D Plan):	Two (2)	Scenic Quality Rating:	Moderate
Number of visible 60º Sectors (Based on 3D Assessment):	Nil	Visual Influence Zone:	VIZ2
Visual Impact Rating:	**Nil**		

Assessment Notes:

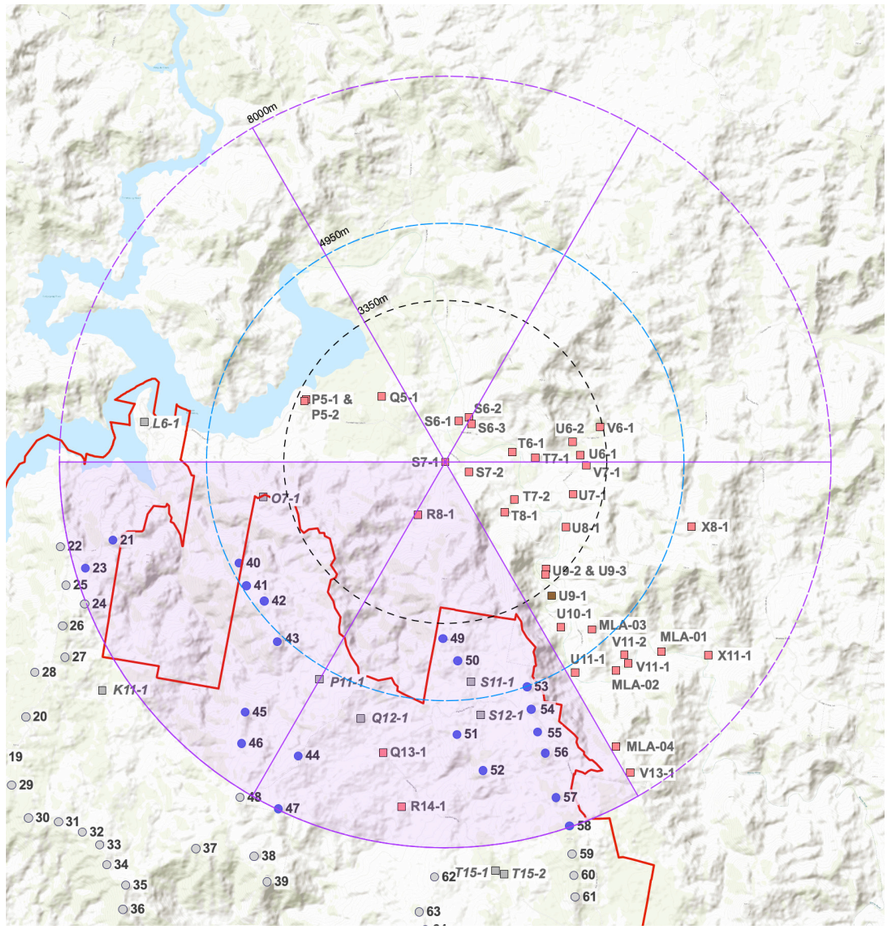
A desktop assessment has been undertaken for this dwelling. The dwelling appears to be orientated towards the north. A wire fram diagram has been prepared from this dwelling location. Views to the Project will not be available from the dwelling, due to surrounding topography. **The visual impact rating from this dwelling has been assessed as nil.**

Visual Performance Objectives (VIZ2):

Visual Magnitude: The house is located within the black line of visual magnitude.
Multiple Wind Turbine Effect: The project will be theoretically visible in up to one (1) 60 degree sector. Topography will screen views to turbines.
Landscape Scenic Integrity: The proposed turbines will not be available due to topography.
Key Feature Disruption: The Project will not disrupt key features of this location.

Mitigation Methods:

Not required.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine

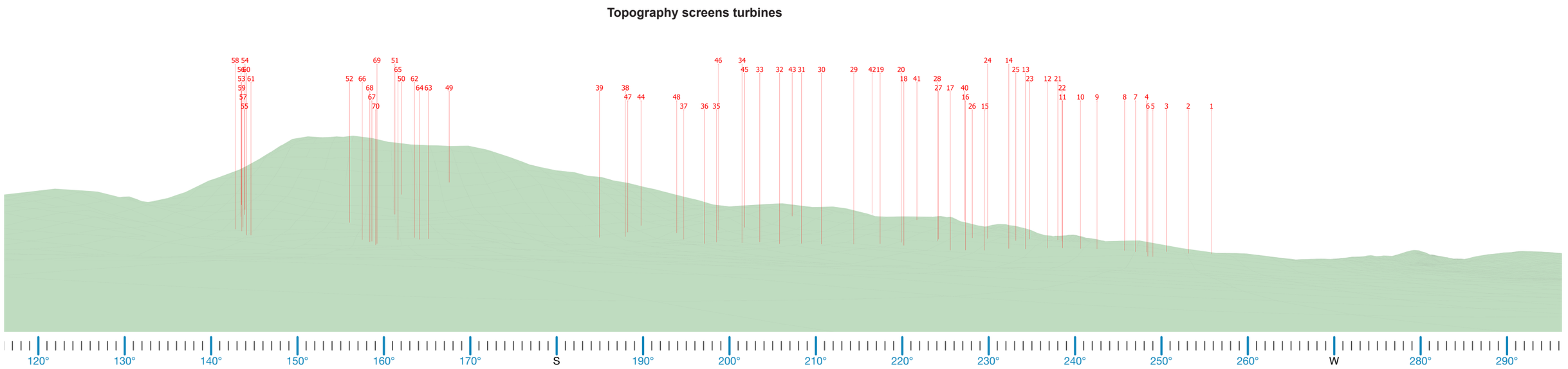
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Preliminary Assessment Tools - Dwelling S7-2

D.6 S7-2 Dwelling Assessment

Wire Frame Diagram



Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - ie. a landscape without screening, structures or vegetation. As accurate information on the height and coverage of vegetation and buildings is unavailable, it is important to note the wire frame diagram is based solely on topographic information.

Therefore this should be acknowledged as representing the absolute worst case scenario.

D.7 P5-1 Dwelling Assessment

Dwelling P5-1			
Nearest proposed turbine (km):	**3.67 km**	**Visibility Distance Zone:**	**NM (Near Middleground)**
Number of turbines within Black Line (3,350 m):	**Nil**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**28 turbines** 22 at hub 6 at blade tip	**Landscape Character Unit:**	**LCU04: Cudgegong River Valley**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Two (2)**	**Scenic Quality Rating:**	**Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**One (1)**	**Visual Influence Zone:**	**VIZ2**

Visual Impact Rating: Nil

Assessment Notes:

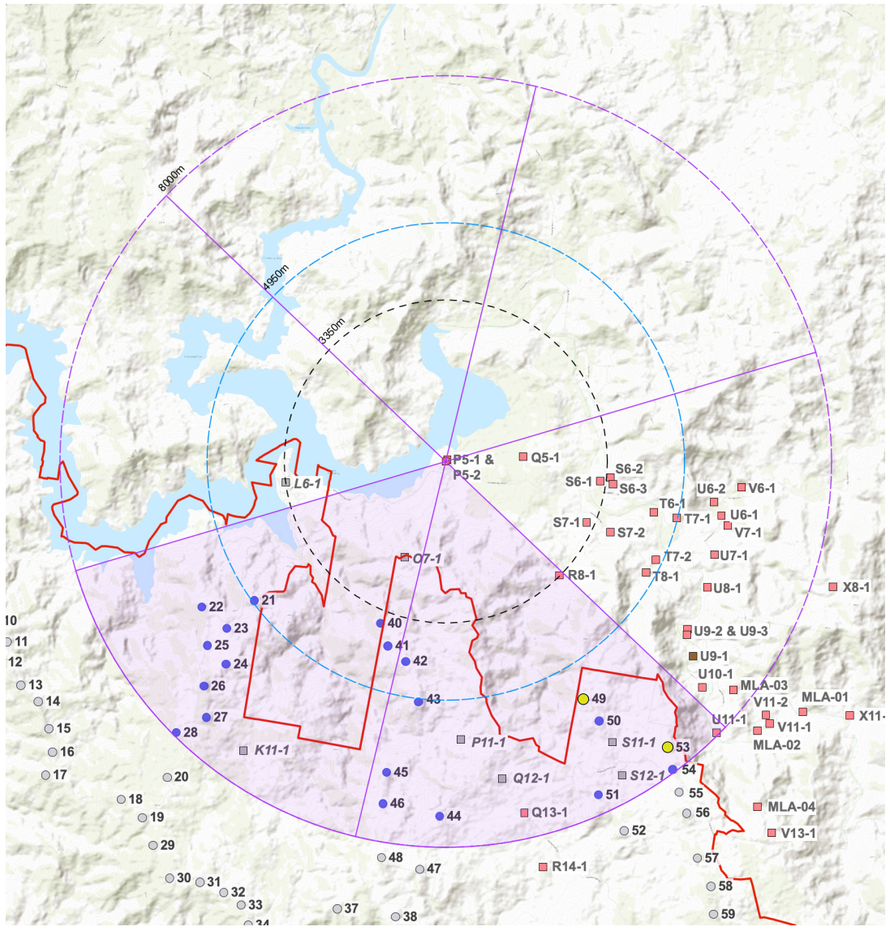
A site inspection was undertaken from this dwelling in March 2023. The dwelling is orientated towards the east. The site inspection identified the dwelling is surrounded by vegetation which contains views to the south towards the Project (see aerial image and panoramic photo aligned with wire frame diagram). Views to the Project will not be available from the dwelling. **The visual impact rating from this dwelling has been assessed as nil.**

Visual Performance Objectives (VIZ2):

Visual Magnitude: The house is located between the black and blue line of visual magnitude.
Multiple Wind Turbine Effect: The project will be theoretically visible in up to one (1) 60 degree sector. Vegetation will screen views to turbines.
Landscape Scenic Integrity: The proposed turbines are unlikely to be visible due to existing vegetation surrounding the dwelling to the south and south west.
Key Feature Disruption: The Project will not disrupt key features of this location.

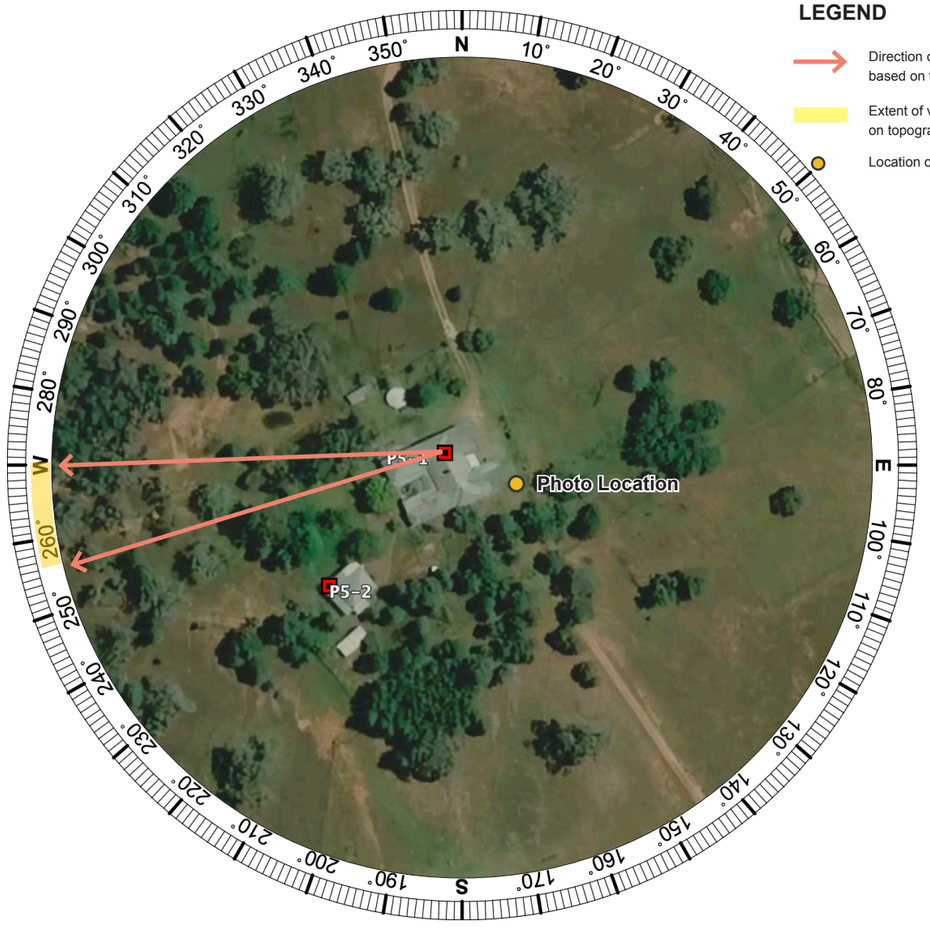
Mitigation Methods:

Not required due to existing vegetation.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine

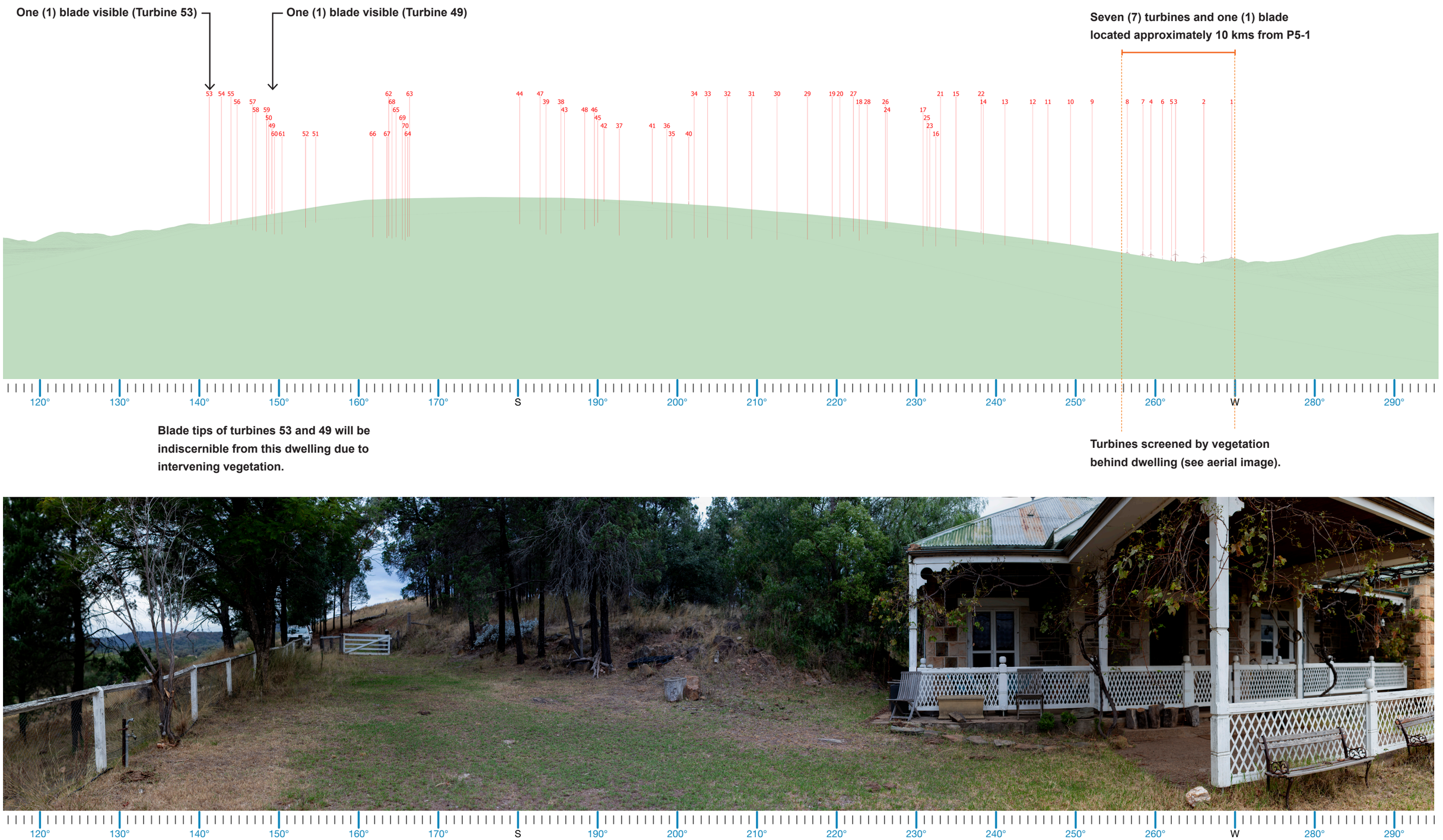


LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

D.7 P5-1 Dwelling Assessment

Wire Frame Diagram



180º Aligned Panorama

D.8 R23-1 Dwelling Assessment

Dwelling R23-1			
Nearest proposed turbine (km):	**3.699 km**	**Visibility Distance Zone:**	**NM (Near Middleground)**
Number of turbines within Black Line (3,350 m):	**Nil**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	***32*** (15 at hub, 17 blades)	**Landscape Character Unit:**	**LCU02: Yarrabin / Hargraves Farmlands**
Number of theoretical 60º Sectors (Based on 2D Plan):	**One (1)**	**Scenic Quality Rating:**	**Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**One (1)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Low**		

Assessment Notes:

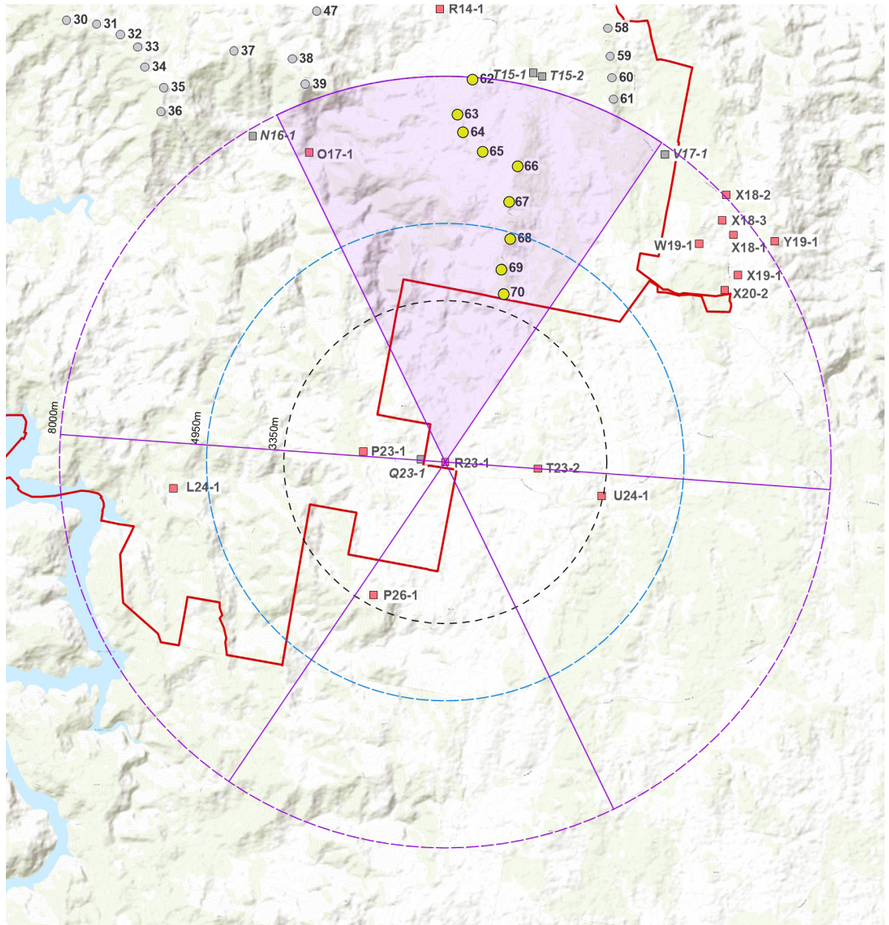
A site inspection was undertaken from this dwelling in March 2023. The dwelling is orientated towards the east with views of vegetated hills. The site inspection identified the dwelling is surrounded by vegetation which fragments views to the Project (see aerial image and photomontage aligned with wire frame diagram). Views to the Project will be fragmented by the vegetation from the dwelling. **The visual impact rating from this dwelling has been assessed as low.**

Visual Performance Objectives (VIZ2):

Visual Magnitude: The house is located between the black and blue line of visual magnitude.
Multiple Wind Turbine Effect: The project will be theoretically visible in up to one (1) 60 degree sector. Vegetation will fragment views to turbines.
Landscape Scenic Integrity: The proposed turbines are unlikely to be visible due to existing vegetation surrounding the dwelling to the south and south west.
Key Feature Disruption: Views from this dwelling are characterised by the densely vegetated hills. The turbines will be a visible element in the landscape viewed against a sky backdrop, the vegetated ridgelines will remain the dominating feature of the landscape.

