

Appendix E
Detailed Dwelling Assessments

# MH Cluster: Overview of Non-Participating Dwellings within 3,350 m (Black Line)

Representative Dwelling	Linked Dwellings	Distance to nearest turbine	Nearest turbine	Total number of turbines within 3350m	Turbines within 3350m	Theoretical number of 60° Sectors	Number of 60° sectors	Number of visible turbines (based on topography alone)	Visual Impact Rating	Shadow Flicker (Hours per year)	MLA Comments
		Based on 2D	Assessme	ent:			3D Assessme	ent			Desktop Assessment:
Dwelling 18	Dwelling 127	2.21 km	Turbine MH76	3	MH74, MH76, MH77	2	1	14 turbines (10 at tip 4 at hub)	Nil	6:11 / Year (Dwelling 18) 6:44 / Year (Dwelling 127)	Refer Appendix E.1.
Dwelling 25		2.10 km	Turbine MH29	8	MH12, MH13, MH25, MH27, MH28, MH29, MH30, MH31	2	2	73 turbines (18 at tip 55 at hub)	Low	12:00 / Year	Refer Appendix E.2.
Dwelling 76	Dwelling 77	2.37 km	Turbine MH63	4	MH61, MH62, MH63 & MH54	3	2	54 turbines (12 at tip 42 at hub)	Low	Nil	Refer Appendix E.3.
Dwelling 78		3.15 km	Turbine MH39	2	MH39, MH63	3	3	57 turbines (16 at tip 41 at hub)	Low	Nil	Refer Appendix E.4.
Dwelling 79		2.09 km	Turbine MH39	4	MH36, MH37, MH38, MH39	3	3	45 turbines (5 at tip 40 at hub)	Low	Nil	Refer Appendix E.5.
Dwelling 80		3.22 km	Turbine MH36	1	MH36	2	2	98 turbines (13 at tip 85 at hub)	Low	Nil	Refer Appendix E.6.
Dwelling 83	Dwellings 82 & 199	2.88 km	Turbine MH29	3	MH29, MH32, MH33	2	2	72 turbines (9 at tip 63 at hub)	Moderate	Nil	Refer Appendix E.7.
Dwelling 84		2.13 km	Turbine MH29	7	MH12, MH13, MH25, MH27, MH28, MH29, MH31	2	2	66 turbines (11 at tip 55 at hub)	High	11:44 / Year	Refer Appendix E.8.
Dwelling 85		2.18 km	Turbine MH29	6	MH12, MH13, MH25, MH27, MH28, MH29	2	2	76 turbines (17 at tip 59 at hub)	Low	11:21 / Year	Refer Appendix E.9.
Dwelling 86	Dwelling 88	2.10 km	Turbine MH12	10	MH8, MH9, MH10, MH11, MH12, MH13, MH24, MH25, MH27 & MH28	4	2	65 turbines (4 at tip 61 at hub)	Low	20:36 / Year (Dwelling 86) 26:23 / Year (Dwelling 88)	Refer Appendix E.10.
Dwelling 87		2.74 km	Turbine MH12	5	MH9, MH10, MH11, MH12, MH13	4	2	89 turbines (18 at tip 71 at hub)	Low	Nil	Refer Appendix E.11.

# MH Cluster: Overview of Non-Participating Dwellings within 3,350 m (Black Line)

Representative Dwelling	Linked Dwellings	Distance to nearest turbine	Nearest turbine	Total number of turbines within 3350m	Turbines within 3350m	Theoretical number of 60° Sectors	Number of 60° sectors	Number of visible turbines (based on topography alone)	Visual Impact Rating	Shadow Flicker (Hours per year)	MLA Comments
		Based on 2D	Assessmer	nt:			3D Assessme	ent			Desktop Assessment:
Dwelling 90	Dwelling 91	2.90 km	Turbine MH3	2	MH3, MH5	4	3	97 turbines (17 at tip 80 at hub)	Moderate	Nil	Refer Appendix E.12.
Dwelling 239		2.42 km	Turbine MH76	3	MH74, MH76, MH79	2	1	94 turbines (36 at tip 58 at hub)	Negligible	9:12 / Year	Refer Appendix E.13.
Dwelling 240		2.91 km	Turbine MH76	1	MH76	2	2	13 turbines (6 at tip 7 at hub)	Low	Nil	Refer Appendix E.14.
Dwelling 282		2.22 km	Turbine MH3	6	MH3, MH4, MH5, MH6, MH7, MH8	4	3	89 turbines (10 at tip 79 at hub)	Moderate	17:24 / Year	Refer Appendix E.15.
Dwelling 298		2.99 km	Turbine MH64	2	MH64, MH65	3	2	69 turbines (14 at tip 55 at hub)	Moderate	Nil	Refer Appendix E.16.
Dwelling 314		2.23 km	Turbine MH14	5	MH14, MH15, MH16, MH3 & MH5	3	1	30 turbines (7 at tip 23 at hub)	Moderate	Nil	Refer Appendix E.17.
Dwelling 503		2.33 km	Turbine MH37	4	MH36, MH37, MH38 & MH39	2	1	1 turbine (At tip height)	Nil	Nil	Refer Appendix E.18.
Dwelling 505		2.40 km	Turbine MH29	6	MH13, MH27, MH28, MH29, MH31 & MH32	2	1	67 turbines (11 at tip 56 at hub)	Low	6:25 / Year	Refer Appendix E.19.
Dwelling 506		3.22 km	Turbine MH29	3	MH29, MH35 & MH36	2	2	89 turbines (15 at tip 74 at hub)	Nil	Nil	Refer Appendix E.20.

# GR Cluster: Overview of Non-Participating Dwellings within 3,350 m (Black Line)

Representative Dwelling	Linked Dwellings	Distance to nearest turbine	Nearest turbine	Total number of turbines within 3350m	Turbines within 3350m	Theoretical number of 60° Sectors	Number of 60° sectors	Number of visible turbines (based on topography alone)	Visual Impact Rating	Shadow Flicker (Hours per year)	MLA Comments
		Based on 2D	Assessmen	nt:			3D Assessme	nt			Desktop Assessment:
5		2.02 km	Turbine GR40	12	GR28, GR29, GR30, GR35, GR36, GR37, GR40, GR41, GR42, GR43, GR44, GR45.	4	4	49 turbines (10 at tip 39 at hub)	High	24:06 / Year	Refer Appendix E.21.
277		3.07 km	Turbine GR22	2	GR22, GR52	4	2	48 turbines (6 at tip 42 at hub)	High	Nil	Refer Appendix E.22.
278		2.09 km	Turbine GR52	10	GR19, GR20, GR21, GR22, GR27, GR34, GR50, GR51, GR52 & GR18	4	4	83 turbines (30 at tip 53 at hub)	Low	Nil	Refer Appendix E.23.
363		2.91 km	Turbine GR40	2	GR40, GR41	4	2	28 turbines (19 at tip 9 at hub)	Nil	Nil	Refer Appendix E.24.
497		2.11 km	Turbine GR2	11	GR2, GR3, GR4, GR5, GR13, GR14, GR23, GR24, GR28, GR29, GR30	3	3	115 turbines (34 at tip 81 at hub)	Low	Nil	Refer Appendix E.25.