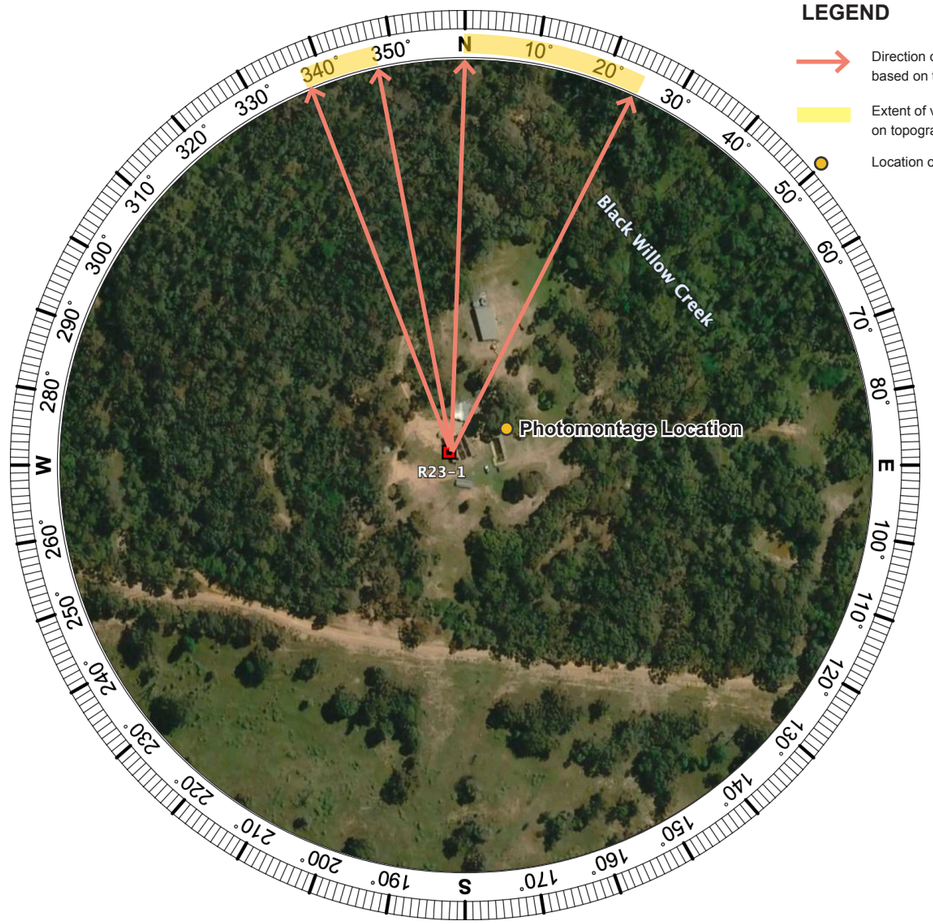
Mitigation Methods:

Not required due to existing vegetation.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine



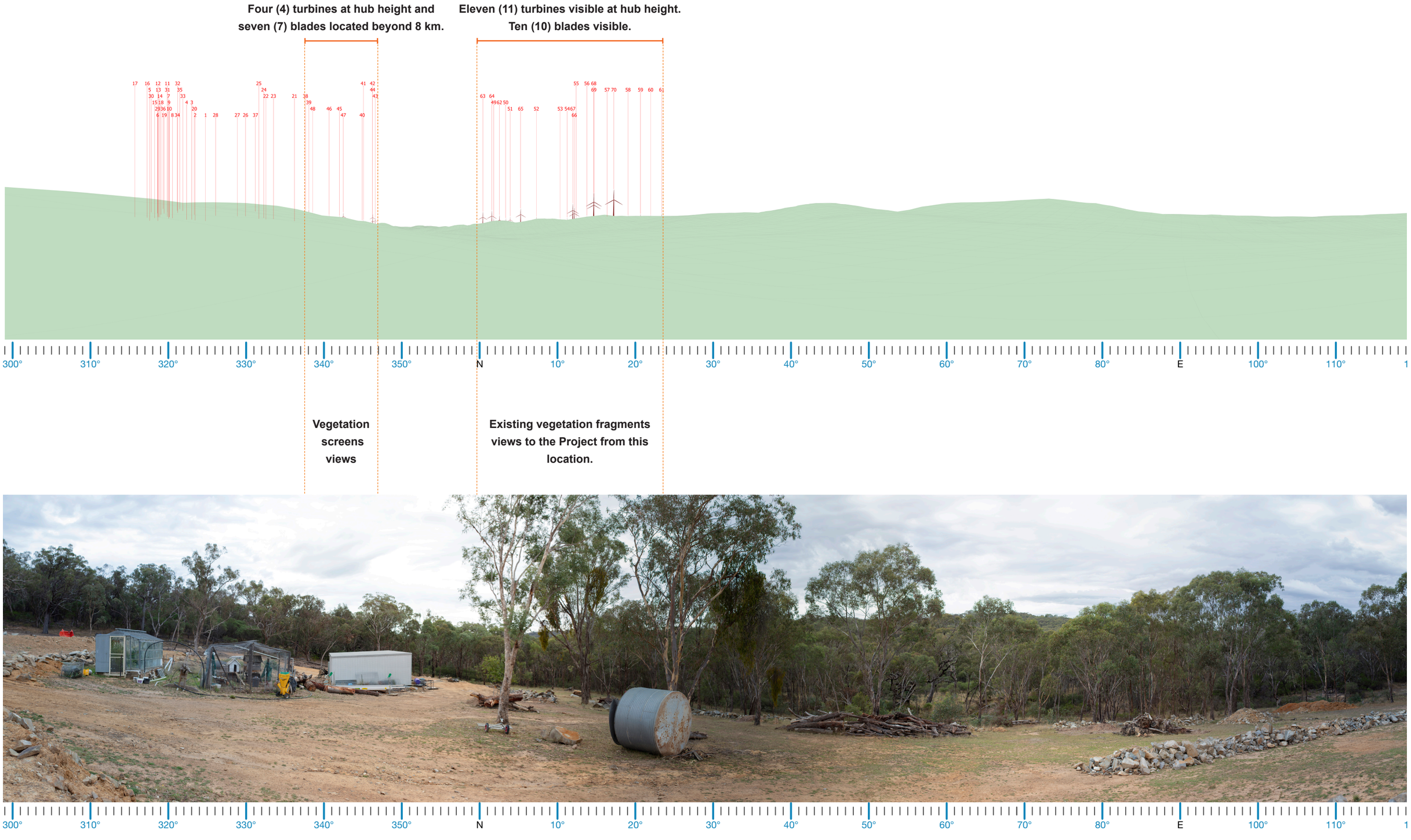
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Preliminary Assessment Tools - Dwelling R23-1

D.8 R23-1 Dwelling Assessment

Wire Frame Diagram



Photomontage

D.9 X18-1 Dwelling Assessment

Dwelling X18-1			
Nearest proposed turbine (km):	**3.761 km**	**Visibility Distance Zone:**	**NM (Near Middleground)**
Number of turbines within Black Line (3,350 m):	**Nil**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**17** (16 at hub, 1 blade)	**Landscape Character Unit:**	**LCU02: Yarrabin / Hargraves Farmlands**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Two (2)**	**Scenic Quality Rating:**	**Low - Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**Two (2)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Nil**		

Assessment Notes:

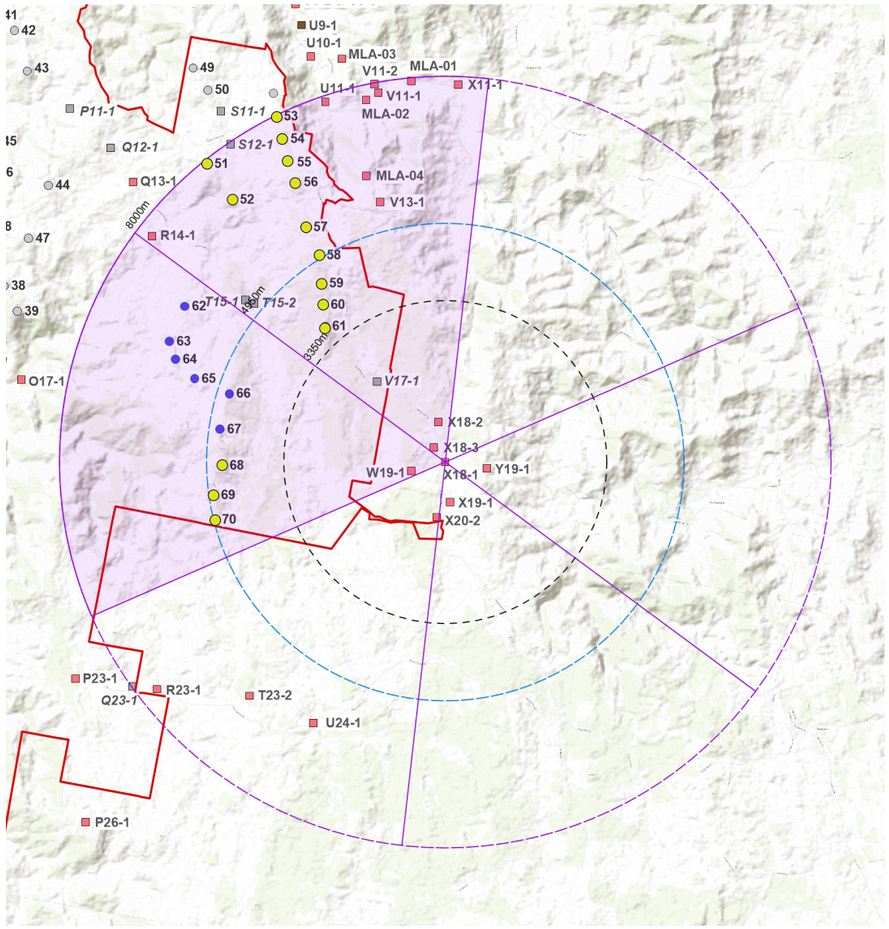
Moir LA attended the property in March 2023 to undertake a site inspection for the visual assessment. A wire frame diagram indicates a total of 17 turbines would be visible to the west and north west of the dwelling (16 at hub height, 1 blade). Site inspecition identified vegetation surrounding the dwelling and associated with Wallawaugh Road will screen views to the turbines. **The visual impact rating has been assessed as nil from this dwelling.**

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: No turbines are located within the black line of visual magnitude. Eight (8) are located within the blue line, however they will be screened by vegetation.
Multiple Wind Turbine Effect: The project will be theoretically visible in up to two (2) 60 degree sectors, which is acceptable for a level 2 sensitivity viewer. Turbines will be screened by vegetation.
Landscape Scenic Integrity: The proposed turbines will not alter the scenic integrity from this dwelling.
Key Feature Disruption: The Project will not disrupt key features from this dwelling.

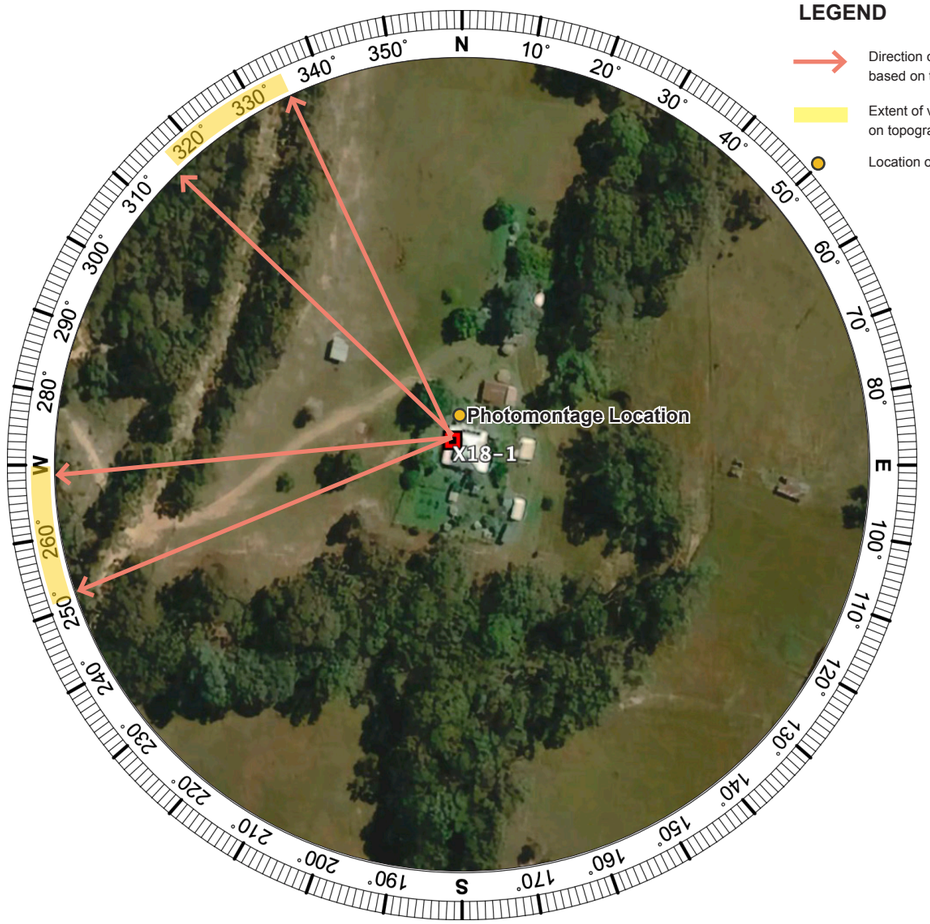
Mitigation Measures:

Mitigation measures are not required at this dwelling due to existing vegetation.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine



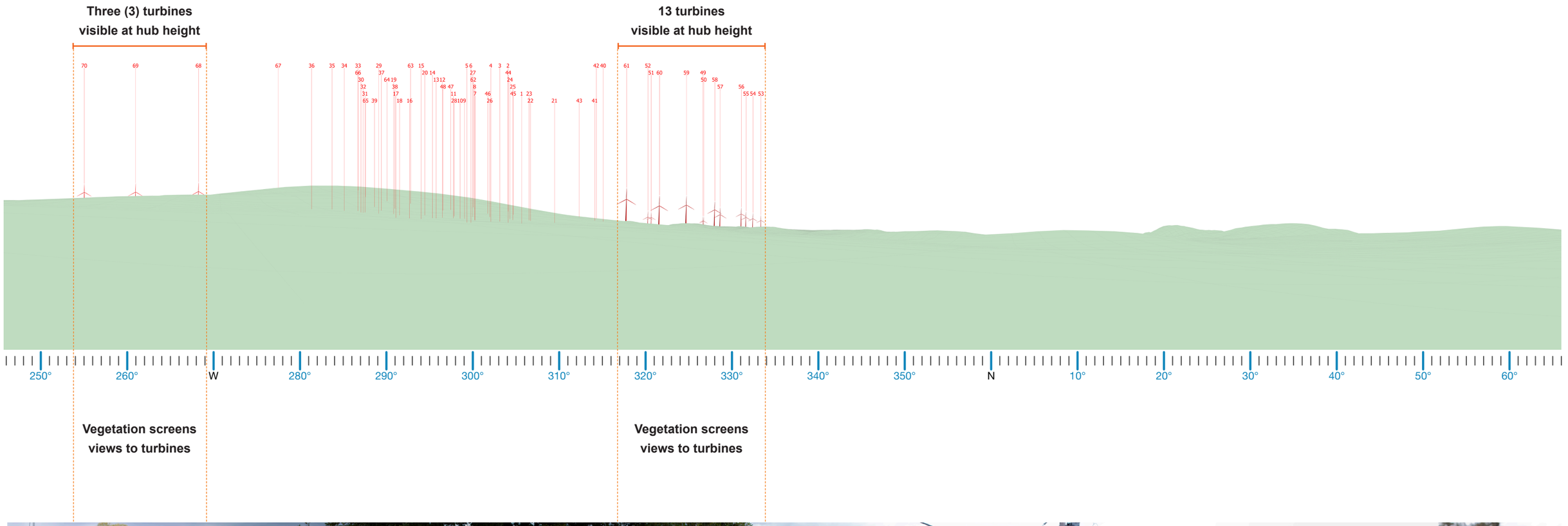
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Preliminary Assessment Tools - Dwelling X18-1

D.9 X18-1 Dwelling Assessment

Wire Frame Diagram



180º Panorama Aligned with Wire Frame Diagram

D.10 U7-1 Dwelling Assessment

Dwelling U7-1			
Nearest proposed turbine (km):	**3.39 km**	**Visibility Distance Zone:**	**NM (Near Middle ground)**
Number of turbines within Black Line (3,350 m):	**Nil**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**31 turbines** 21 at hub 10 at blade tip	**Landscape Character Unit:**	**LCU07: Worlds End**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Two (2)**	**Scenic Quality Rating:**	**Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**One (1)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Moderate**		

Assessment Notes:

A site inspection was undertaken in March 2023, which identified the dwelling is orientated to the north with a deck to the west and south. A photomontage was prepared from the deck facing west. The photomontage identified a total of 13 turbines would be visible to the south west of the dwelling (ten at hub height and 3 blades). Distant views to turbines (in excess of 10kms would also be available to the west. The vegetated ridge to the west of the dwelling will remain the dominant visual feature of this view. **The visual impact rating has been assessed as moderate from this dwelling**.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: No turbines are located within the black line of visual magnitude. Four (4) turbines are located within the blue line of visual magnitude. There is opportunity to screen these turbines.

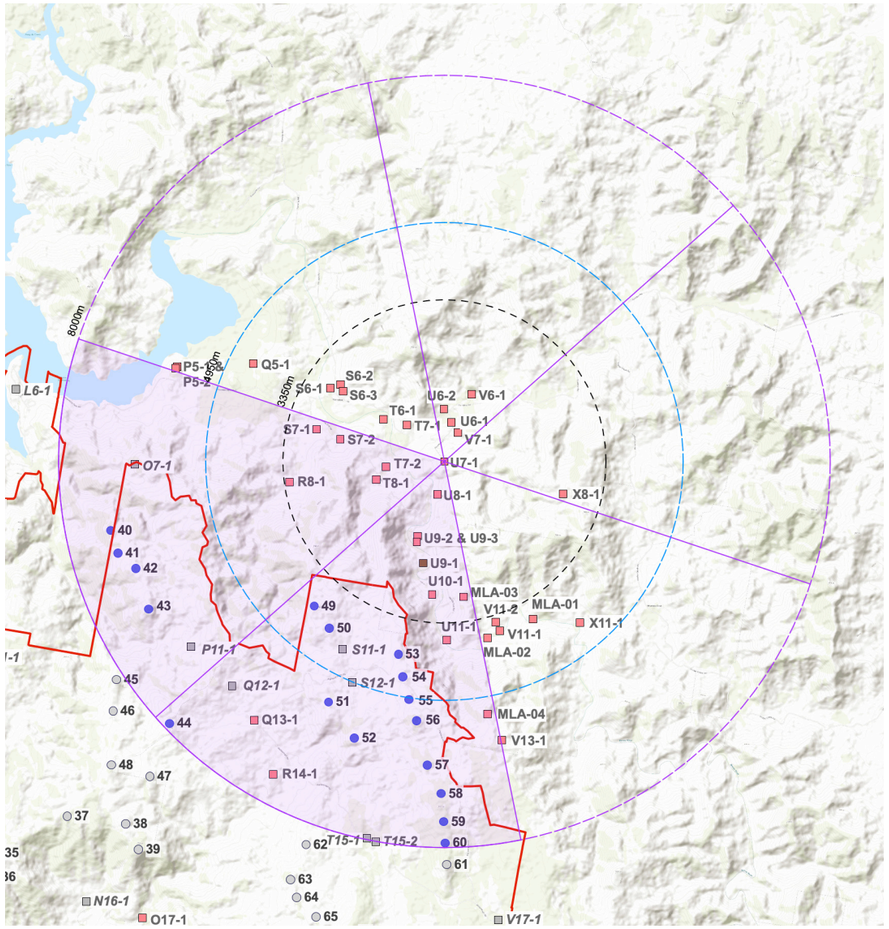
Multiple Wind Turbine Effect: The project will be theoretically visible in less than one (1) 60 degree sector, which is acceptable for a level 2 sensitivity viewer.

Landscape Scenic Integrity: Views to the Project are limited to the south west of this dwelling. Expansive desirable views will remain intact to the north and west and the turbines will not significantly alter the existing visual character.

Key Feature Disruption: The Project will be a visible element in the landscape, viewed against a sky backdrop. They will not disrupt views of the vegetated ridgelines which are the key features from this dwelling.

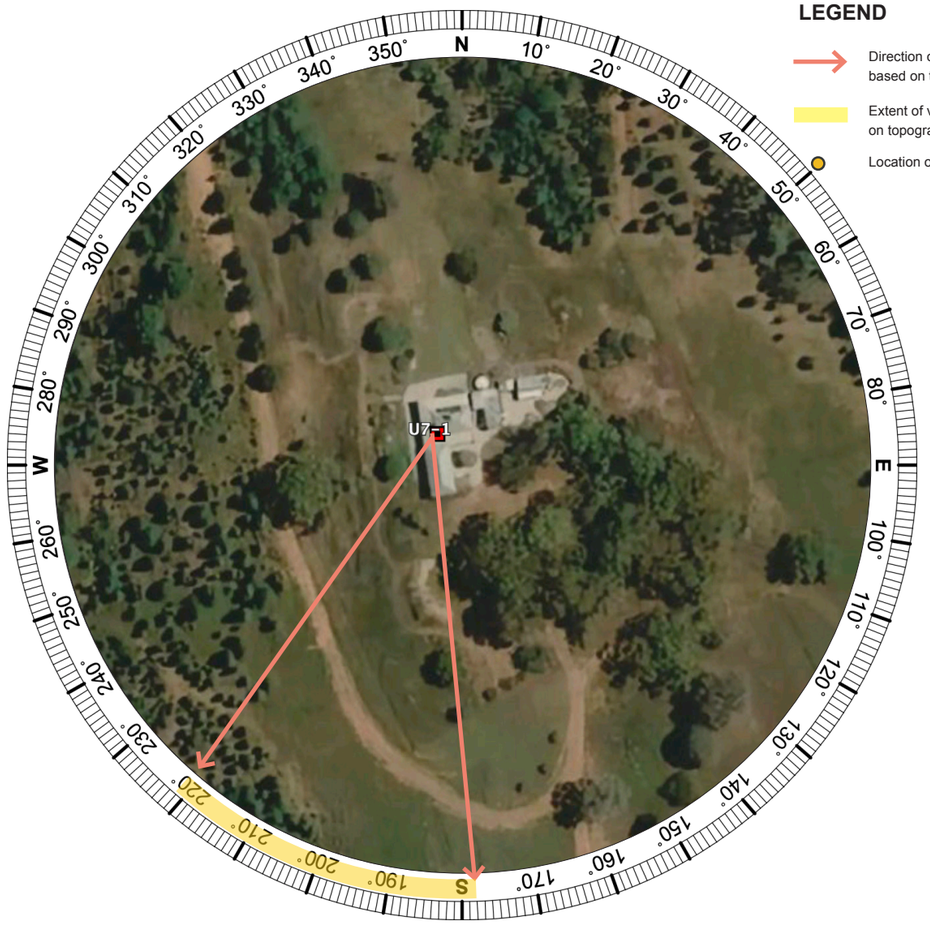
Mitigation Measures:

To assist in reducing the potential visual impact, screen planting could be undertaken in consultation with the landowner. It is estimated that the plantings would take approximately 5 years to effectively screen the Project and once established could reduce the potential visual impact to **very low. Refer to Appendix G.3.**



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine



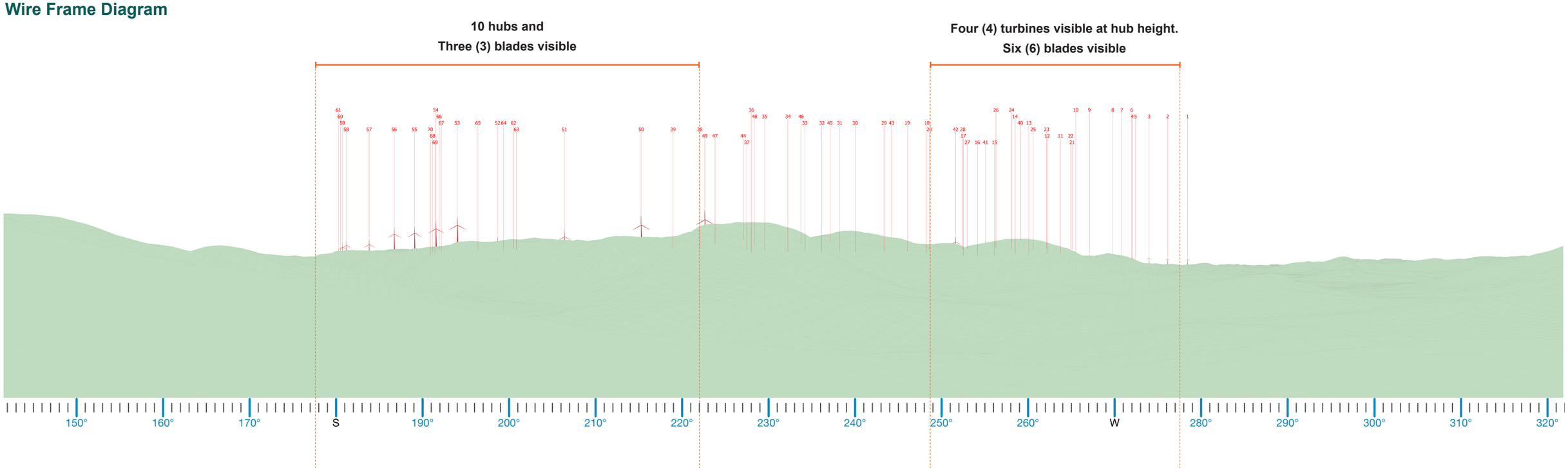
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Preliminary Assessment Tools - Dwelling U7-1

D.10 U7-1 Dwelling Assessment

Wire Frame Diagram



Additional planting to the south would assist in reducing views to turbines from this location. Refer to Appendix G.3

Photomontage

D.11 T6-1 Dwelling Assessment

Dwelling T6-1			
Nearest proposed turbine (km):	**4.13 km**	**Visibility Distance Zone:**	**NM (Near Middle ground)**
Number of turbines within Black Line (3,350 m):	**Nil**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	***21*** turbine 13 at hub 8 blades	**Landscape Character Unit:**	**LCU02: Yarrabin / Hargraves Farmlands**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Two (2)**	**Scenic Quality Rating:**	**Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**One (1)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Low**		

Assessment Notes:

A desktop assessment was undertaken, identifying a total of ten (10) turbines have the potential to be visible to the south of the dwelling (8 at hub height, 2 blades). Turbines in excess of 8 kms are visible to the west (based on wire frame diagram alone). Vegetation is likely to limit views to these turbines. Aerial imagery indicates existing scattered vegetation in the paddock to the south of the dwelling is likely to intervene with views to the Project, fragmenting potential views to the turbines. The dwelling appears to be orientated to the north east towards the Meroo River.

The visual impact rating has been assessed as low.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: No turbines are located within the black line of visual magnitude. Three (3) are located within the blue line of visual magnitude.

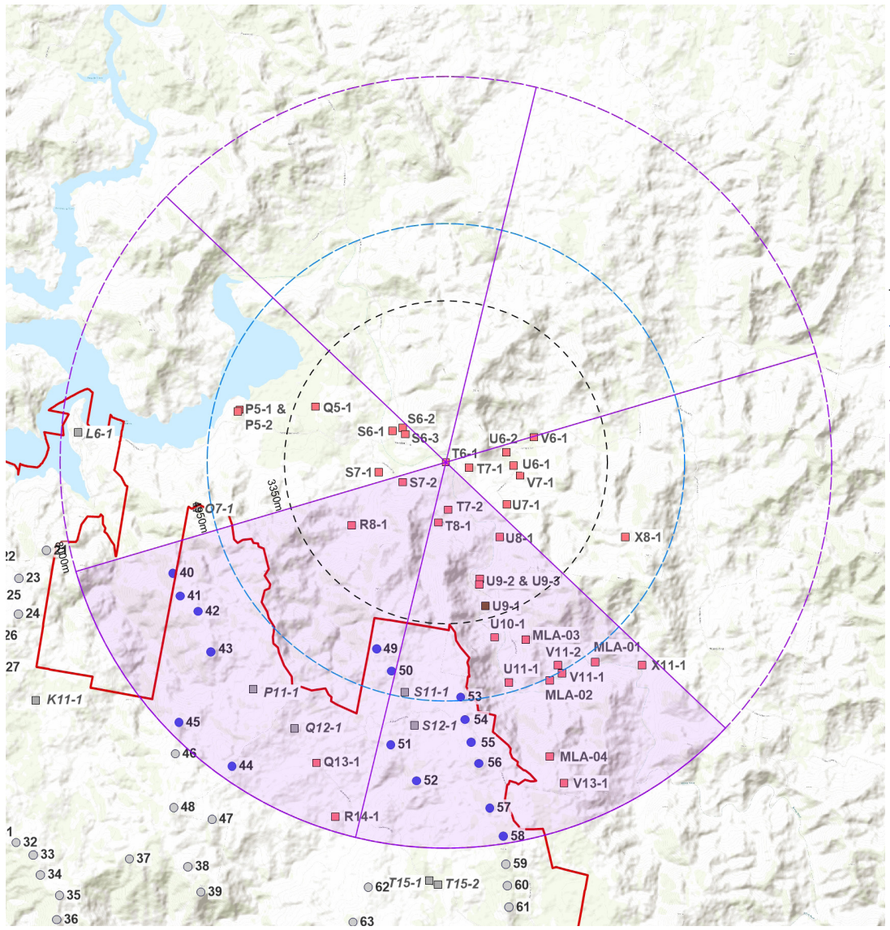
Multiple Wind Turbine Effect: The project will be theoretically visible in up to two (2) 60 degree sectors, which is acceptable for a level 2 sensitivity viewer. However, topography screens views to turbines to the south west and turbines will only be visible in up to one (1) 60 degree sector.

Landscape Scenic Integrity: The proposed turbines will not alter the scenic integrity from this dwelling.

Key Feature Disruption: The Project will not disrupt key features from this dwelling.

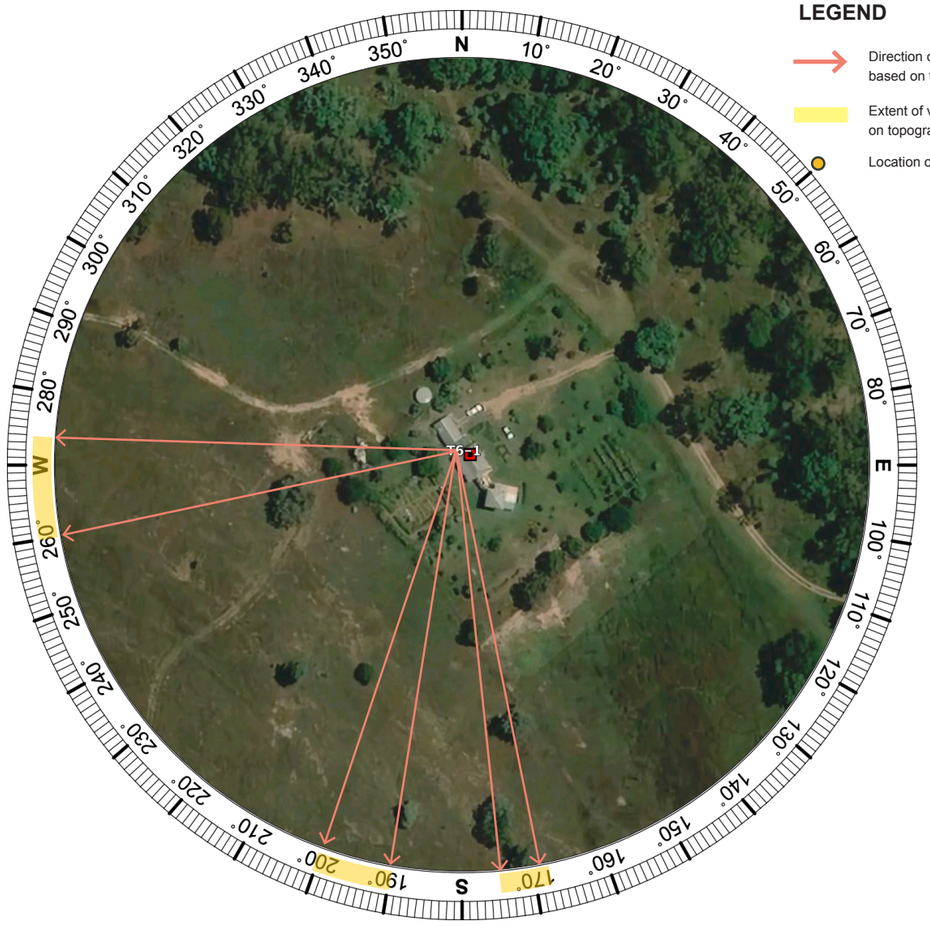
Mitigation Measures:

Mitigation measures are not required at this dwelling due to the low visual impact rating.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine



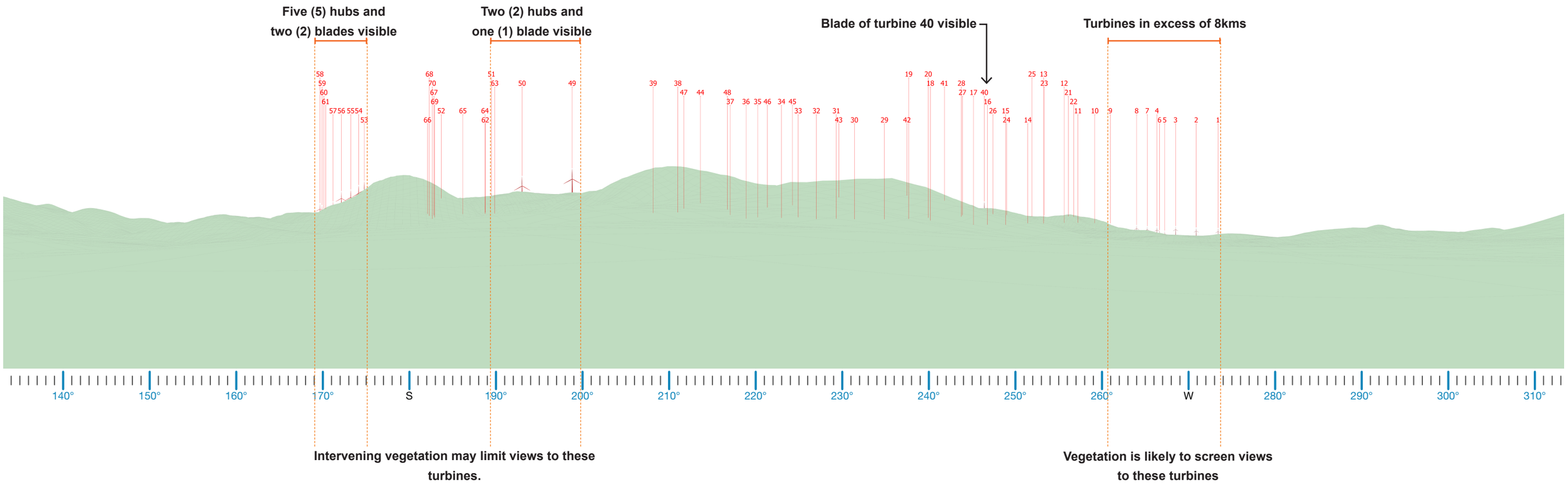
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Preliminary Assessment Tools - Dwelling T6-1

D.11 T6-1 Dwelling Assessment

Wire Frame Diagram



Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - ie. a landscape without screening, structures or vegetation. As accurate information on the height and coverage of vegetation and buildings is unavailable, it is important to note the wire frame diagram is based solely on topographic information.