# LV Cluster: Overview of Non-Participating Dwellings within 3,350 m (Black Line)

Representative Dwelling	Linked Dwellings	Distance to nearest turbine	Nearest turbine	Total number of turbines within 3350m	Turbines within 3350m	Theoretical number of 60° Sectors	Number of 60° sectors	Number of visible turbines (based on topography alone)	Visual Impact Rating	Shadow Flicker (Hours per year)	MLA Comments
		Based on 2D	Assessmer	nt:			3D Assessme	nt			Desktop Assessment:
Dwelling 20	Dwelling 177	3.20 km	Turbine LV20	1	LV20	1	1	122 turbines (25 at tip 97 at hub)	Low	Nil	Refer Appendix E.26.
Dwelling 151	Dwelling 324	2.21 km	Turbine LV20	3	LV20, LV21, LV22	2	2	121 turbines (34 at tip 87 at hub)	Low	6:45 / Year (Dwelling 151) 6:07 / Year (Dwelling 324)	Refer Appendix E.27.
Dwelling 181	Dwelling 180 & 182	2.43 km	Turbine LV22	4	LV17, LV20, LV21, LV22	2	2	89 turbines (2 at tip 87 at hub)	Moderate	Nil	Refer Appendix E.28.
Dwelling 187		2.47 km	Turbine LV4	3	LV4, LV5, LV6	2	1	8 turbines (3 at tip 5 at hub)	Low	Nil	Refer Appendix E.29.
Dwelling 188		3.13 km	Turbine LV4	1	LV4	2	2	61 turbines (17 at tip 44 at hub)	Moderate	Nil	Refer Appendix E.30.
Dwelling 189	Dwelling 190	2.38 km	Turbine LV3	3	LV3, LV7, LV8	2	2	6 turbines (All at hub)	Moderate	5:28 / Year (Dwelling 189) 7:16 / Year (Dwelling 190)	Refer Appendix E.31.

# MH Cluster: Overview of Non-Participating Dwellings within 3,350m and 4,950m (Between Black & Blue Lines)

Representative Dwelling	Linked Dwellings	Distance to nearest turbine	Nearest turbine	Total number of turbines within 4950m	Turbines within 4950m	Theoretical number of 60° Sectors	Number of 60° sectors	Number of visible turbines (based on topography alone)	Visual Impact Rating	Shadow Flicker (Hours per year)	MLA Comments
		Based on 2D	Assessmen	t:			3D Assessme	ent			Desktop Assessment:
Dwelling 15		4.31 km	Turbine MH76	1	MH76	1	1	60 turbines (24 at tip 36 at hub)	Nil	Nil	Refer Appendix E.32.
Dwelling 24	Dwelling 498	4.86 km	Turbine MH39	1	MH39	2	2	67 turbines (18 at tip 49 at hub)	Nil	Nil	Refer Appendix E.33.
Dwelling 69		3.89 km	Turbine MH37	4	MH36, MH37, MH38, MH39	1	Nil (0)	Nil	Nil	Nil	Refer Appendix E.34.
Dwelling 72		3.49 km	Turbine MH63	6	MH61, MH62, MH63, MH72, MH73, MH79	2	2	61 turbines (10 at tip 51 at hub)	Low	Nil	Refer Appendix E.35.
Dwelling 75		3.70 km	Turbine MH63	5	MH39, MH61, MH62, MH63 & MH73	2	2	61 turbines (10 at tip 51 at hub)	Negligible	Nil	Refer Appendix E.36.
Dwelling 81	Dwelling 318	3.37 km	Turbine MH36	15	MH13, MH27, MH28, MH29, MH30, MH31, MH32, MH33, MH34, MH35, MH36, MH37, MH38, MH45, MH44	2	2	11 turbines (8 at tip 3 at hub)	Nil	Nil	Refer Appendix E.37.
Dwelling 128	Dwelling 16	3.49 km	Turbine MH76	9	MH64, MH65, MH66, MH67, MH68, MH74, MH75, MH76, MH77	1	1	52 turbines (24 at tip 28 at hub)	Moderate	Nil	Refer Appendix E.38.
Dwelling 129	Dwelling 130	4.71 km	Turbine MH64	1	MH64	2	2	45 turbines (25 at tip 20 at hub)	Low	Nil	Refer Appendix E.39.
Dwelling 138		4.69 km	Turbine MH29	1	MH29	2	2	38 turbines (11 at tip 27 at hub)	Low	Nil	Refer Appendix E.40.
Dwelling 144		4.74 km	Turbine MH36	1	MH36	2	2	98 turbines (25 at tip 73 at hub)	Low	Nil	Refer Appendix E.41.
Dwelling 234	Dwellings 241 & 242	3.94 km	Turbine MH76	6	MH64, MH65, MH66, MH67, MH74 & MH76	1	1	2 turbines (All at tip)	Nil	Nil	Refer Appendix E.42.
Dwelling 243		4.52 km	Turbine MH76	5	MH64, MH65, MH66, MH74 & MH76	1	Nil (0)	Nil	Nil	Nil	Refer Appendix E.43.
Dwelling 501		4.59 km	Turbine MH3	1	МН3	3	3	92 turbines (16 at tip 76 at hub)	Low	Nil	Refer Appendix E.44.

### GR Cluster: Overview of Non-Participating Dwellings within 3,350m and 4,950m (Between Black & Blue Lines)

Representative Dwelling	Linked Dwellings	Distance to nearest turbine	Nearest turbine	Total number of turbines within 4950m	Turbines within 4950m	Theoretical number of 60° Sectors	Number of 60° sectors	Number of visible turbines (based on topography alone)	Visual Impact Rating	Shadow Flicker (Hours per year)	MLA Comments
		Based on 2D	Assessmen	ıt:			3D Assessme	nt			Desktop Assessment:
Dwelling 12	Dwellings 7-11	3.97 km	Turbine GR2	4	GR2, GR3, GR4, GR5	1	1	48 turbines (11 at tip 37 at hub)	Moderate	Nil	Refer Appendix E.45.
Dwelling 185		4.51 km	Turbine GR42	4	GR40, GR41, GR42, GR43	4	2	100 turbines (23 at tip 77 at hub)	Moderate	Nil	Refer Appendix E.46.
Dwelling 283		4.88 km	Turbine GR4	1	GR4	1	1	57 turbines (22 at tip 35 at hub)	Moderate	Nil	Refer Appendix E.47.
Dwelling 285		4.36 km	Turbine GR8	8	GR6, GR7, GR8, GR9, GR10, GR11, GR12, GR53	1	1	69 turbines (26 at tip 43 at hub)	Low	Nil	Refer Appendix E.48.
Dwelling 286		4.74 km	Turbine GR11	5	GR8, GR9, GR10, GR11, GR12	1	1	67 turbines (18 at tip 49 at hub)	Low	Nil	Refer Appendix E.49.
Dwelling 288	Dwellings 287 & 289	4.37 km	Turbine GR12	3	GR10, GR11, GR12	1	1	22 turbines (8 at tip 14 at hub)	Low	Nil	Refer Appendix E.50.
Dwelling 352		4.73 km	Turbine GR2	1	GR2	2	2	21 turbines (10 at tip 11 at hub)	Low	Nil	Refer Appendix E.51.

### LV Cluster: Overview of Non-Participating Dwellings within 3,350m and 4,950m (Between Black & Blue Lines)

Representative Dwelling	Linked Dwellings	Distance to nearest turbine	Nearest turbine	Total number of turbines within 4950m	Turbines within 4950m	Theoretical number of 60° Sectors	Number of 60° sectors	Number of visible turbines (based on topography alone)	Visual Impact Rating	Shadow Flicker (Hours per year)	MLA Comments
		Based on 2D	Assessmer	nt:			3D Assessme	ent			Desktop Assessment:
Dwelling 2		4.09 km	Turbine LV9	9	LV4, LV5, LV6, LV9, LV10, LV11, LV12, LV13, LV23	2	2	17 turbines (8 at tip 9 at hub)	Nil	Nil	Refer Appendix E.52.
Dwelling 3		3.48 km	Turbine LV9	10	LV4, LV5, LV6, LV9, LV10, LV11, LV12, LV13, LV23, LV14	2	2	31 turbines (10 at tip 21 at hub)	Moderate	Nil	Refer Appendix E.53.
Dwelling 21	Dwelling 203	4.11 km	Turbine LV20	2	LV20, LV21	1	1	145 turbines (15 at tip 130 at hub)	Moderate	Nil	Refer Appendix E.54.
Dwelling 154	Dwellings 152,153 & 155- 176	3.51 km approximately	Turbine LV20	4	LV19, LV20, LV21, LV22	1	1	143 turbines (29 at tip 114 at hub)	Moderate	Nil	Refer Appendix E.55.
Dwelling 178		3.63 km	Turbine LV20	4	LV19, LV20, LV21, LV22	1	1	148 turbines (27 at tip 121 at hub)	Low	Nil	Refer Appendix E.56.
Dwelling 179		3.43 km	Turbine LV22	6	LV16, LV17, LV19, LV20, LV21, LV22	1	1	141 turbines (15 at tip 126 at hub)	Nil	Nil	Refer Appendix E.57.
Dwelling 193	Dwelling 192	4.31 km	Turbine LV9	2	LV9, LV10	1	1	21 turbines (4 at tip 17 at hub)	Nil	Nil	Refer Appendix E.58.
Dwelling 313		3.74 km	Turbine LV20	4	LV19, LV20, LV21, LV22	1	1	131 turbines (20 at tip 111 at hub)	Moderate	Nil	Refer Appendix E.59.
Dwelling 323	Dwelling 200	4.79 km	Turbine LV20	1	LV20	1	1	108 turbines (16 at tip 92 at hub)	Nil	Nil	Refer Appendix E.60.
Dwelling 357		3.41 km	Turbine LV3	6	LV3, LV4, LV5, LV6, LV7 & LV8	2	1	62 turbines (29 at tip 33 at hub)	Nil		Refer Appendix E.61.