Therefore this should be acknowledged as representing the absolute worst case scenario.

D.12 T7-1 Dwelling Assessment

Dwelling T7-1			
Nearest proposed turbine (km):	**4.228 km**	**Visibility Distance Zone:**	**NM (Near Middle ground)**
Number of turbines within Black Line (3,350 m):	**NIL**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**27** (18 hub, 9 blades)	**Landscape Character Unit:**	**LCU02: Yarrabin / Hargraves Farmlands**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Two (2)**	**Scenic Quality Rating:**	**Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**Two (2)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Low**		

Assessment Notes:

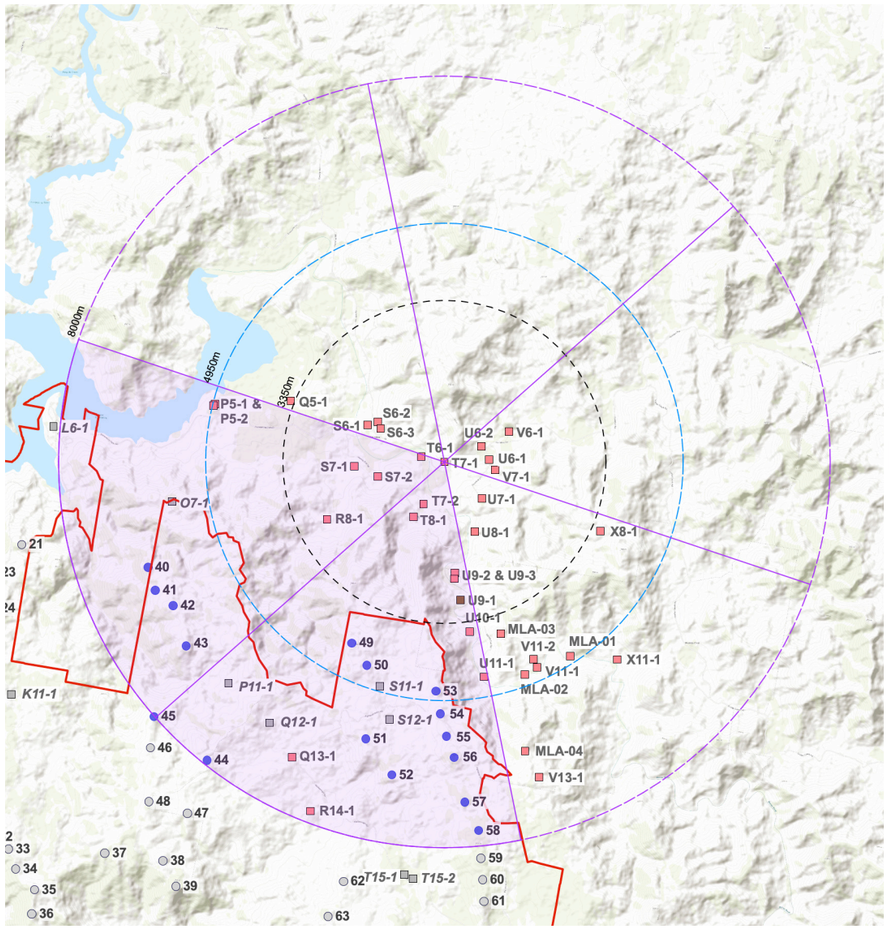
A desktop assessment was undertaken from dwelling T7-1, identifying a total of 27 turbines would be visible to the south and south west of the dwelling (18 at hub height, 9 blades) . Aerial imagery indicates existing scattered vegetation to the south of the lawn adjacent to the dwelling and in the paddock to the south of the dwelling is likely to intervene with views to the Project, fragmenting potential views to the turbines. **The visual impact rating has been assessed as low from this dwelling.**

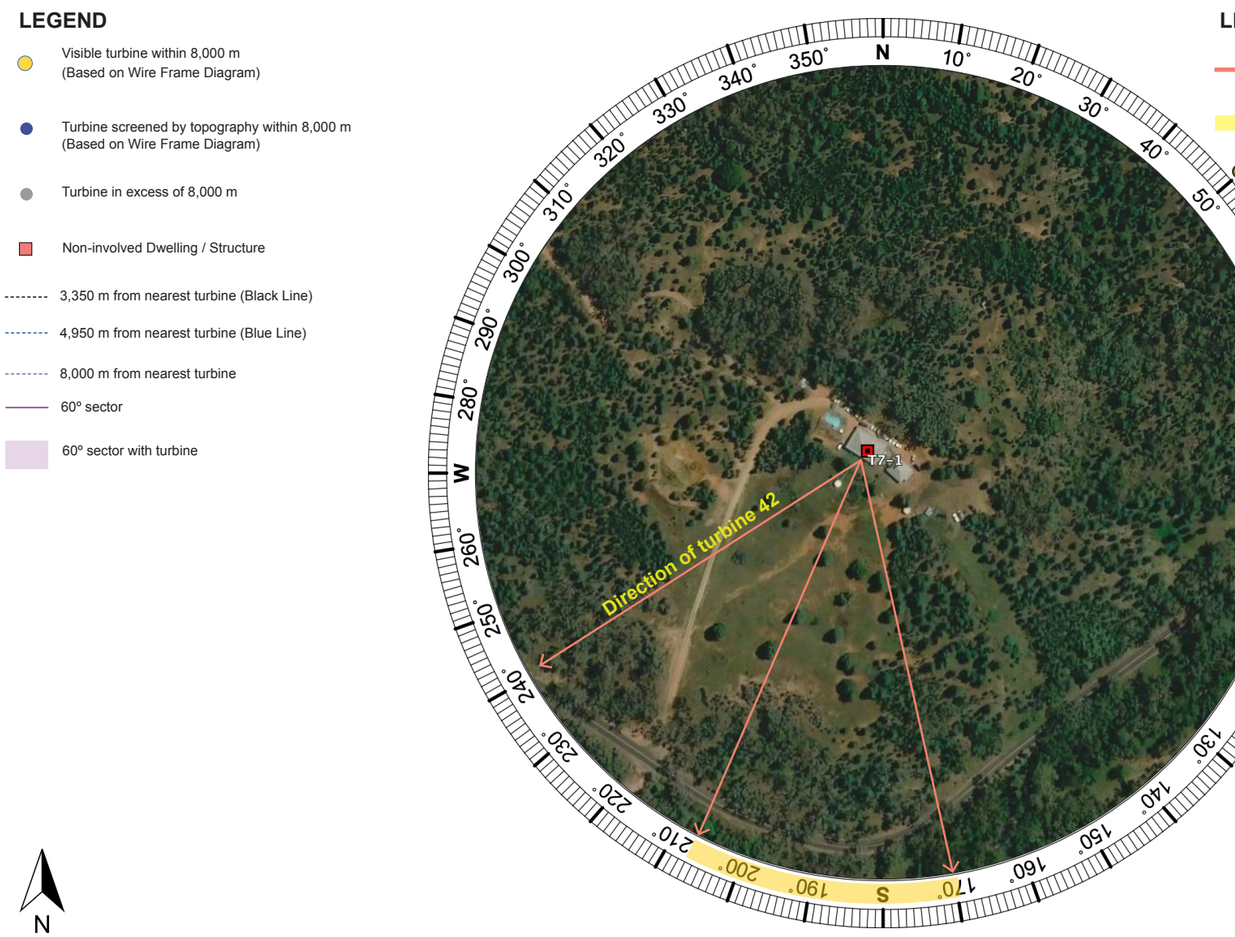
Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: No turbines are located within the black line of visual magnitude. Five (5) are located within the blue line.
Multiple Wind Turbine Effect: The project will be theoretically visible in up to two (2) 60 degree sectors, which is acceptable for a level 2 sensitivity viewer.
Landscape Scenic Integrity: The proposed turbines will not alter the scenic integrity from this dwelling.
Key Feature Disruption: The Project will be a visible element, but will not disrupt key features from this dwelling.

Mitigation Measures:

Mitigation measures are not required at this dwelling due to the low visual impact rating.

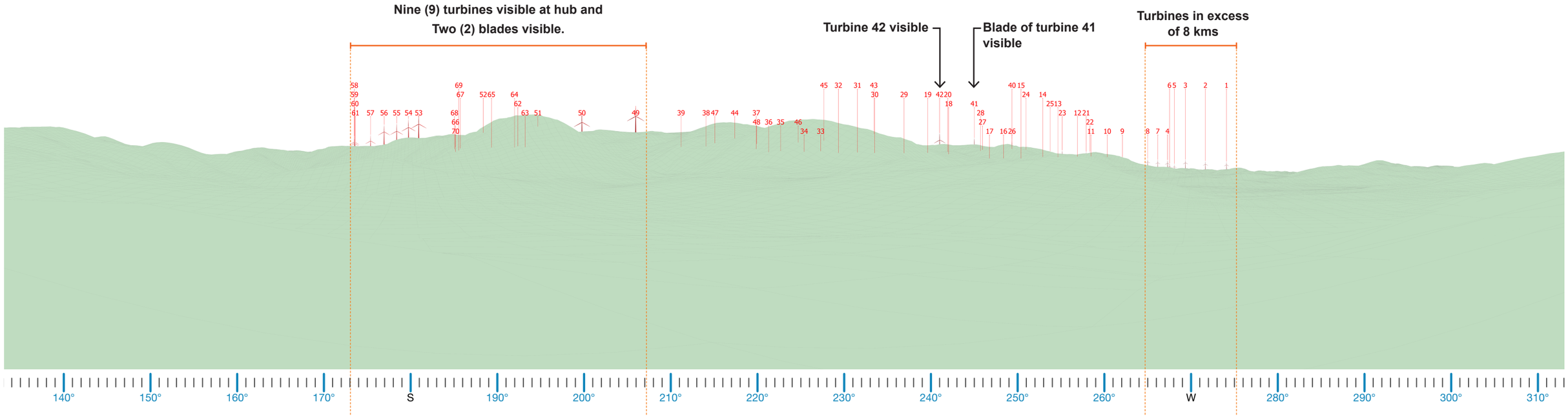




Preliminary Assessment Tools - Dwelling T7-1

D.12 T7-1 Dwelling Assessment

Wire Frame Diagram



Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - ie. a landscape without screening, structures or vegetation. As accurate information on the height and coverage of vegetation and buildings is unavailable, it is important to note the wire frame diagram is based solely on topographic information.

Therefore this should be acknowledged as representing the absolute worst case scenario.

Image A: View from driveway entry to T7-1 showing intervening vegetation

D.13 X19-1 Dwelling Assessment

Dwelling X19-1			
Nearest proposed turbine (km):	**4.48 km**	**Visibility Distance Zone:**	**FM (Far Middle ground)**
Number of turbines within Black Line (3,350 m):	**Nil**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**31 turbines** 19 at hub 12 blades	**Landscape Character Unit:**	**LCU07: Worlds End**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Two (2)**	**Scenic Quality Rating:**	**Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**Two (2)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Nil**		

Assessment Notes:

A desktop assessment was undertaken from this dwelling. The wire frame diagram indicates a total of 31 turbines would be visible to the north of the dwelling (19 at hub height, 12 blades). The dwelling is located to the east of Wallawaugh Road. Aerial imagery indicates dense vegetation associated with Warramagullon Creek to the west which is anticipated to screen views to the Project from this dwelling. **The visual impact rating has been assessed as nil from this dwelling.**

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: No turbines are located within the black line of visual magnitude. Five (5) are located within the blue line, however intervening vegetation will screen views to these turbines.

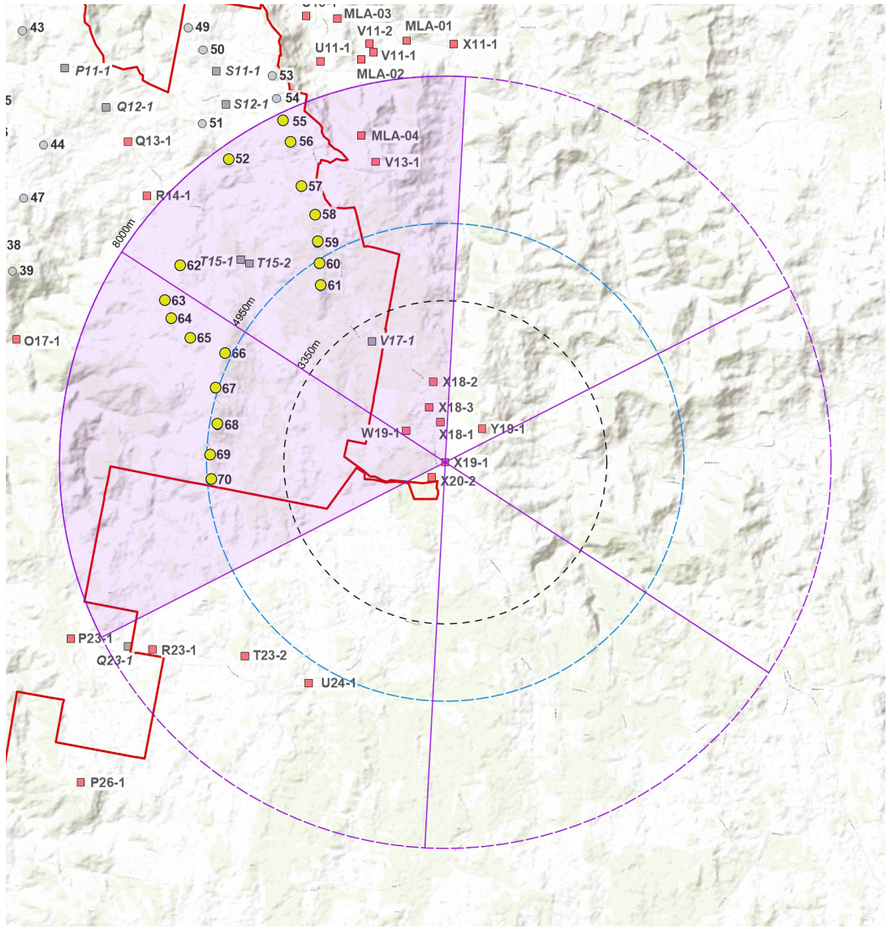
Multiple Wind Turbine Effect: The project will be visible in up to two (2) 60 degree sectors. This is acceptable for a level 2 sensitivity viewer.

Landscape Scenic Integrity: The proposed turbines will not alter the scenic integrity from this dwelling.

Key Feature Disruption: The Project will not disrupt key features from this dwelling.

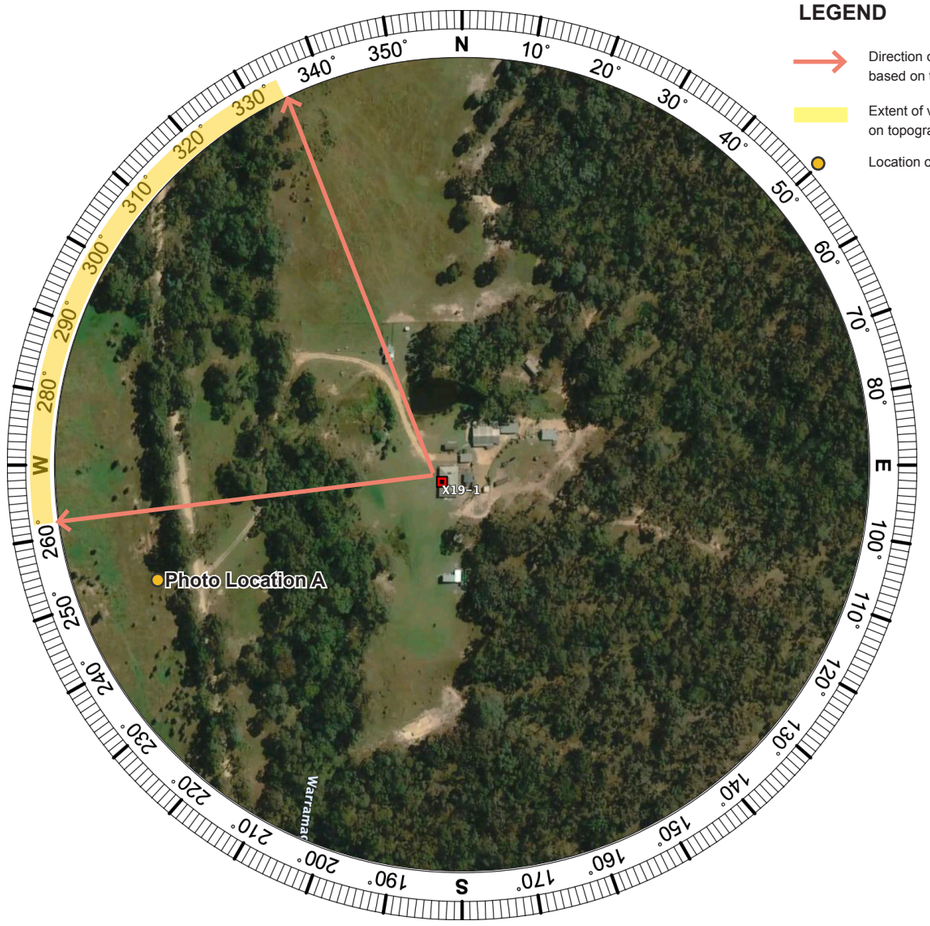
Mitigation Measures:

No mitigation measures are required at this dwelling.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine



LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

D.13 X19-1 Dwelling Assessment

Wire Frame Diagram

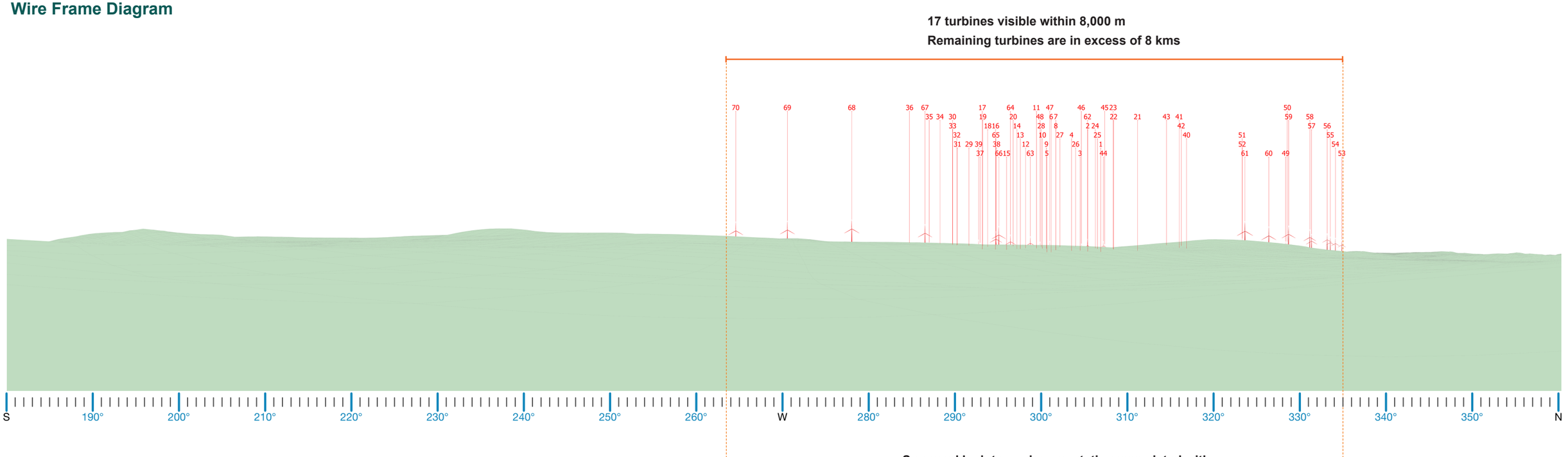


Image A: View from driveway entry to X19-1 showing intervening vegetation

Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - ie. a landscape without screening, structures or vegetation. As accurate information on the height and coverage of vegetation and buildings is unavailable, it is important to note the wire frame diagram is based solely on topographic information.