# Overview of Non-Participating Dwellings in excess of 4,950m with Multiple Visible Sectors

Representative Dwelling	Linked Dwellings	Distance to nearest turbine	Nearest turbine	Total number of turbines within 8000m	Theoretical number of 60° Sectors	Number of 60° sectors	Number of visible turbines (based on topography alone)	Visual Impact Rating	Shadow Flicker (Hours per year)	MLA Comments
		Based on 2D As	ssessment:			3D Assessme	ent			Desktop Assessment:
Dwelling 183		5.15 km	Turbine LV17	30	4	2	130 turbines (30 at tip 100 at hub)	Low	Nil	Refer Appendix E.62.
Dwelling 184		5.17 km	Turbine LV17	35	4	2	127 turbines (20 at tip 107 at hub)	Low	Nil	Refer Appendix E.63.
Dwelling 311		5.79 km	Turbine MH14	20	4	2	43 turbines (16 at tip 27 at hub)	Low	Nil	Refer Appendix E.64.



# Appendix E

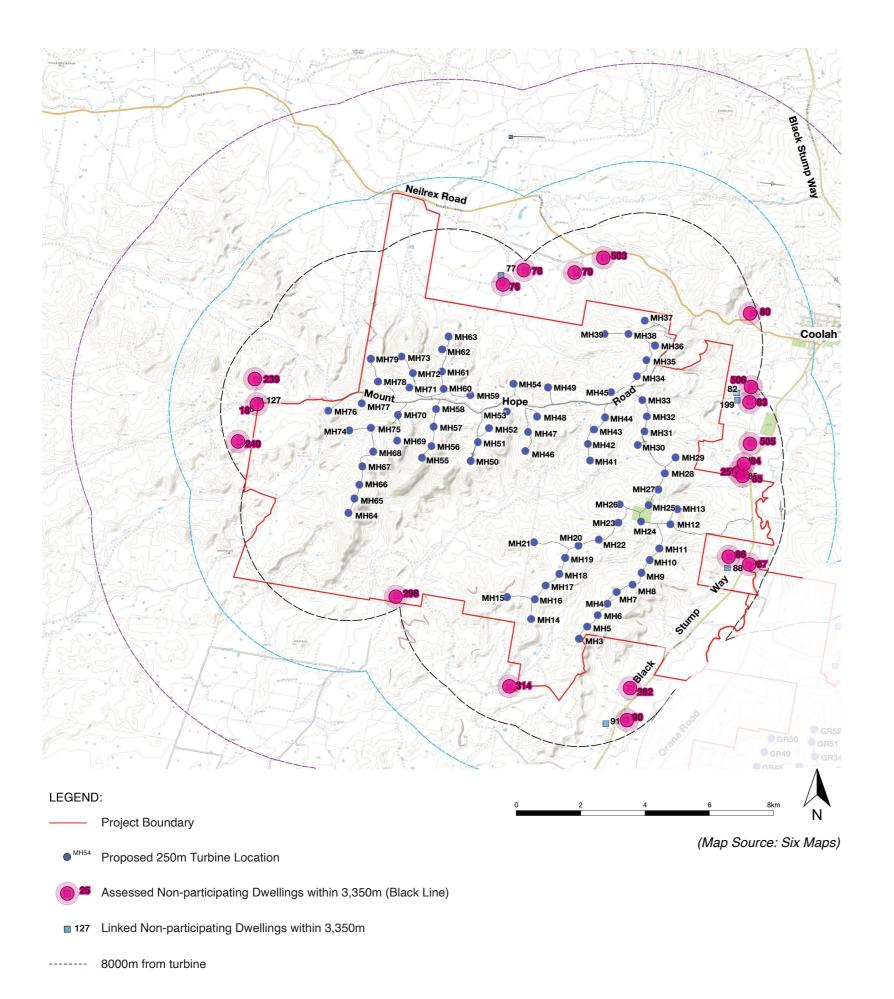
Detailed Dwelling Assessments

Dwellings within 3350m



Dwellings within 3350m associated with Mount Hope Road (MH) cluster

## MH Cluster: Location of Non-Participating Dwellings within 3,350 m (Black Line)



Dwellings within 3,350m		
Representative Dwelling	Linked Dwellings	MLA Comments
Dwelling 18	Dwelling 127	Refer Appendix E.1.
Dwelling 25		Refer Appendix E.2.
Dwelling 76	Dwelling 77	Refer Appendix E.3.
Dwelling 78		Refer Appendix E.4.
Dwelling 79		Refer Appendix E.5.
Dwelling 80		Refer Appendix E.6.
Dwelling 83	Dwellings 82 & 199	Refer Appendix E.7.
Dwelling 84		Refer Appendix E.8.
Dwelling 85		Refer Appendix E.9.
Dwelling 86	Dwelling 88	Refer Appendix E.10.
Dwelling 87		Refer Appendix E.11.
Dwelling 90	Dwelling 91	Refer Appendix E.12.
Dwelling 239		Refer Appendix E.13.
Dwelling 240		Refer Appendix E.14.
Dwelling 282		Refer Appendix E.15.
Dwelling 298		Refer Appendix E.16.
Dwelling 314		Refer Appendix E.17.
Dwelling 503		Refer Appendix E.18.
Dwelling 505		Refer Appendix E.19.
Dwelling 506		Refer Appendix E.20.

### E.1. Dwelling Assessment Dwelling 18 (Linked to Dwelling 127)

DWELLING 18			
Nearest proposed turbine (km):	2.21 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	3	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU02: Undulating farmlands
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Moderate
Number of potentially visible turbines (Based on topography alone)	14 10 at tip 4 at hub	Visual Influence Zone:	VIZ2

Visual Impact Rating: Nil

#### Assessment Notes:

An assessment based on topography alone identified a total of 14 turbines (10 at tip height and 4 at hub height) would be visible from Dwelling 18. A viewpoint was taken from Mount Hope Road to the west of the residences where there was a clearing to represent views of Dwellings 127 &18. The dwelling is located on undulating terrain and appears to be orientated north-south. Aerial imagery indicates that a patch of dense vegetation located east/southeast of the dwelling will help screen views in the direction where the turbines would be visible. Existing vegetation and the rise in topography on the eastern side is likely to fragment views of turbines. A patch of remnant vegetation located further to the east is likely to fragment views of turbines. Similar observations are noted for Dwelling 127 since the house is surrounded by screening vegetation as per aerial imagery. There are three (3) turbines within the black line of visual magnitude and 13 within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *Nil* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

*Visual Magnitude:* Three (3) turbines (MH74, MH76, MH77) are located within the black line of visual magnitude. 13 turbines are located between the black & blue lines of visual magnitude but these are likely to be screened.