Therefore this should be acknowledged as representing the absolute worst case scenario.

D.14 S6-3 Dwelling Assessment

Dwelling S6-3			
Nearest proposed turbine (km):	**4.50 km**	**Visibility Distance Zone:**	**FM (Far Middle ground)**
Number of turbines within Black Line (3,350 m):	**Nil**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**29 turbines** 20 at hub 9 at blade tip	**Landscape Character Unit:**	**LCU04: Cudgegong River Valley**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Two (2)**	**Scenic Quality Rating:**	**Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**Two (2)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Low**		

Assessment Notes:

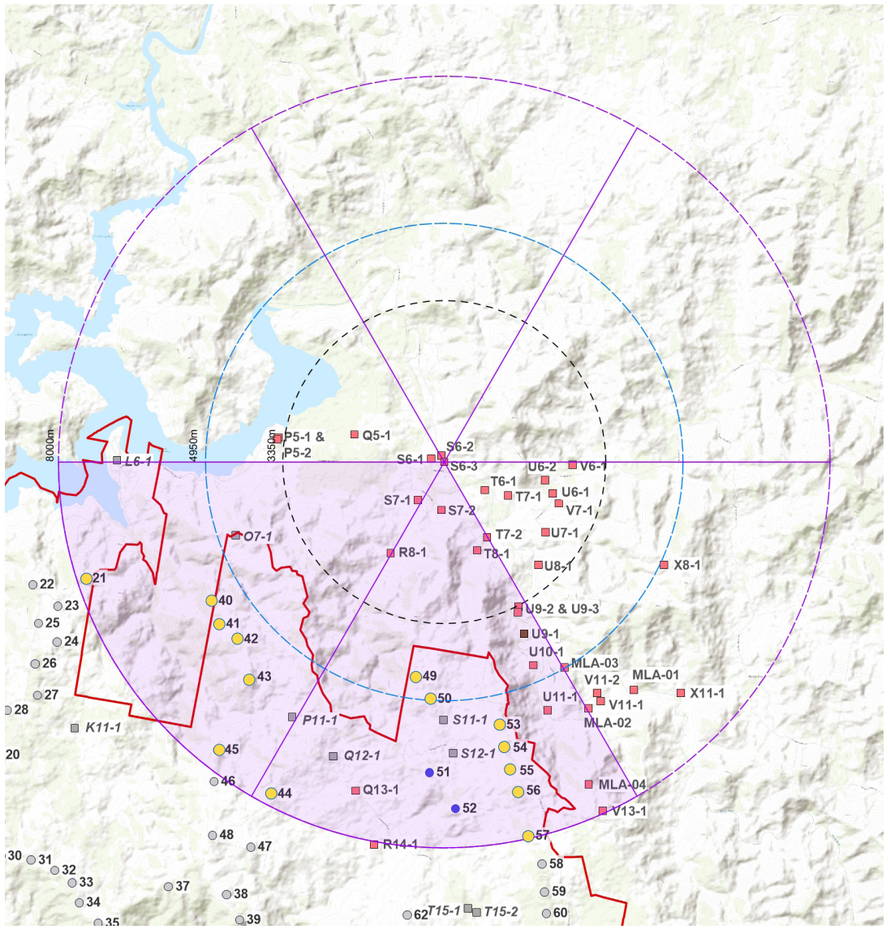
A desktop assessment was undertaken from this dwelling. The wire frame diagram indicates a total of 20 turbines would be visible at hub height and 9 blades to the south and south west of the dwelling. The dwelling is located on Yarrabin Road and appears to be orientated to the north east. Existing vegetation to the south west of the dwelling may fragment views to the Project. **The visual impact rating has been assessed as low from this dwelling.**

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: No turbines are located within the black line of visual magnitude. Two (2) turbines are located within the blue line (turbines 49 and 50).
Multiple Wind Turbine Effect: The project will be visible in up to two (2) 60 degree sectors. This is acceptable for a level 2 sensitivity viewer.
Landscape Scenic Integrity: The proposed turbines will not alter the scenic integrity from this dwelling.
Key Feature Disruption: The Project will not disrupt key features from this dwelling.

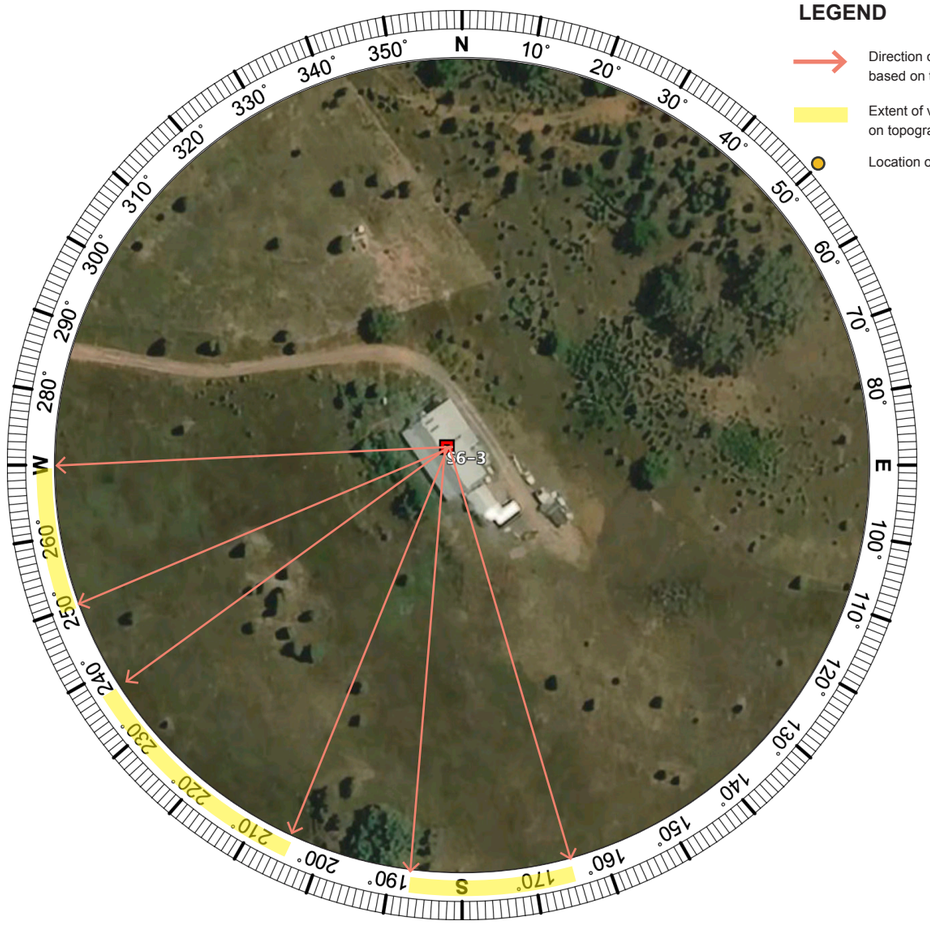
Mitigation Measures:

No mitigation measures are required at this dwelling.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine



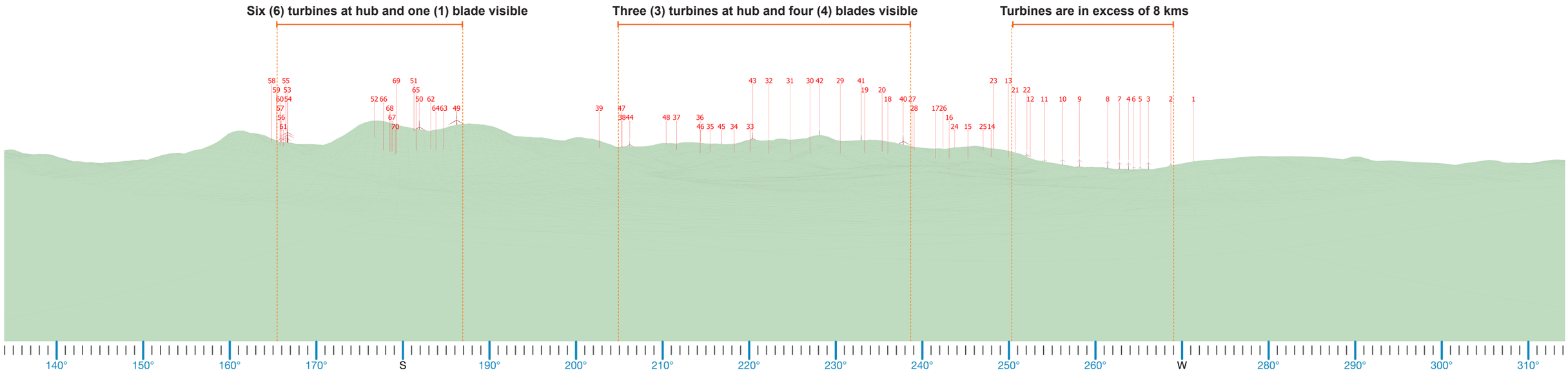
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Preliminary Assessment Tools - Dwelling S6-3

D.14 S6-3 Dwelling Assessment

Wire Frame Diagram



Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - ie. a landscape without screening, structures or vegetation. As accurate information on the height and coverage of vegetation and buildings is unavailable, it is important to note the wire frame diagram is based solely on topographic information.

Therefore this should be acknowledged as representing the absolute worst case scenario.

D.15 S6-4 Dwelling Assessment

Dwelling S6-4			
Nearest proposed turbine (km):	**4.52 km**	**Visibility Distance Zone:**	**FM (Far Middle ground)**
Number of turbines within Black Line (3,350 m):	**Nil**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**30 turbines** 17 at hub 13 at blade tip	**Landscape Character Unit:**	**LCU04: Cudgegong River Valley**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Two (2)**	**Scenic Quality Rating:**	**Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**Two (2)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Low**		

Assessment Notes:

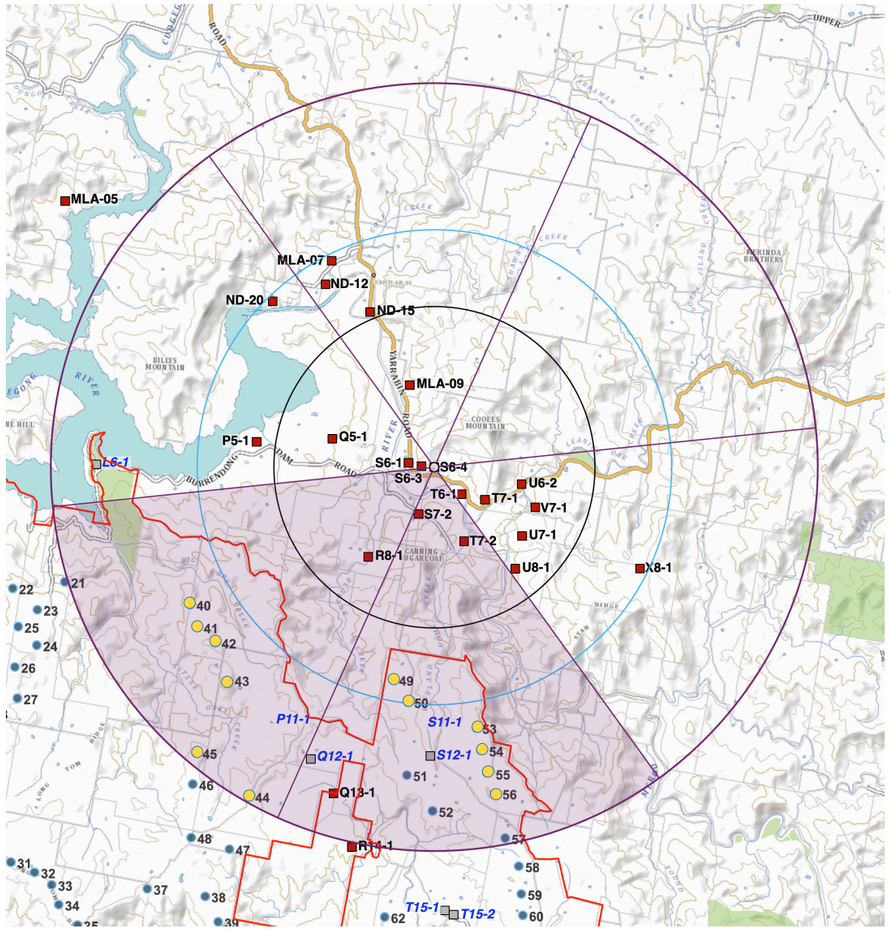
A desktop assessment was undertaken from this dwelling. The wire frame diagram indicates a total of 17 turbines would be visible at hub height and 13 blades to the south and south west of the dwelling. The dwelling is located on Yarrabin Road and appears to be orientated to the south towards the road. Aerial imagery and a photograph of the dwelling taken from Yarrabin Road indicates a tree located to the south of the dwelling which has the potential to fragment views to turbines. **The visual impact rating has been assessed as low from this dwelling.**

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: No turbines are located within the black line of visual magnitude. Two (2) turbines are located within the blue line (turbines 49 and 50).
Multiple Wind Turbine Effect: The project will be visible in up to two (2) 60 degree sectors. This is acceptable for a level 2 sensitivity viewer.
Landscape Scenic Integrity: The proposed turbines will not alter the scenic integrity from this dwelling.
Key Feature Disruption: The Project will not disrupt key features from this dwelling.

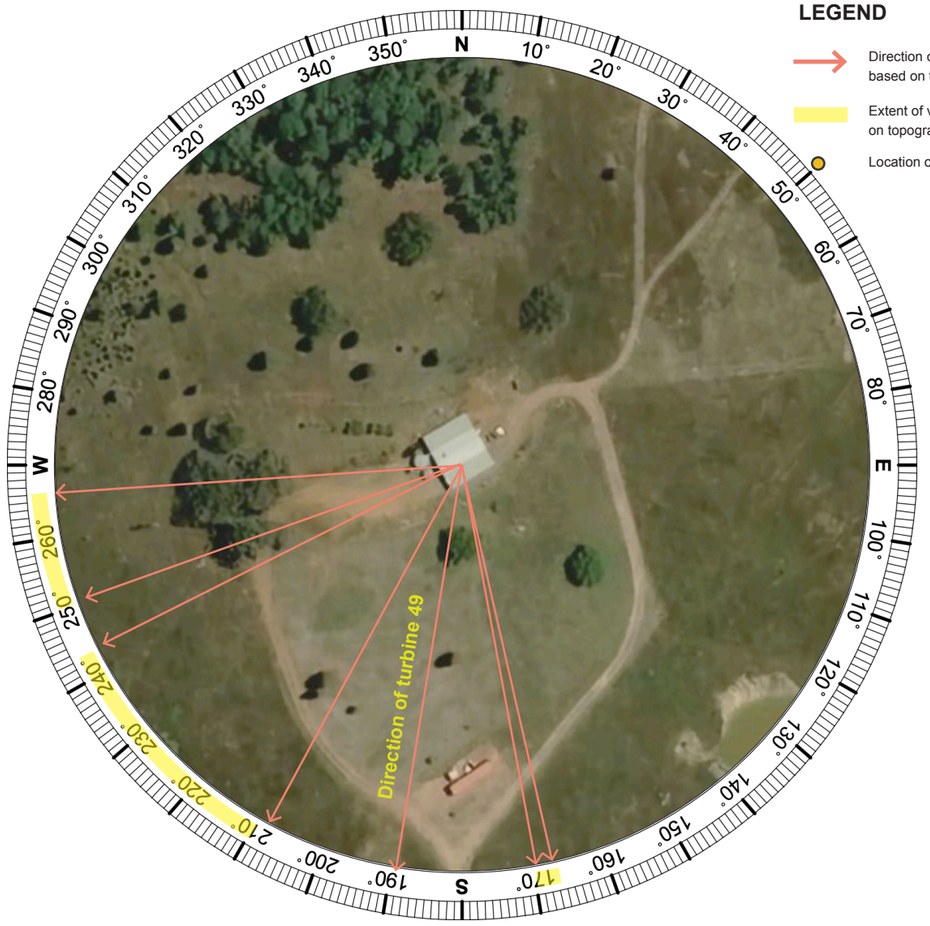
Mitigation Measures:

No mitigation measures are required at this dwelling.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine



LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Preliminary Assessment Tools - Dwelling S6-4

D.15 S6-4 Dwelling Assessment

Wire Frame Diagram

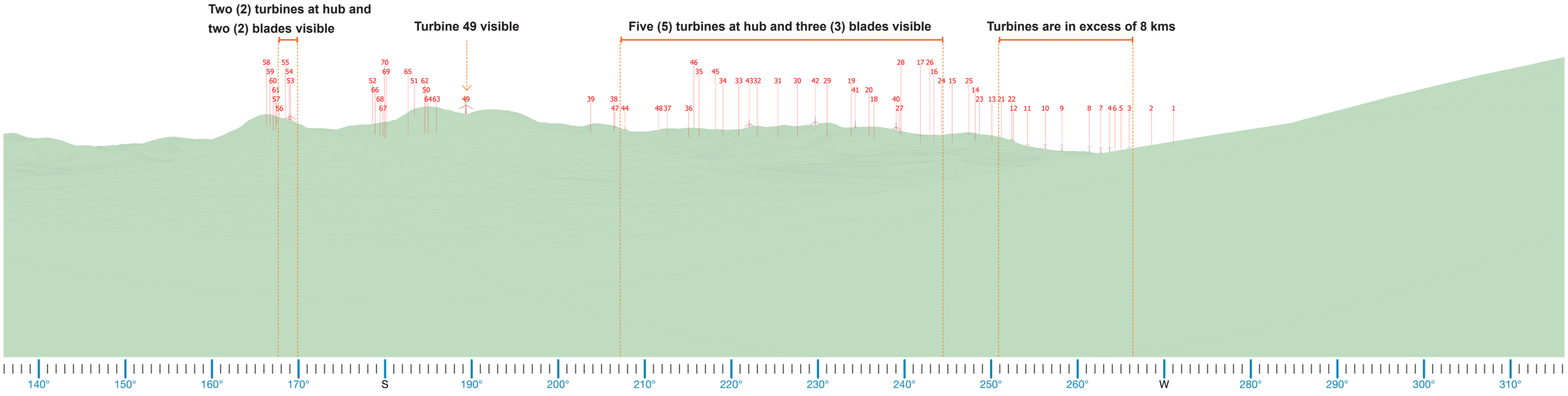


Image A: View from Yarrabin Road showing S6-4

Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - ie. a landscape without screening, structures or vegetation. As accurate information on the height and coverage of vegetation and buildings is unavailable, it is important to note the wire frame diagram is based solely on topographic information.