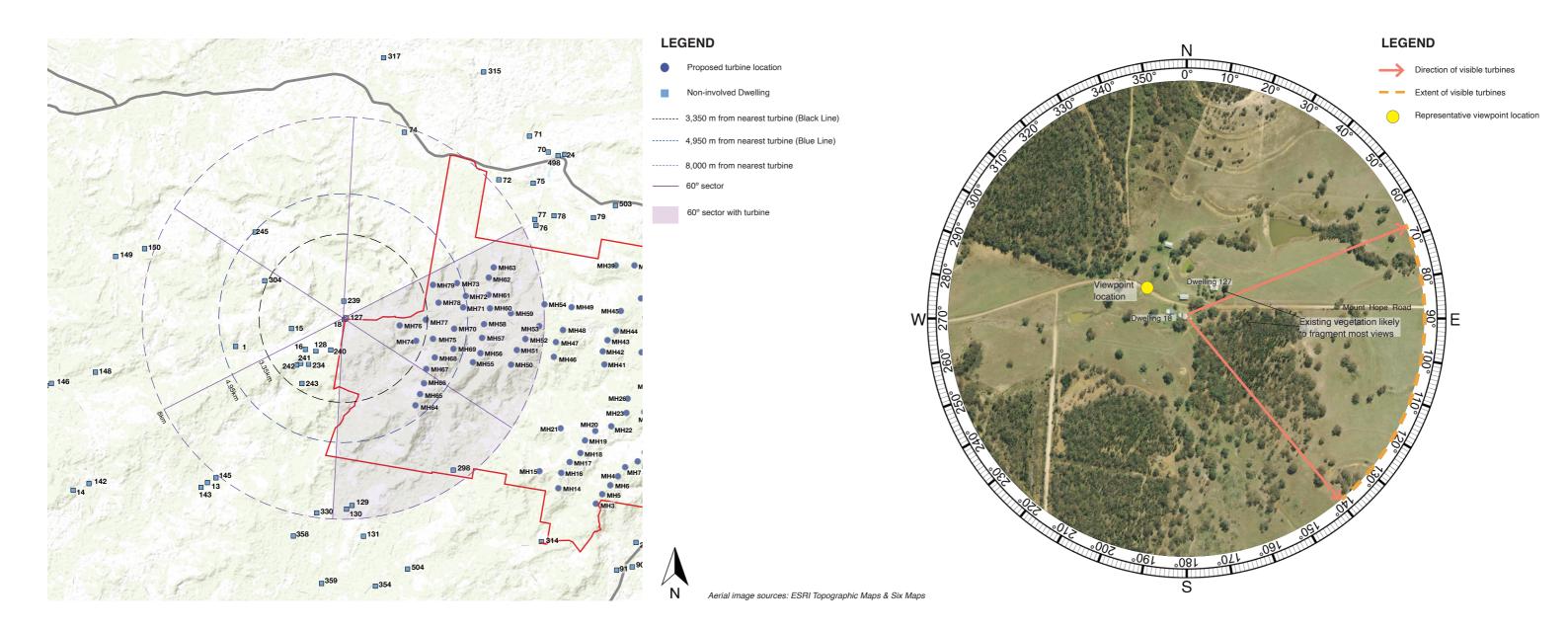
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation is likely to screen views towards turbines in the east/southeast direction.

Landscape Scenic Integrity: The Project will have not impact scenic integrity at this location. The proposed turbines will be screened by vegetation.

Key Feature Disruption: The turbines are likely to be a visible element in the landscape, but will not diminish the key landscape features as viewed from this dwelling due to existing vegetation around the houses.

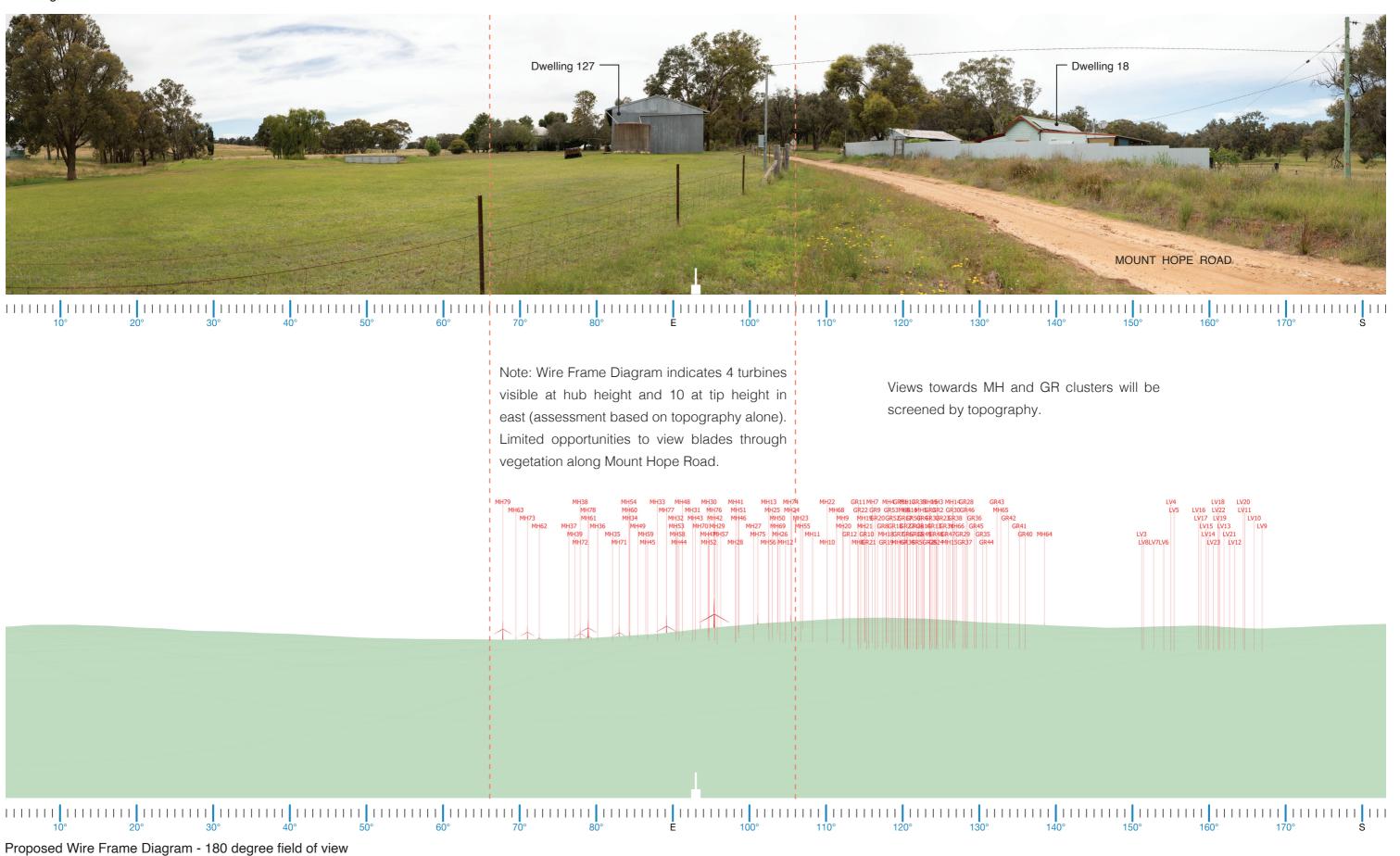
### Mitigation Measures:

No mitigation measures required for both Dwellings 18 and 127. Existing vegetation would be sufficient in screening views.



### E.1. Dwelling Assessment Dwelling 18

### 180 Degree Baseline Panorama



### E.2. Dwelling Assessment Dwelling 25

DWELLING 25			
Nearest proposed turbine (km):	2.10 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	8	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU03: Agricultural flats
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	73 18 at tip 55 at hub	Visual Influence Zone:	VIZ2

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 73 turbines (18 at tip height and 55 at hub height) would be visible, of which 47 turbines are located within 8km of this dwelling. A viewpoint was taken on the eastern side of the house to represent views from the property and to assess the potential impact of the Project. Aerial imagery indicates that the dwelling is surrounded by scattered vegetation in all directions and is orientated east-west. Prominent views of the Project will be in the western direction and the dwelling is surrounded by dense windbreak vegetation on the western side. A gentle rise in the topography to the northwest will help screen views towards some turbines in this direction. Existing vegetation along the dwelling's western boundary will help fragment most views but given the close proximity of the Project, it is likely that the tips of turbines would be partially visible at the dwelling. There are eight (8) turbines within the black line of visual magnitude and 12 within the blue line of this dwelling. The visual impact resulting from the Project has been rated as **Low** from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Eight (8) turbines are located within the black line of visual magnitude. 12 turbines are located between the black & blue lines of visual magnitude but these are likely to be screened.

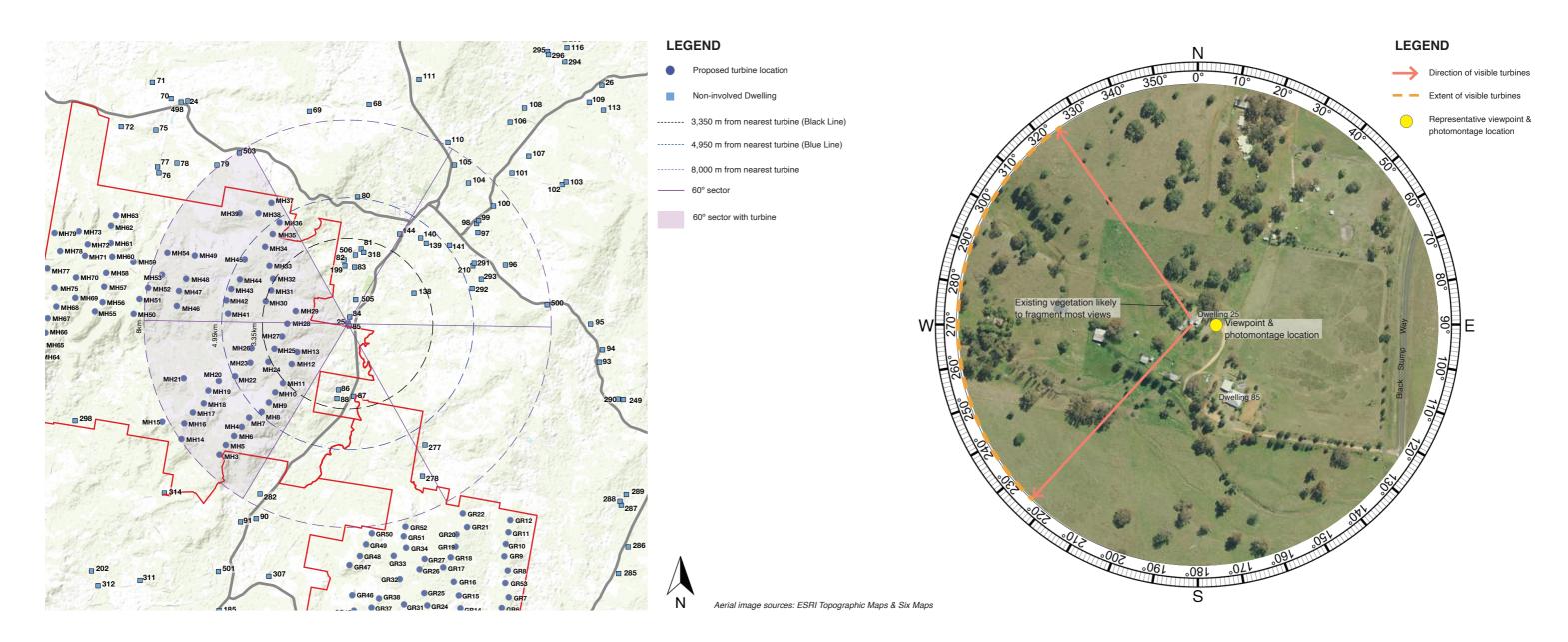
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation and topographical changes are likely to screen views towards turbines.

Landscape Scenic Integrity: The Project will not impact the scenic integrity at this location. The proposed turbines have the potential to be visible at this location, however, vegetation and topographical changes are likely to screen most views.

Key Feature Disruption: The Project will be a partially visible element on the ridgeline in the western direction. Views from the dwelling will be limited and fragmented by existing vegetation.

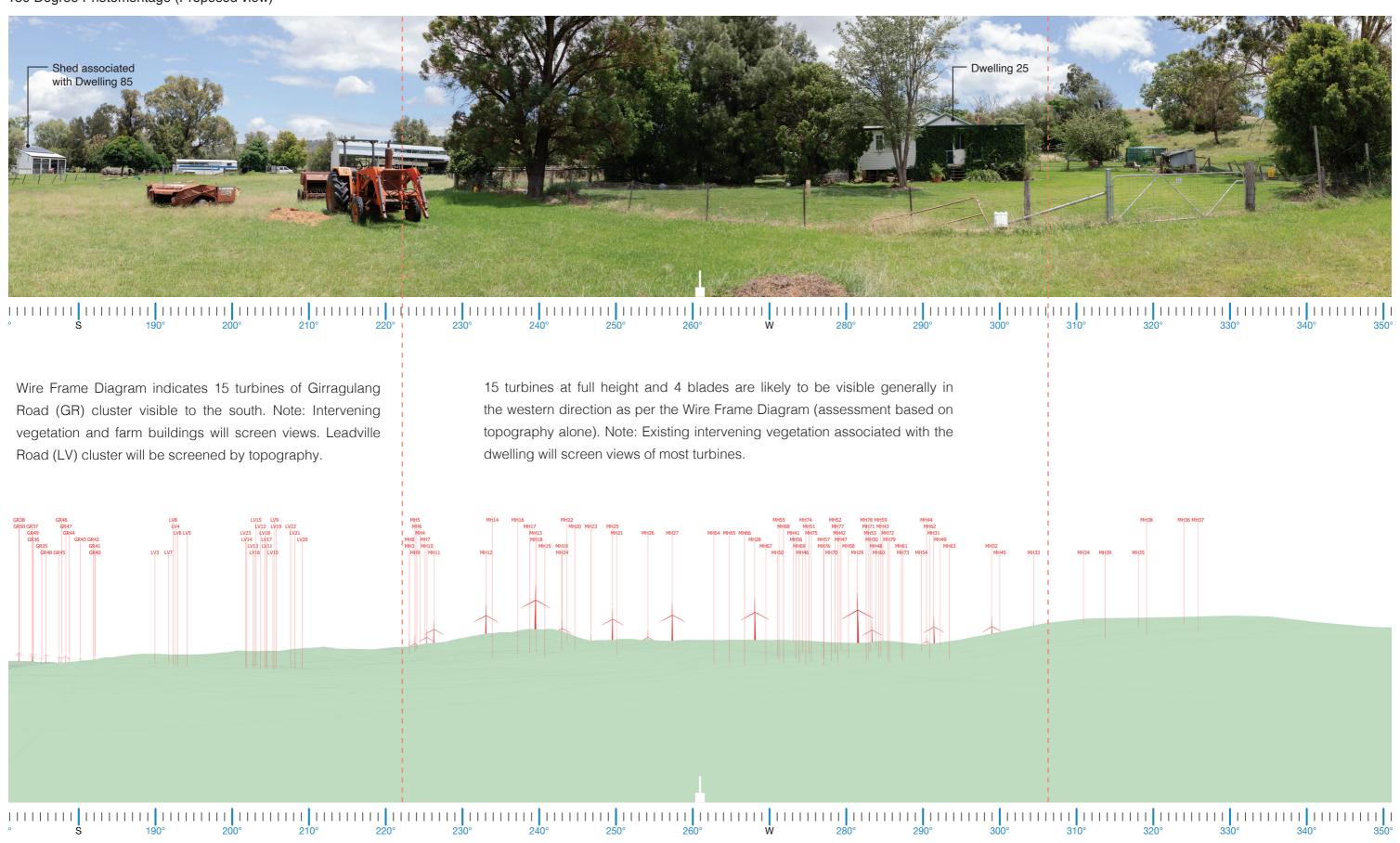
### Mitigation Measures:

Existing screen planting would be sufficient to screen views. No mitigation measures required.