Therefore this should be acknowledged as representing the absolute worst case scenario.

D.16 S6-1 Dwelling Assessment

Dwelling S6-1			
Nearest proposed turbine (km):	**4.097 km**	**Visibility Distance Zone:**	**FM (Far Middleground)**
Number of turbines within Black Line (3,350 m):	**Nil**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	***29*** (19 at hub, 10 blades)	**Landscape Character Unit:**	**LCU04: Cudgegong River Valley**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Two (2)**	**Scenic Quality Rating:**	**Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**Two (2)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Low**		

Assessment Notes:

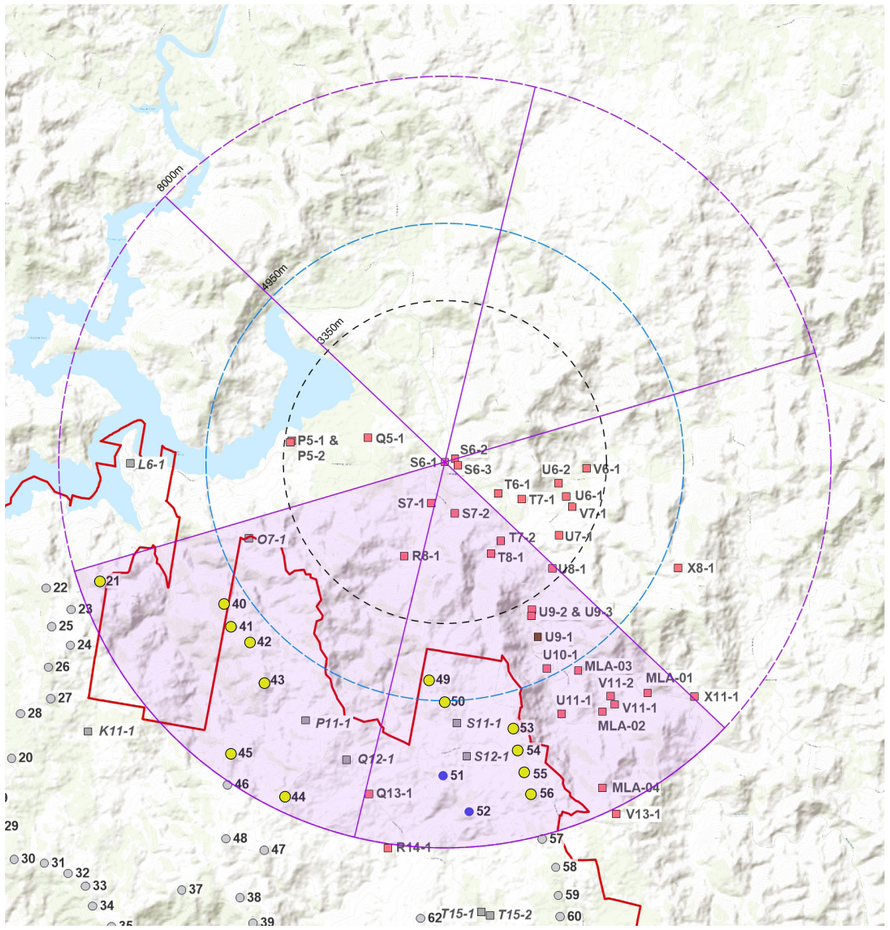
A site inspection was undertaken from this dwelling in March 2023. The dwelling is located to the west of Yarrabin Road to the north of Burrendong Dam Road. A wire frame diagram prepared from the dwelling (based on topography alone) indicates a total of 29 turbines would be visible from this dwelling beyond the ridgeline between the south and west. A photomontage was prepared from the south of the dwelling. The photomontage indicates views to turbines to the west will be screened by a combination of vegetation and intervening sheds. Views to turbines to the south and south west will be available along the ridgeline viewed against a sky backdrop. **The visual impact rating has been assessed as low from this dwelling.**

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: No turbines are located within the black line of visual magnitude. Four (4) are located within the blue line.
Multiple Wind Turbine Effect: The project will be visible in up to two (2) 60 degree sectors. This is acceptable for a level 2 sensitivity viewer.
Landscape Scenic Integrity: The proposed turbines will not alter the scenic integrity from this dwelling.
Key Feature Disruption: The Project will not disrupt key features from this dwelling.

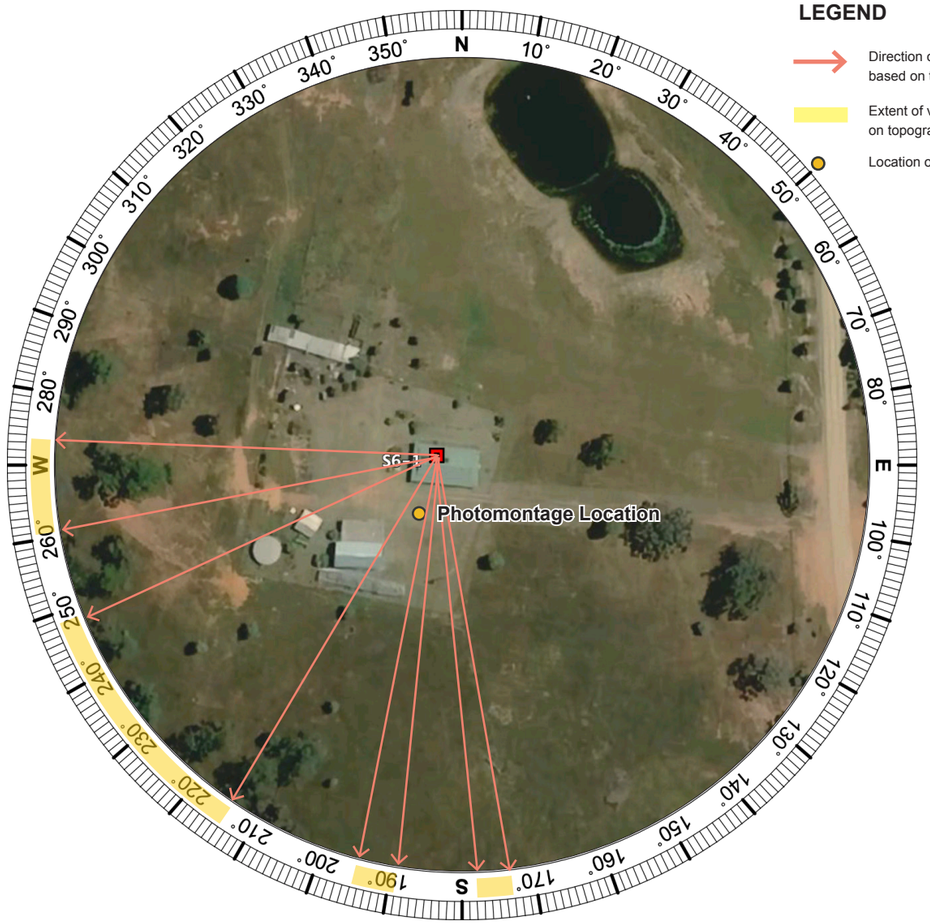
Mitigation Measures:

Mitigation measures are not required at this dwelling due to the low visual impact rating.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine



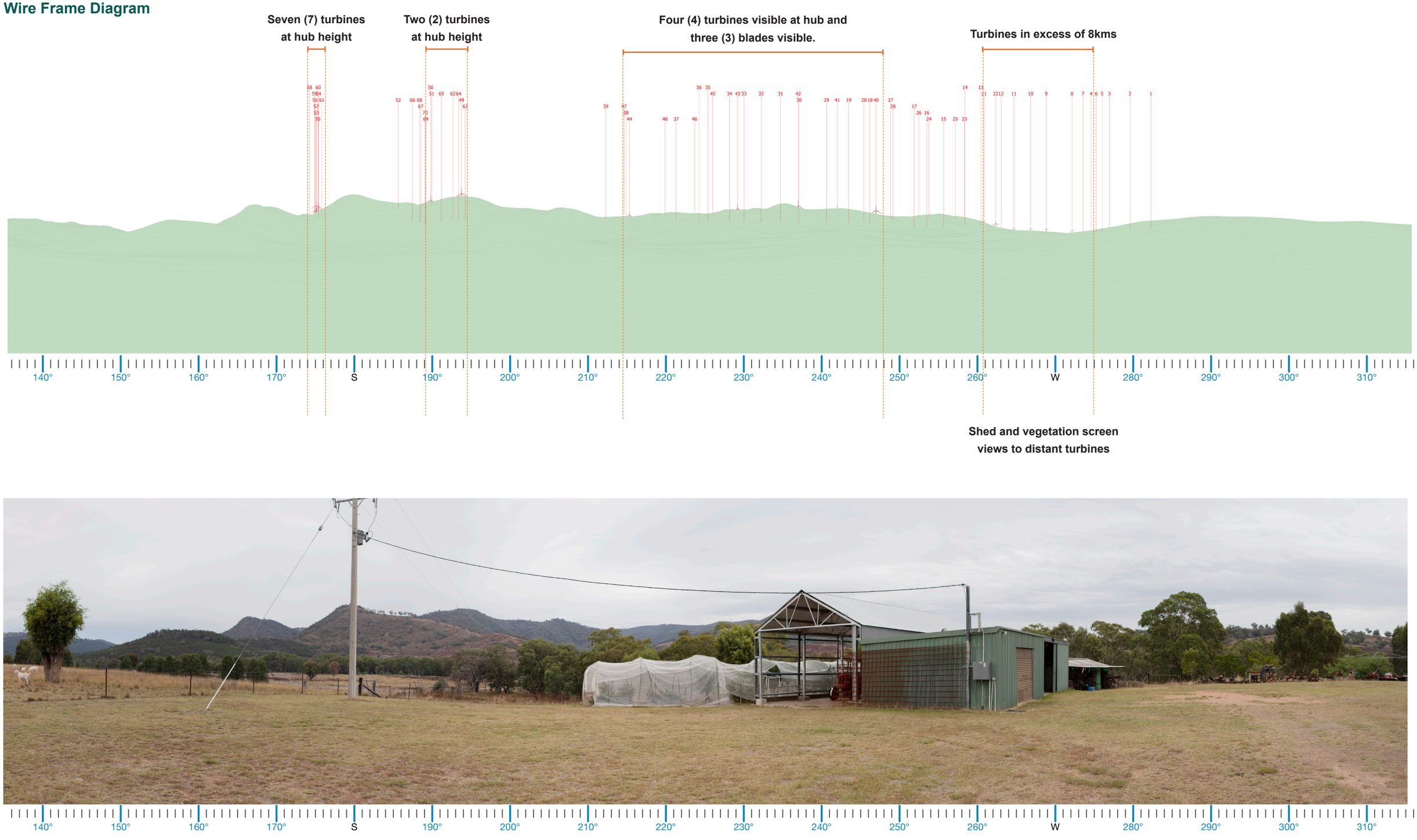
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Preliminary Assessment Tools - Dwelling S6-1

D.16 S6-1 Dwelling Assessment

Wire Frame Diagram



Photomontage

D.17 Q5-1 Dwelling Assessment

Dwelling Q5-1			
Nearest proposed turbine (km):	**4.557 km**	**Visibility Distance Zone:**	**FM (Far Middleground)**
Number of turbines within Black Line (3,350 m):	**NIL**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**34 (28 at hub, 6 blades)**	**Landscape Character Unit:**	**LCU04: Cudgegong River Valley**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Two (2)**	**Scenic Quality Rating:**	**Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**Two (2)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Low**		

Assessment Notes:

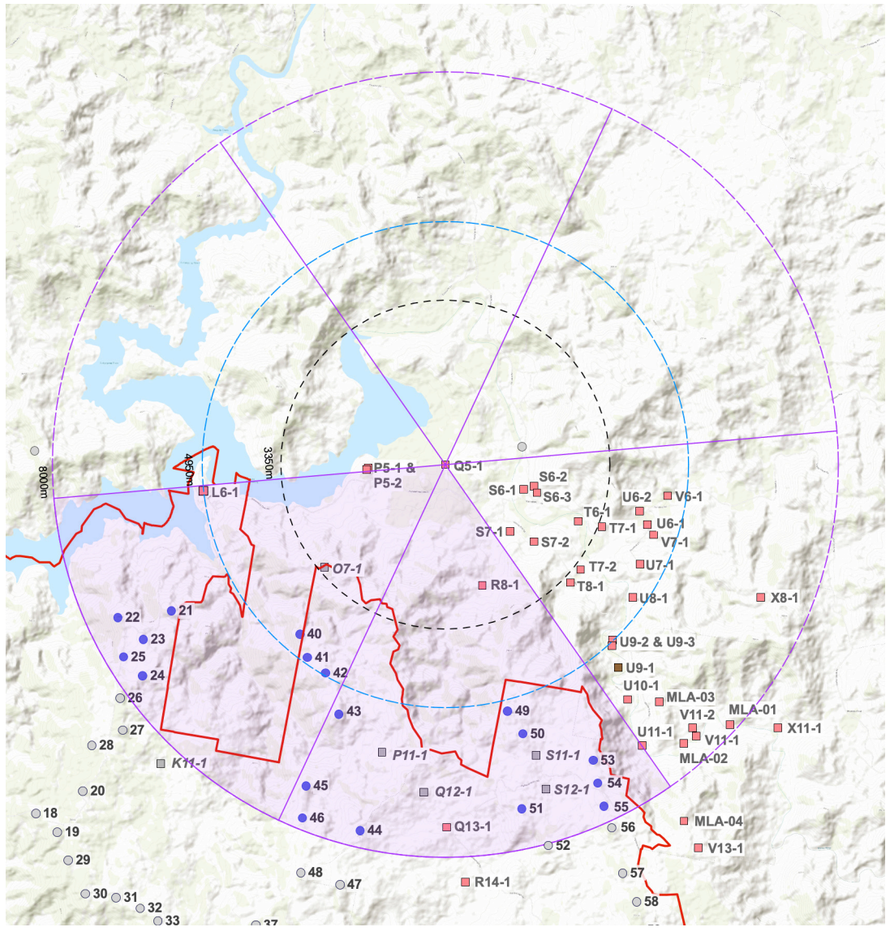
A site visit was undertaken in March 2021. The dwelling is orientated towards the north west. A wire frame diagram identifying a total of 34 turbines would be visible to the south, south west and west of the dwelling (28 at hub height, 6 blades). 12 turbines (to the west of the dwelling) are located in excess of 8 kilometres from the dwelling. A photomontage prepared from the southern side of the dwelling indicates existing vegetation to the south of the dwelling is likely to intervene with views to the Project, fragmenting potential views to the turbines. Three turbines at hub height and one blade will be visible within 8 km of the dwelling to the south west. **The visual impact rating has been assessed as low from this dwelling**.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: No turbines are located within the black line of visual magnitude. Three (3) are located within the blue line.
Multiple Wind Turbine Effect: The project will be theoretically visible in up to two (2) 60 degree sectors, which is acceptable for a level 2 sensitivity viewer.
Landscape Scenic Integrity: The proposed turbines will not alter the scenic integrity from this dwelling.
Key Feature Disruption: The Project will not disrupt key features from this dwelling.

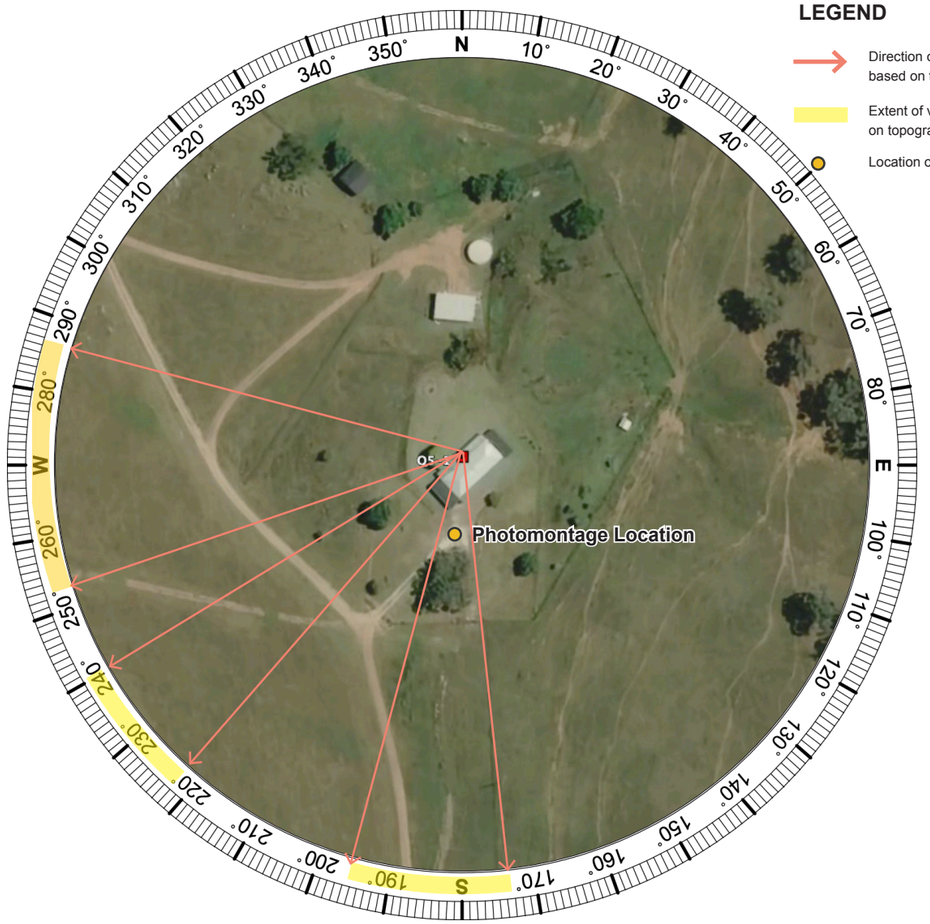
Mitigation Measures:

Mitigation measures are not required at this dwelling due to the low visual impact rating.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine



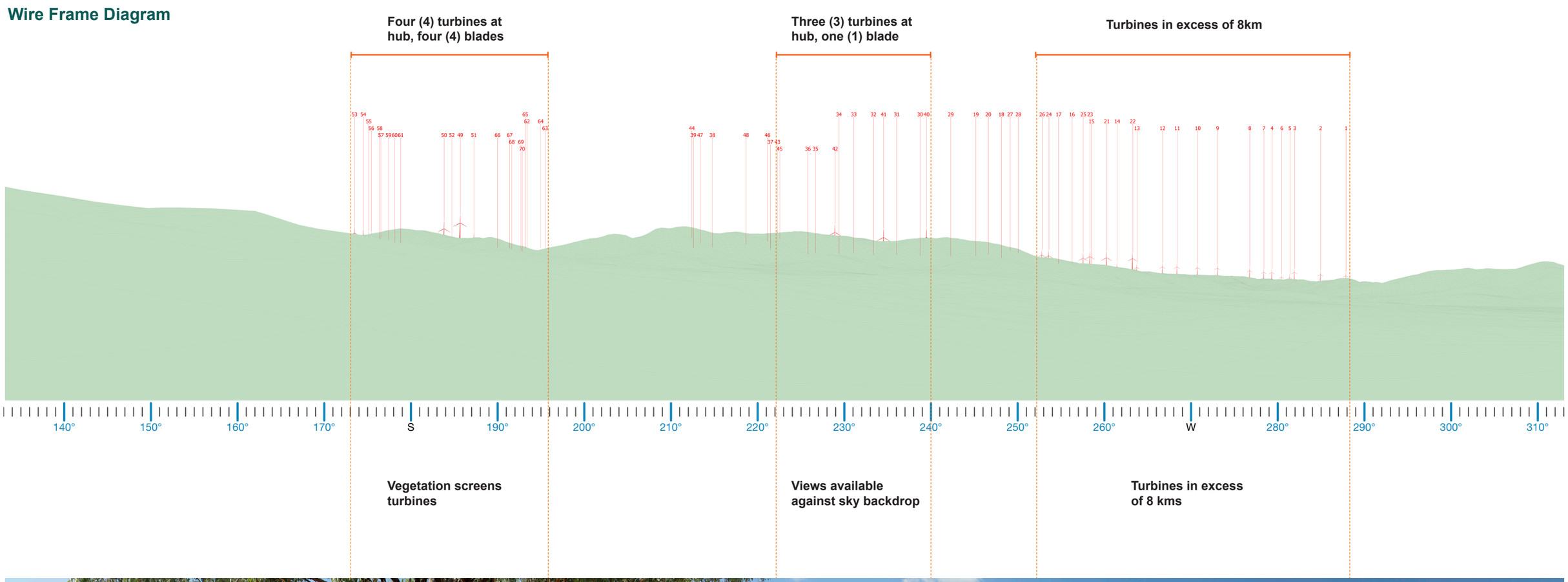
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Preliminary Assessment Tools - Dwelling Q5-1

D.17 Q5-1 Dwelling Assessment

Wire Frame Diagram



Vegetation screens turbines

Views available against sky backdrop

Turbines in excess of 8 kms

Photomontage

D.18 V7-1 Dwelling Assessment

Dwelling V7-1			
Nearest proposed turbine (km):	**4.67 km**	**Visibility Distance Zone:**	**FM (Far Middleground)**
Number of turbines within Black Line (3,350 m):	**NIL**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**6 3 at hub 3 blades**	**Landscape Character Unit:**	**LCU02: Yarrabin / Hargraves Farmlands**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Two (2)**	**Scenic Quality Rating:**	**Low - Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**One (1)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Nil**		

Assessment Notes:

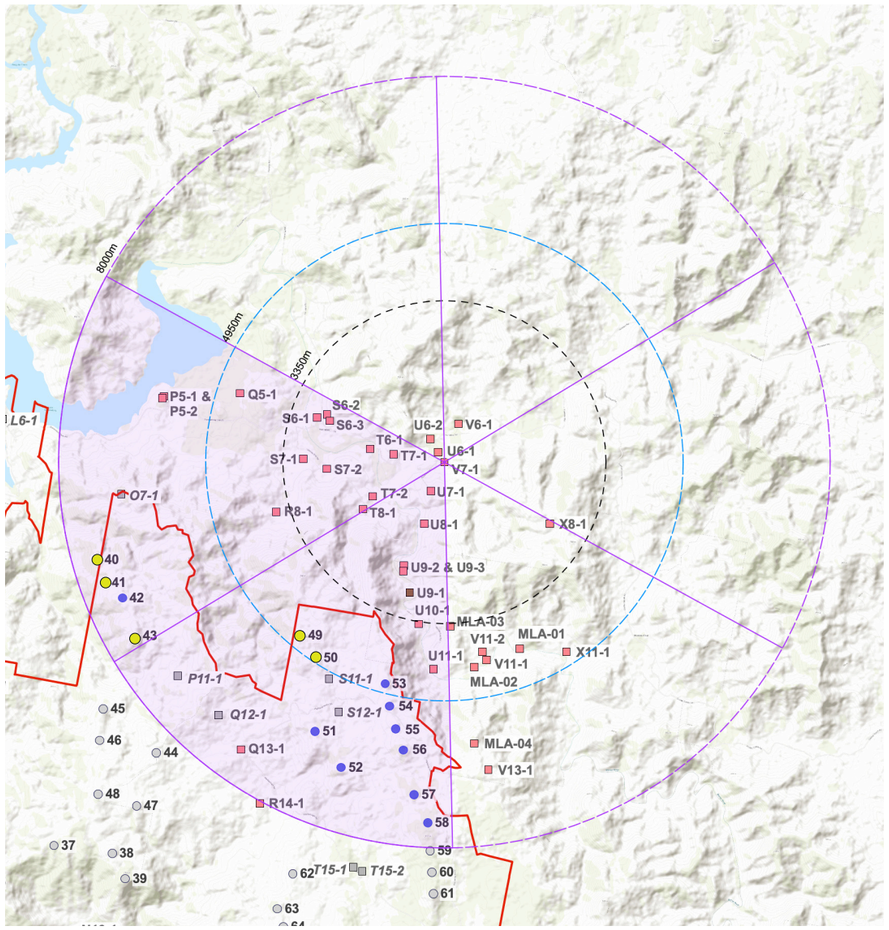
A desktop assessment was undertaken from this dwelling. The wire frame diagram indicates a total of six (6) turbines would be visible between the south and west of the dwelling (3 at hub height, 3 blades). The dwelling is located to the south of Yarrabin Road on the valley floor associated with Leaning Oak Creek. Aerial imagery indicates vegetation to the south west is anticipated to fragment views to the Project from the dwelling. **The visual impact rating has been assessed as nil from this dwelling.**

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: No turbines are located within the black line of visual magnitude. Three (3) are located within the blue line.
Multiple Wind Turbine Effect: The project will be visible in up to one (1) 60 degree sector. This is acceptable for a level 2 sensitivity viewer.
Landscape Scenic Integrity: The proposed turbines will not alter the scenic integrity from this dwelling.
Key Feature Disruption: The Project will not disrupt key features from this dwelling.

Mitigation Measures:

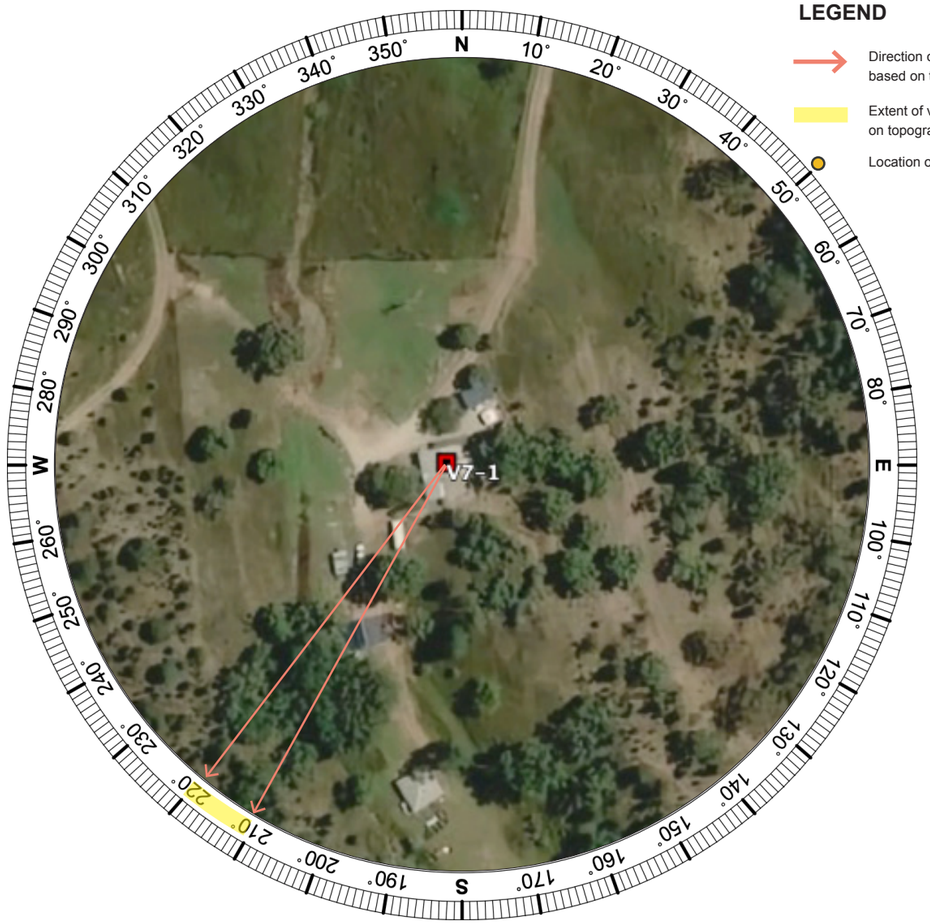
Mitigation measures are not required at this dwelling.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine

N



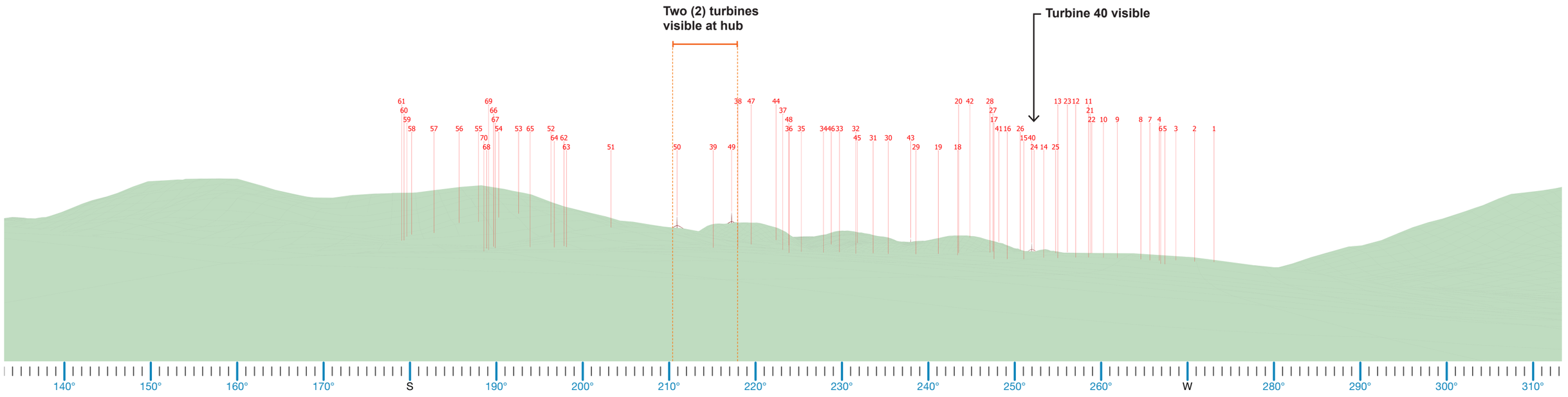
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Preliminary Assessment Tools - Dwelling V7-1

D.18 V7-1 Dwelling Assessment

Wire Frame Diagram



Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - ie. a landscape without screening, structures or vegetation. As accurate information on the height and coverage of vegetation and buildings is unavailable, it is important to note the wire frame diagram is based solely on topographic information.

Therefore this should be acknowledged as representing the absolute worst case scenario.

D.19 X8-1 Dwelling Assessment

Dwelling X8-1			
Nearest proposed turbine (km):	**4.76 km**	**Visibility Distance Zone:**	**FM (Far Middle ground)**
Number of turbines within Black Line (3,350 m):	**Nil**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**62 turbines** 57 at hub 5 blades	**Landscape Character Unit:**	**LCU07: Worlds End**
Number of theoretical 60º Sectors (Based on 2D Plan):	**One (1)**	**Scenic Quality Rating:**	**Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**One (1)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Moderate**		

Assessment Notes:

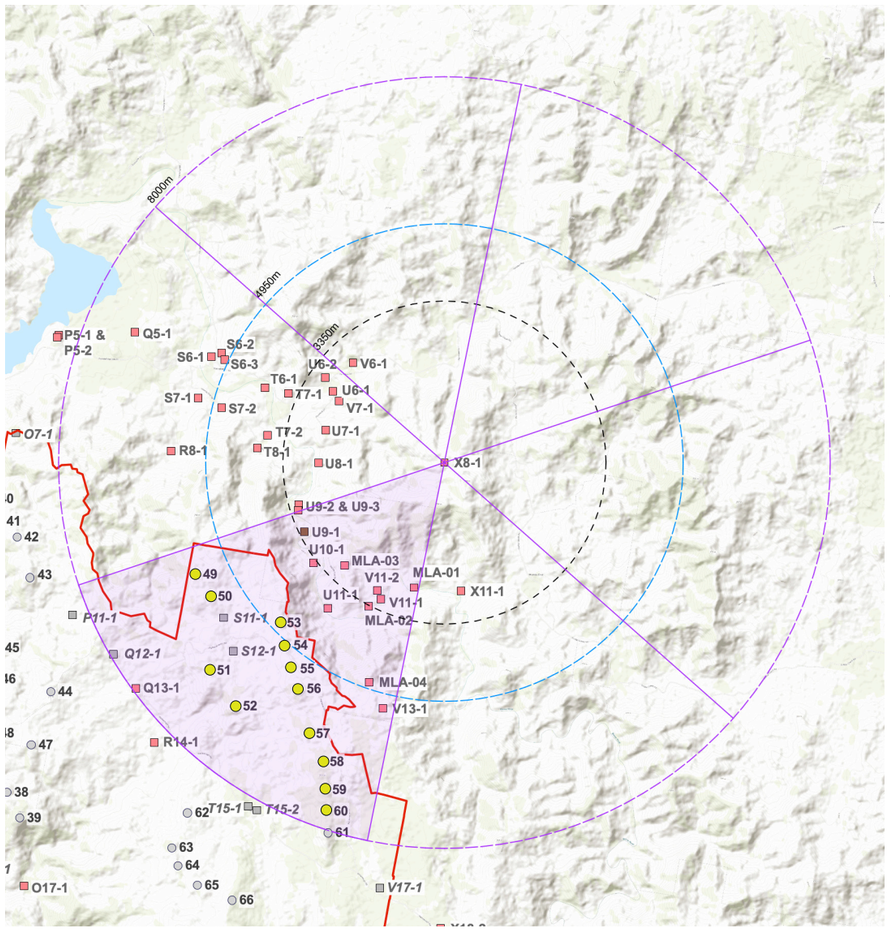
A desktop assessment was undertaken from dwelling X8-1. The dwelling is located in an elevated position with expansive views to the west across vegetated ranges including those associated with the Project Site. The wire frame diagram indicates a total of 62 turbines would be visible within 8,000 m of the dwelling (57 at hub and 5 blades). Aerial imagery indicates limited screening elements to the west of the house and it is anticipated views will be uninterrupted to the turbines. **The visual impact rating has been assessed as moderate from this dwelling.**