### E.2. Dwelling Assessment Dwelling 25

180 Degree Photomontage (Proposed view)



### E.3. Dwelling Assessment Dwelling 76 (Linked to Dwelling 77)

DWELLING 76			
Nearest proposed turbine (km):	2.37 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	4	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	3	Landscape Character Unit:	LCU04: Agricultural flats
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	54 12 at tip 42 at hub	Visual Influence Zone:	VIZ2

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 54 turbines (12 at tip height and 42 at hub height) would be visible from Dwelling 76. The dwelling is located on a gently undulating terrain to the immediate north of ridges associated with Mount Hope. A viewpoint was taken from the parking area located west of the dwelling. This assessment also represents the potential visual impact on Dwelling 77. Aerial imagery indicates that both dwellings are surrounded by dense vegetation in the foreground to the east and south and this is likely to assist in fragmenting views to majority of the turbines located south of the dwelling. The rise in topography to the south of Dwelling 76 will also play an important role in screening views. Existing windbreak plantation along the west/southwest boundaries will also assist in fragmenting views towards some of the turbines from both these dwellings. There are four (4) turbines within the black line of visual magnitude and 18 within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *Low*.

#### Visual Performance Objectives Evaluation (VIZ2):

*Visual Magnitude:* Four (4) turbines (MH61, MH62, MH63 & MH54) are located within the black line of visual magnitude. 18 turbines are located between the black & blue lines of visual magnitude but most of these will be screened by existing vegetation.

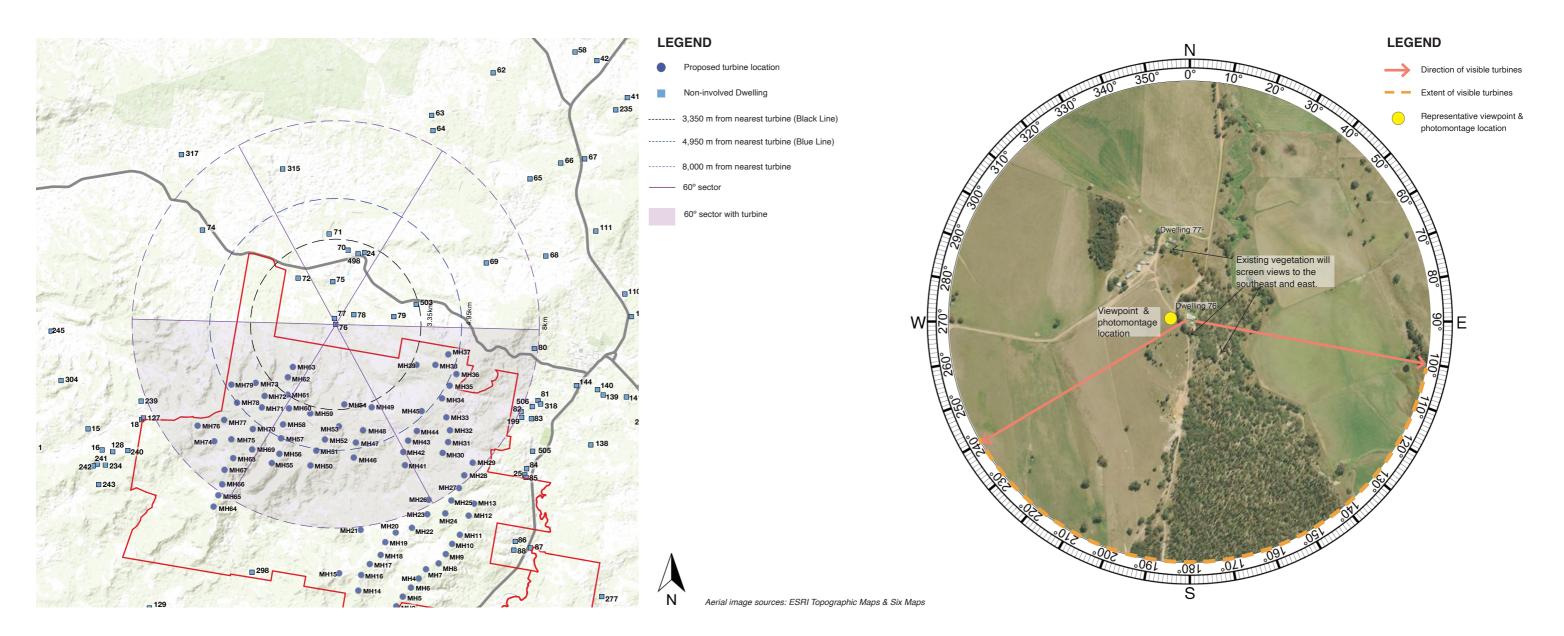
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to three (3) 60 degree sectors. However, existing vegetation and topography are likely to screen some views towards turbines.

Landscape Scenic Integrity: The Project will have a low impact on scenic integrity at this location. The proposed turbines have the potential to be visible at this location but majority will be screened.

Key Feature Disruption: The Project will be a visible on the ridgeline, but the views will be disrupted by existing landscape features.

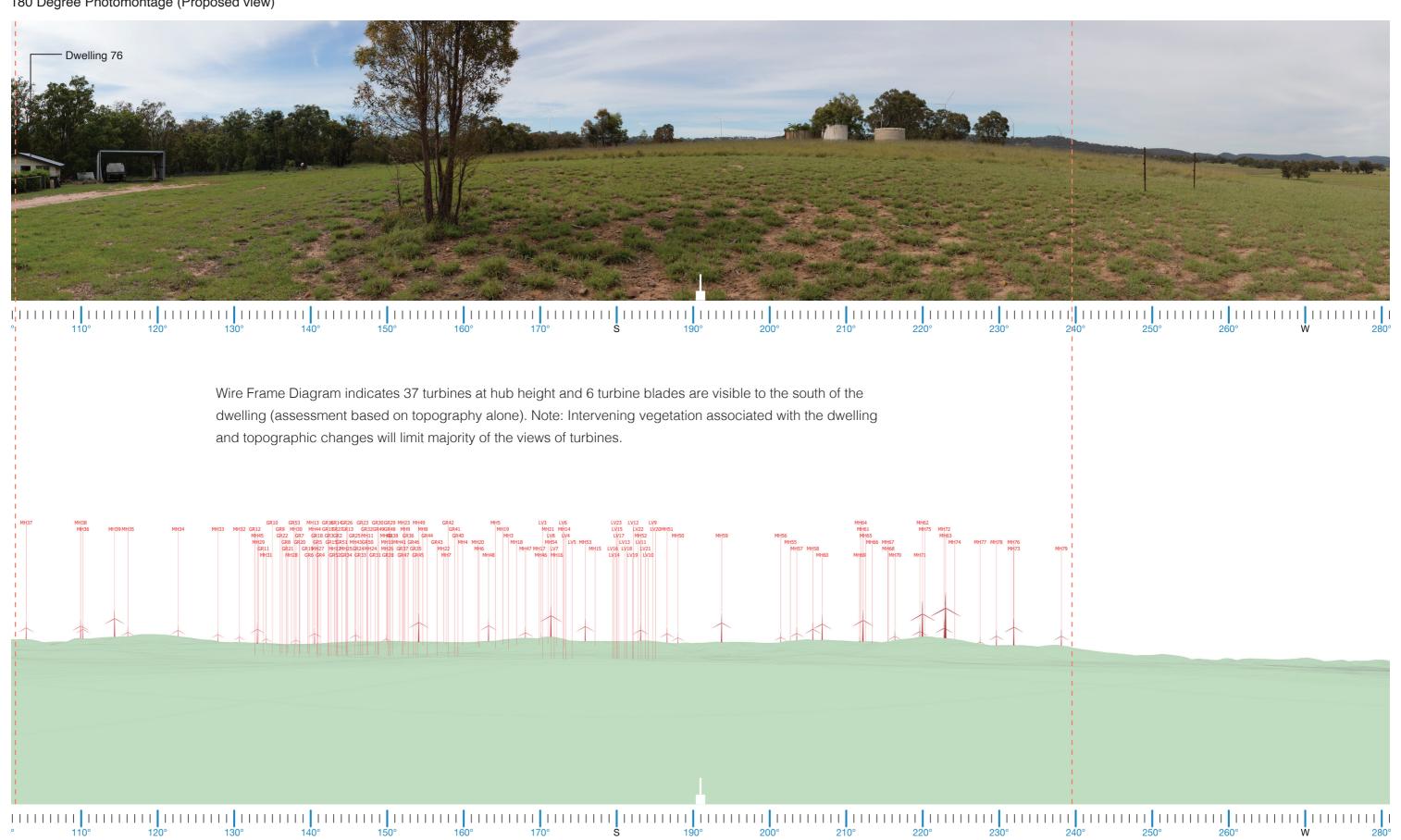
#### Mitigation Measures:

The dwellings are currently surrounded by dense vegetation which will screen majority of the views of the Project. It is likely that the Project will be visible from certain areas near the dwelling. If required, additional screen planting to the dwelling's southwest can be provided to screen views. Consultation with the landowner would be required to discuss appropriate mitigation methods.



### E.3. Dwelling Assessment Dwelling 76

180 Degree Photomontage (Proposed view)



Proposed Wire Frame Diagram - 180 degree field of view

### E.4. Dwelling Assessment Dwelling 78

DWELLING 78				
Nearest proposed turbine (km):	3.15 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black Line (3350 m):	2	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	3	Landscape Character Unit:	LCU03: Agricultural flats	
Number of visible 60° Sectors (Based on 3D Assessment):	3	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	57 16 at tip 41 at hub	Visual Influence Zone:	VIZ2	

Visual Impact Rating: Low

#### Assessment Notes:

An assessment based on topography alone identified a total of 57 turbines (16 at tip height and 41 at hub height) would be visible from Dwelling 78. The dwelling is located on a generally flat terrain. Aerial imagery indicates scattered vegetation in the foreground to the south of the dwelling which is likely to assist in fragmenting views to majority of the turbines. Windbreak plantation immediately south of the dwelling will help limit most views. Given the close proximity of the Project and the elevated position of the Mount Hope Road (MH) cluster, it is likely that the tips of some turbines will be visible at this location. There are two (2) turbines within the black line of visual magnitude and 16 within the blue line of this dwelling. Views towards the turbines, however, will be screened by existing vegetation. The visual impact resulting from the Project has been rated as **Low** from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Two (2) turbines (MH63 & MH39) are located within the black line of visual magnitude. 16 turbines are located between the black & blue lines of visual magnitude and these are likely to be screened.

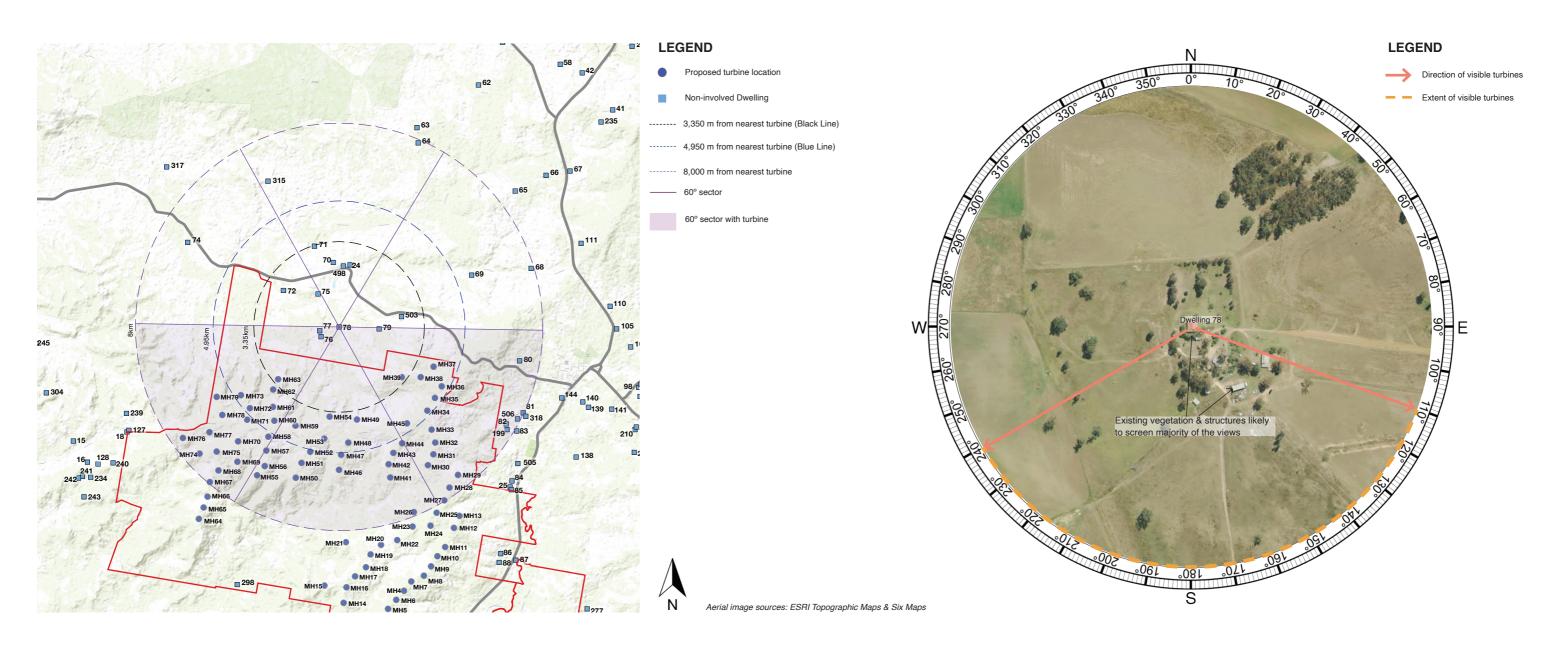
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to three (3) 60 degree sectors. However, existing vegetation is likely to fragment most views towards turbines.

Landscape Scenic Integrity: The Project will have a moderate impact on scenic integrity at this location. The proposed turbines have the potential to be a part of the visual catchment at this location but it is highly likely that majority of turbines will be screened by existing vegetation & structures.

Key Feature Disruption: The Project will be a dominant element on the ridgeline, especially to the south/southwest of the dwelling. Most views, however, will be fragmented.

#### Mitigation Measures

Existing vegetation would be sufficient in screening views. No mitigation measures are required



### E.5. Dwelling Assessment Dwelling 79

DWELLING 79				
Nearest proposed turbine (km):	2.09 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black Line (3350 m):	4	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	3	Landscape Character Unit:	LCU02: Undulating farmlands	
Number of visible 60° Sectors (Based on 3D Assessment):	3	Scenic Quality Rating:	Moderate	
Number of potentially visible turbines (Based on topography alone)	45 5 at tip 40 at hub	Visual Influence Zone:	VIZ2	

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 45 turbines (5 at tip height and 40 at hub height) would be visible from this dwelling. Aerial imagery indicates that the dwelling is oriented generally north-south and is surrounded by a dense vegetation on the southern side. Prominent views of the Project will be available in the southern direction. A gentle rise in the topography to the southeast and existing farm buildings on the mound will help screen some views in this direction. Existing vegetation along the dwelling's southwestern boundary will help fragment some views but it is likely that the tips of the MH turbines will be visible due to their elevated position. There are four (4) turbines within the black line of visual magnitude and 11 within the blue line of this dwelling. The visual impact resulting from the Project has been rated as **Low** from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

*Visual Magnitude:* Four (4) turbines (MH36, MH37, MH38, MH39) are located within the black line of visual magnitude. 11 turbines are located between the black & blue lines of visual magnitude but these are likely to be screened.