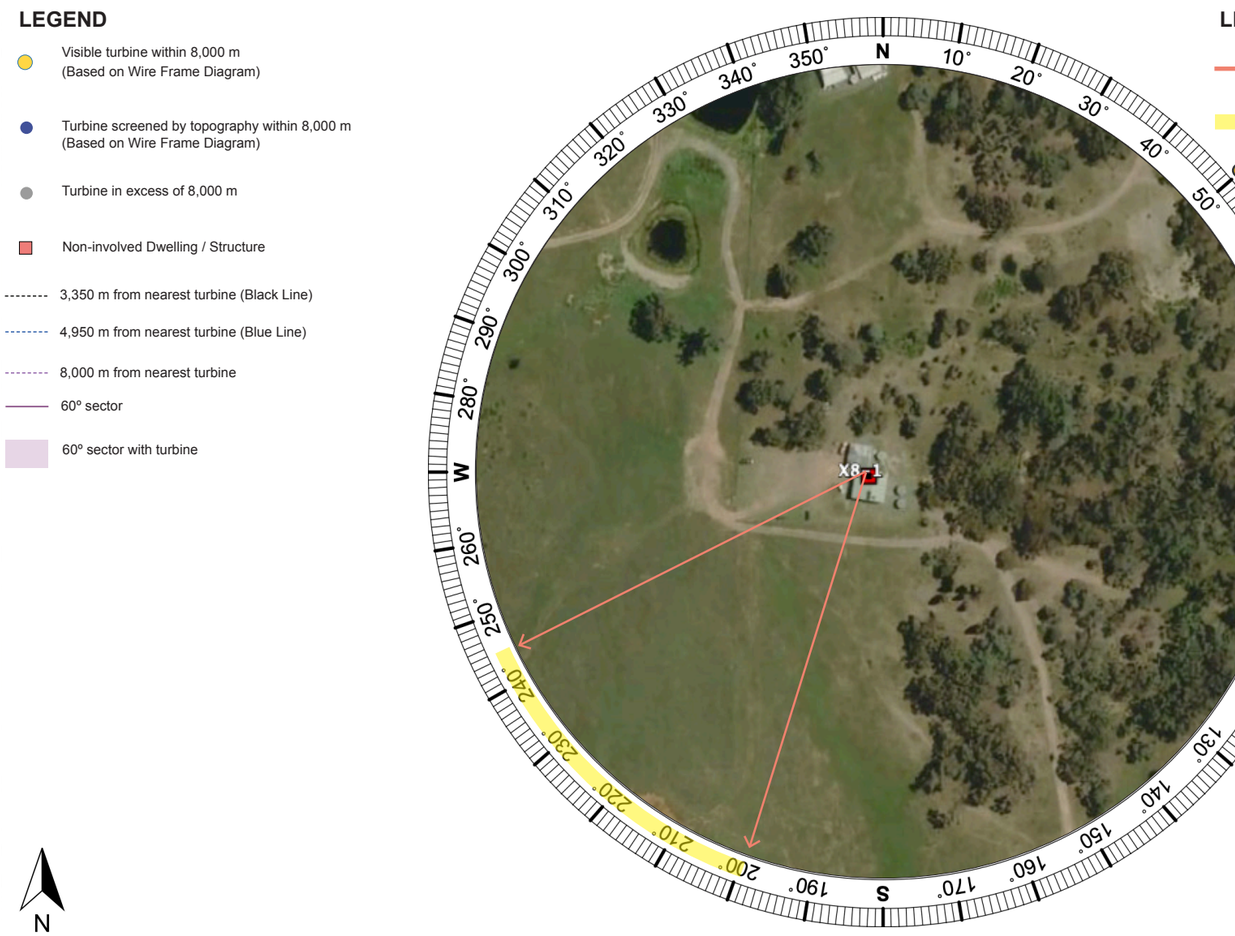
Visual Performance Objectives Evaluation (VIZ2):

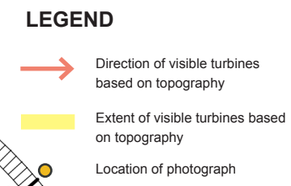
Visual Magnitude: No turbines are located within the black line of visual magnitude. One (1) turbine is located within the blue line of visual magnitude.
Multiple Wind Turbine Effect: The project will be visible in up to one (1) 60 degree sector. This is deemed acceptable for a level 2 sensitivity viewer.
Landscape Scenic Integrity: The proposed turbines will be a noticeable element, however they will not alter the scenic integrity from this dwelling.
Key Feature Disruption: The Project will not disrupt key features from this dwelling. The vegetated ranges will remain the dominant feature of the landscape from this dwelling.

Mitigation Measures:

To assist in reducing the potential visual impact, screen planting could be undertaken to the west of the dwelling. Further consultation with the landowner is required to ascertain the desired viewing locations. **Refer to Appendix G.**



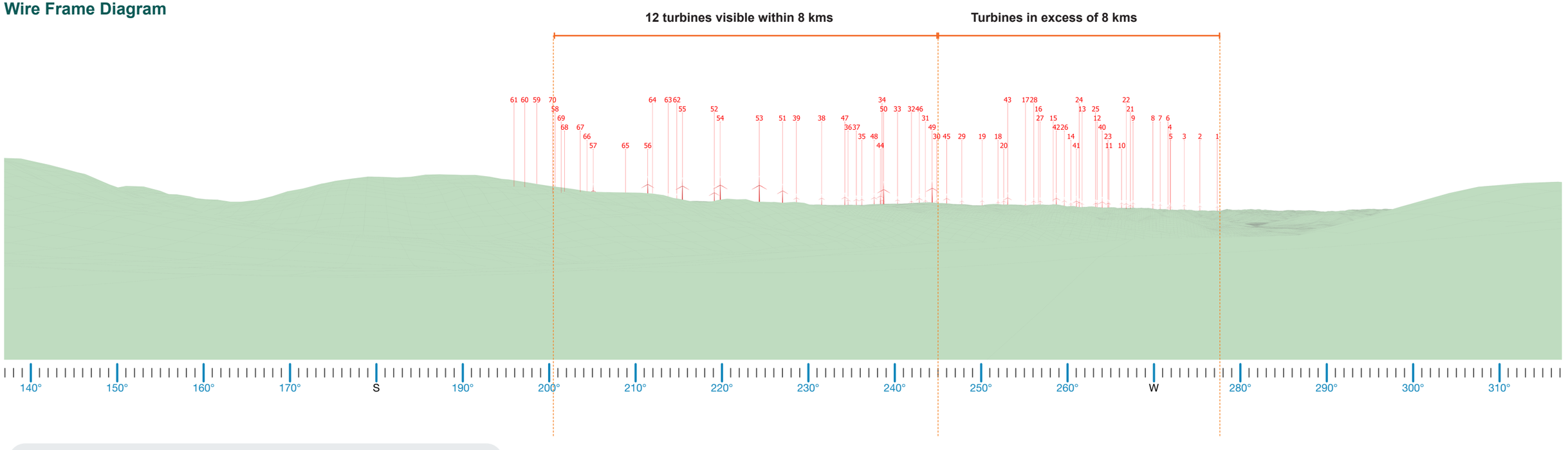




Preliminary Assessment Tools - Dwelling X8-1

D.19 X8-1 Dwelling Assessment

Wire Frame Diagram



Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - ie. a landscape without screening, structures or vegetation. As accurate information on the height and coverage of vegetation and buildings is unavailable, it is important to note the wire frame diagram is based solely on topographic information.

Therefore this should be acknowledged as representing the absolute worst case scenario.

D.20 U6-2 Dwelling Assessment

Dwelling U6-2			
Nearest proposed turbine (km):	**4.75 km**	**Visibility Distance Zone:**	**FM (Far Middle ground)**
Number of turbines within Black Line (3,350 m):	**Nil**	**Viewer Sensitivity Zone:**	**Level 2: Moderate (Rural Dwelling)**
Total number of visible turbines (Based on topography alone):	**13 turbines** 9 at hub 4 blades	**Landscape Character Unit:**	**LCU02: Yarrabin / Hargraves Farmlands**
Number of theoretical 60º Sectors (Based on 2D Plan):	**Two (2)**	**Scenic Quality Rating:**	**Low - Moderate**
Number of visible 60º Sectors (Based on 3D Assessment):	**One (1)**	**Visual Influence Zone:**	**VIZ2**
Visual Impact Rating:	**Very Low**		

Assessment Notes:

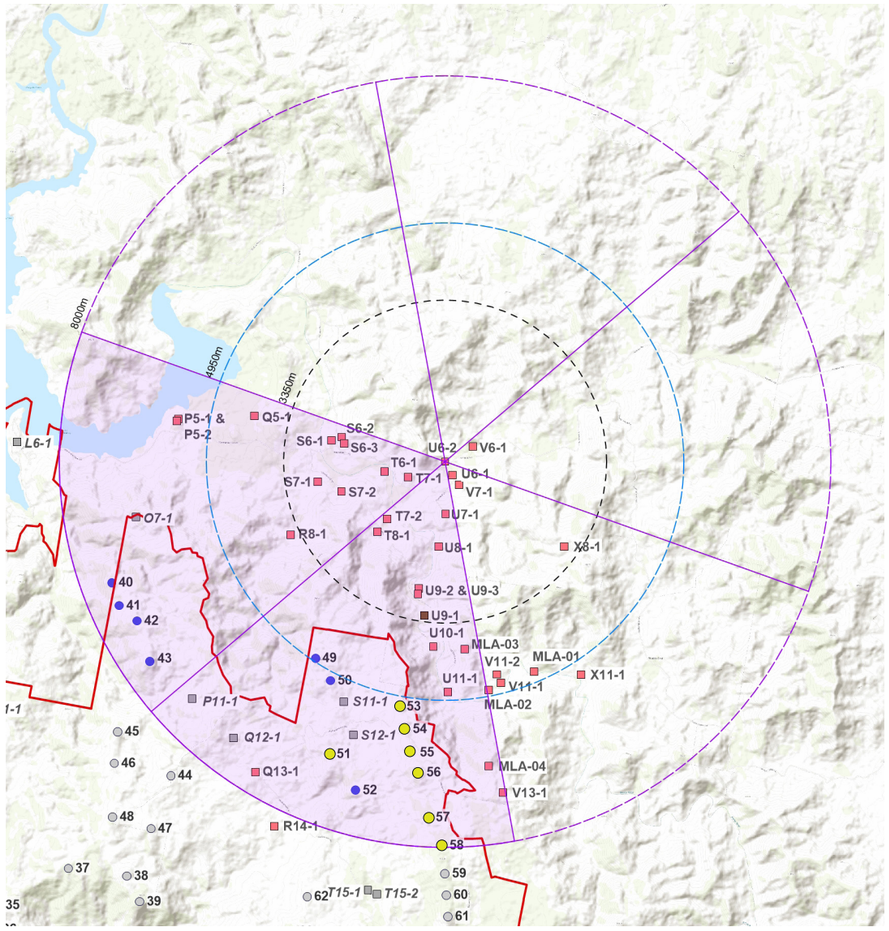
A desktop assessment was undertaken from this dwelling. The wire frame diagram indicates a total of 12 turbines would be visible between the south and west of the dwelling (5 at hub height, 7 blades). The dwelling is located to the north of Yarrabin Road and appears to be orientated toward the Project Site. Aerial imagery indicates vegetation to the south west is anticipated to fragment views to the Project from the dwelling. **The visual impact rating has been assessed as low from this dwelling.**

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: No turbines are located within the black line of visual magnitude. One (1) turbine is located within the blue line.
Multiple Wind Turbine Effect: The project will be visible in up to one (1) 60 degree sectors. This is acceptable for a level 2 sensitivity viewer.
Landscape Scenic Integrity: The proposed turbines will not alter the scenic integrity from this dwelling.
Key Feature Disruption: The Project will not disrupt key features from this dwelling.

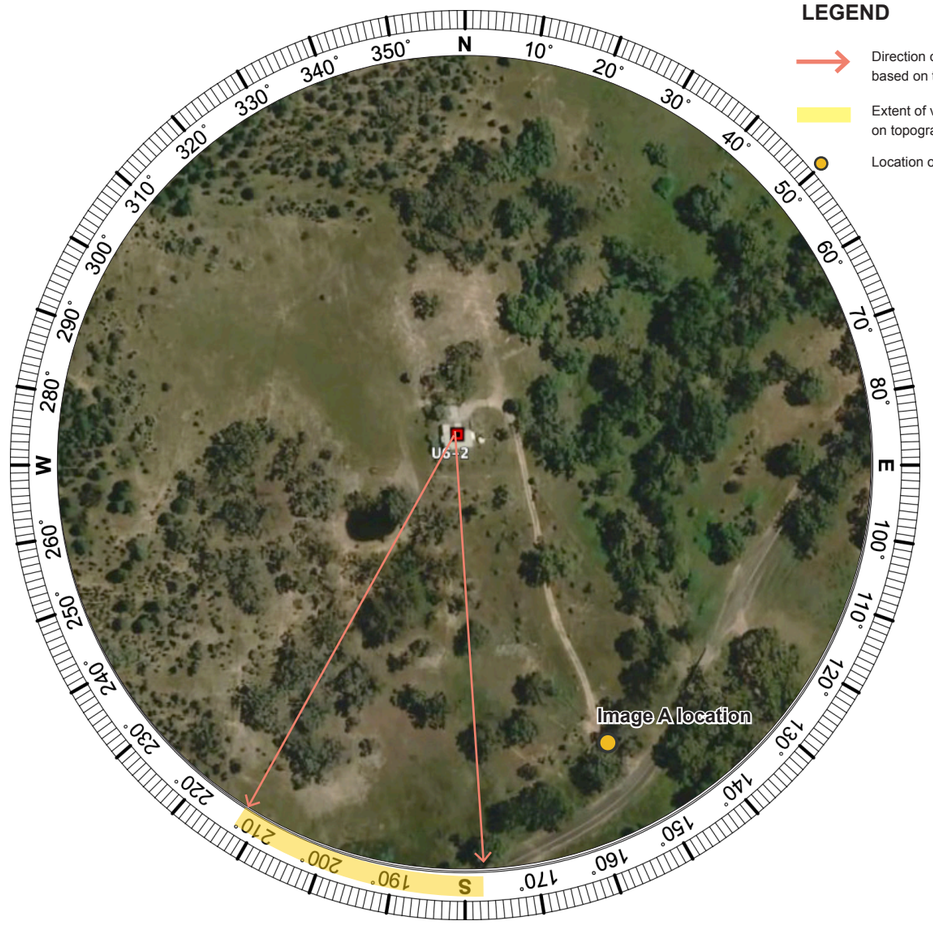
Mitigation Measures:

Mitigation measures are not required at this dwelling due to the low visual impact rating.



LEGEND

- Visible turbine within 8,000 m (Based on Wire Frame Diagram)
- Turbine screened by topography within 8,000 m (Based on Wire Frame Diagram)
- Turbine in excess of 8,000 m
- Non-involved Dwelling / Structure
- 3,350 m from nearest turbine (Black Line)
- 4,950 m from nearest turbine (Blue Line)
- 8,000 m from nearest turbine
- 60º sector
- 60º sector with turbine



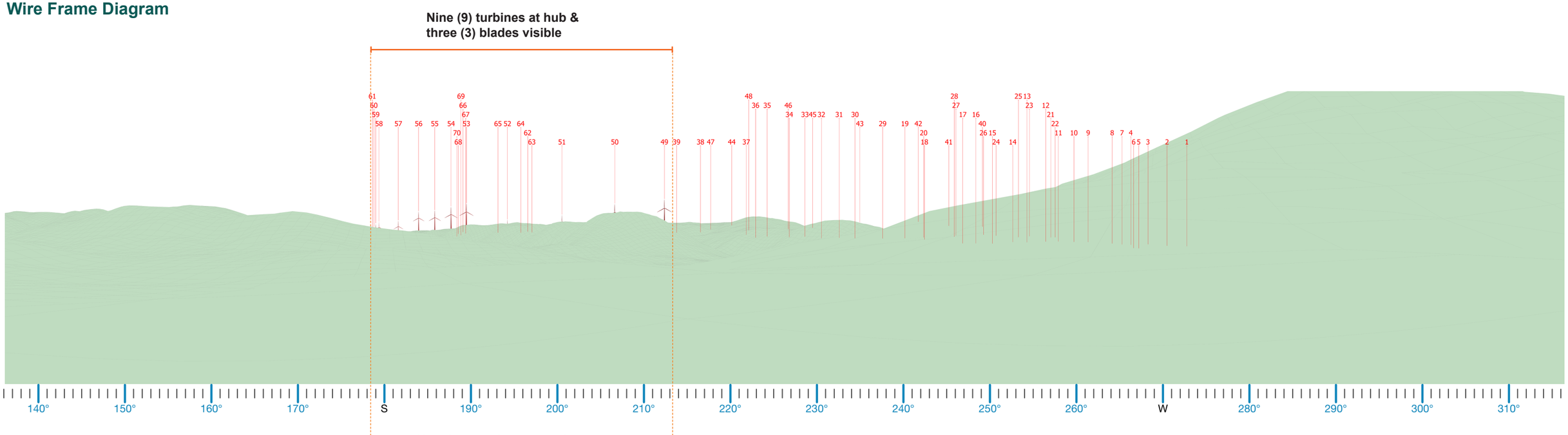
LEGEND

- Direction of visible turbines based on topography
- Extent of visible turbines based on topography
- Location of photograph

Preliminary Assessment Tools - Dwelling U6-2

D.20 U6-2 Dwelling Assessment

Wire Frame Diagram



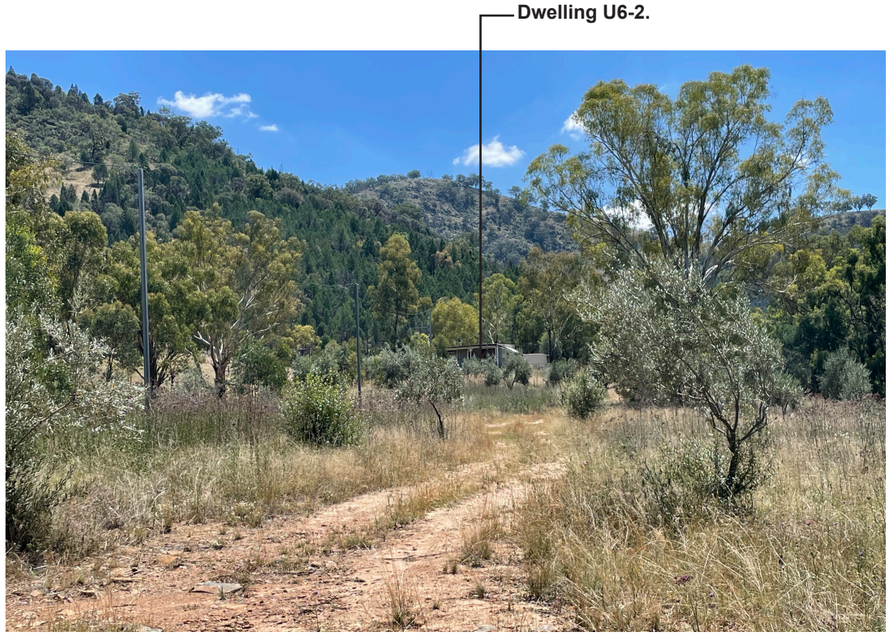


Image A: View of U6-2 from Yarrabin Road showing intervening vegetation

Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - ie. a landscape without screening, structures or vegetation. As accurate information on the height and coverage of vegetation and buildings is unavailable, it is important to note the wire frame diagram is based solely on topographic information.

Therefore this should be acknowledged as representing the absolute worst case scenario.