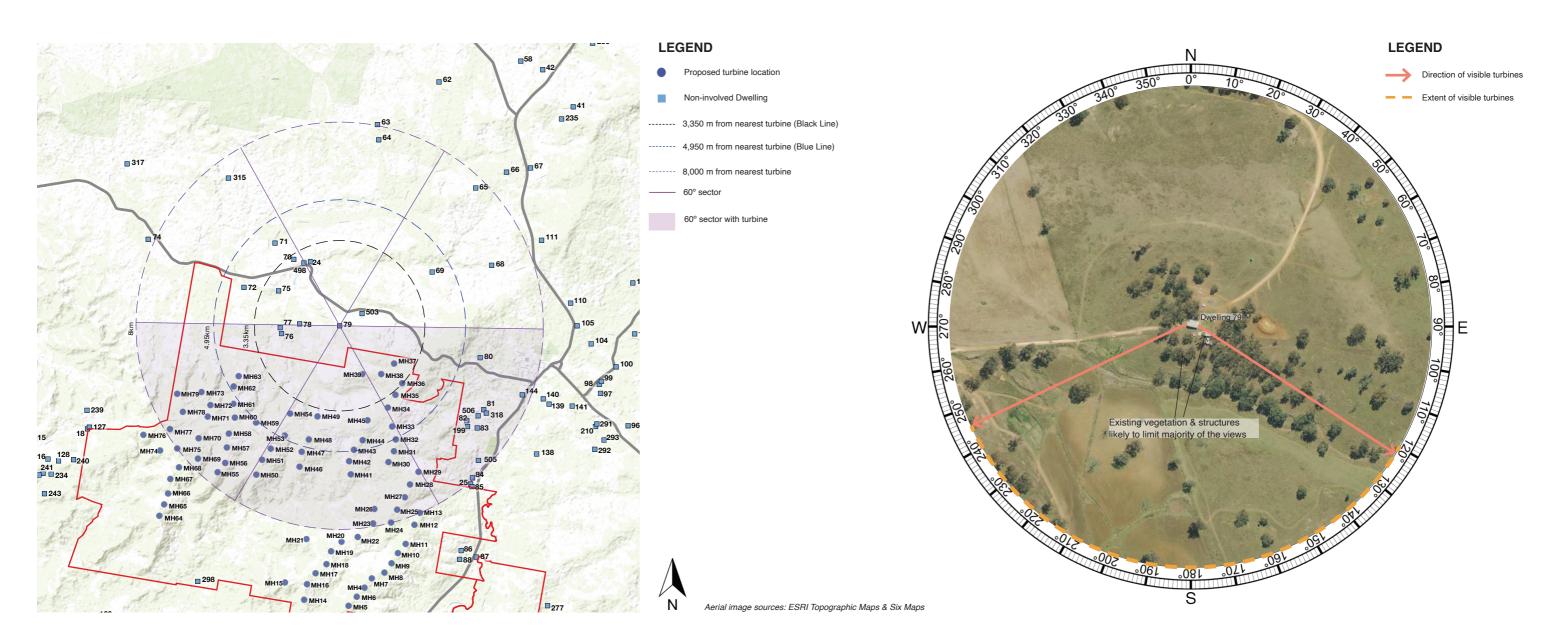
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to three (3) 60 degree sectors. However, existing vegetation and topographical changes are likely to screen majority of the views.

Landscape Scenic Integrity: The Project will have a low impact on scenic integrity at this location. The proposed turbines have the potential to be a part of the visual catchment at this location, however existing vegetation will fragment views.

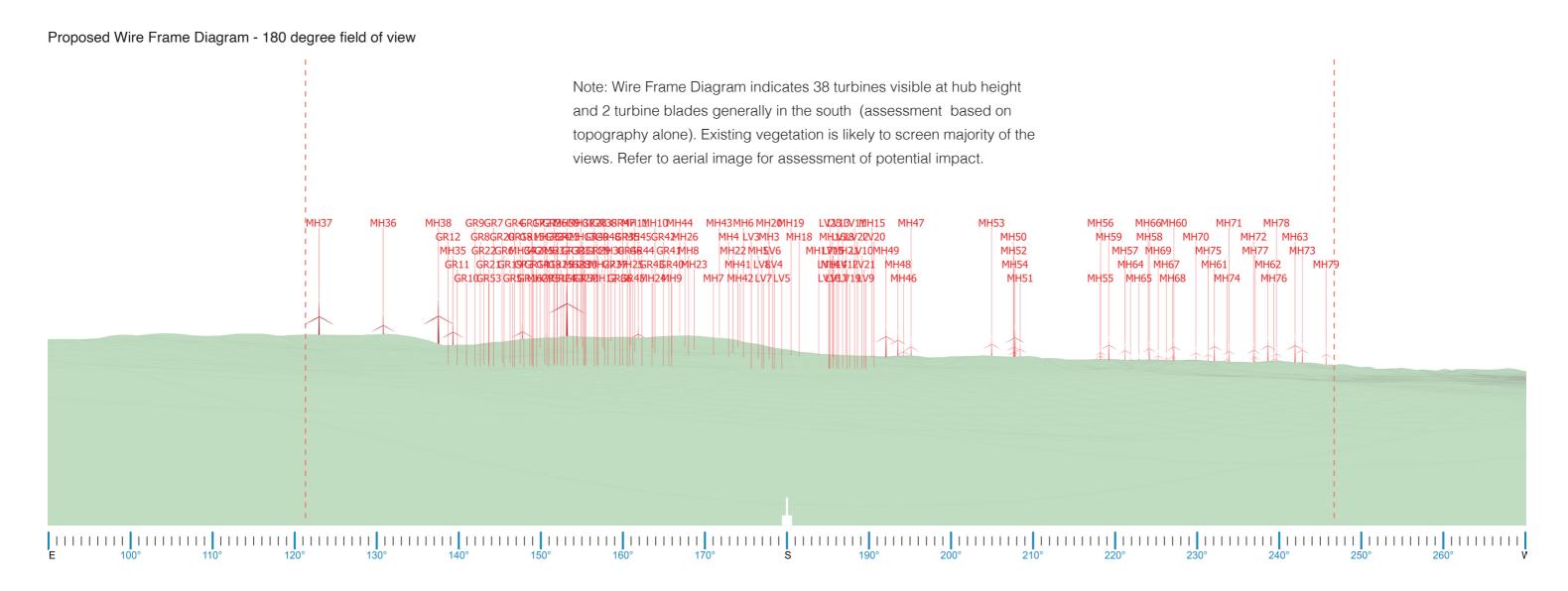
Key Feature Disruption: The Project will be partially visible on the ridgeline in the southwestern direction.

### Mitigation Measures:

Existing vegetation would be sufficient in screening views. If deemed necessary, screen planting to the southwest of the dwelling may further help screen views to the Project and reduce the potential visual impact. Consultation with the landowner would be required to discuss appropriate mitigation methods.



### E.5. Dwelling Assessment Dwelling 79



### Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.

### E.6. Dwelling Assessment Dwelling 80

DWELLING 80				
Nearest proposed turbine (km):	3.22 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black Line (3350 m):	1	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU02: Undulating farmlands	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Moderate	
Number of potentially visible turbines (Based on topography alone)	98 13 at tip 85 at hub	Visual Influence Zone:	VIZ2	

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 98 turbines (13 at tip height and 85 at hub height) would be visible from Dwelling 80, of which 29 turbines are located within 8km of this dwelling. The dwelling is located on a gently undulating terrain and appears to have openings orientated east-west. Aerial imagery indicates that the dwelling is surrounded by vegetation in its foreground to the west/southwest which is the direction in which the closest turbines (MH cluster) are located. A gentle rise in the topography to the dwelling's southwest will help screen majority of the views in this direction. Existing vegetation in the dwelling's foreground will also help fragment views of the MH turbines towards the southwest and it is likely that the tips of some turbines would be visible generally in the south. The visual impact resulting from the Project has been rated as **Low** from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: One (1) turbine (MH36) is located within the black line of visual magnitude. Six (6) turbines are located between the black & blue lines of visual magnitude but it is highly likely that the views to these will be limited by topography and vegetation.

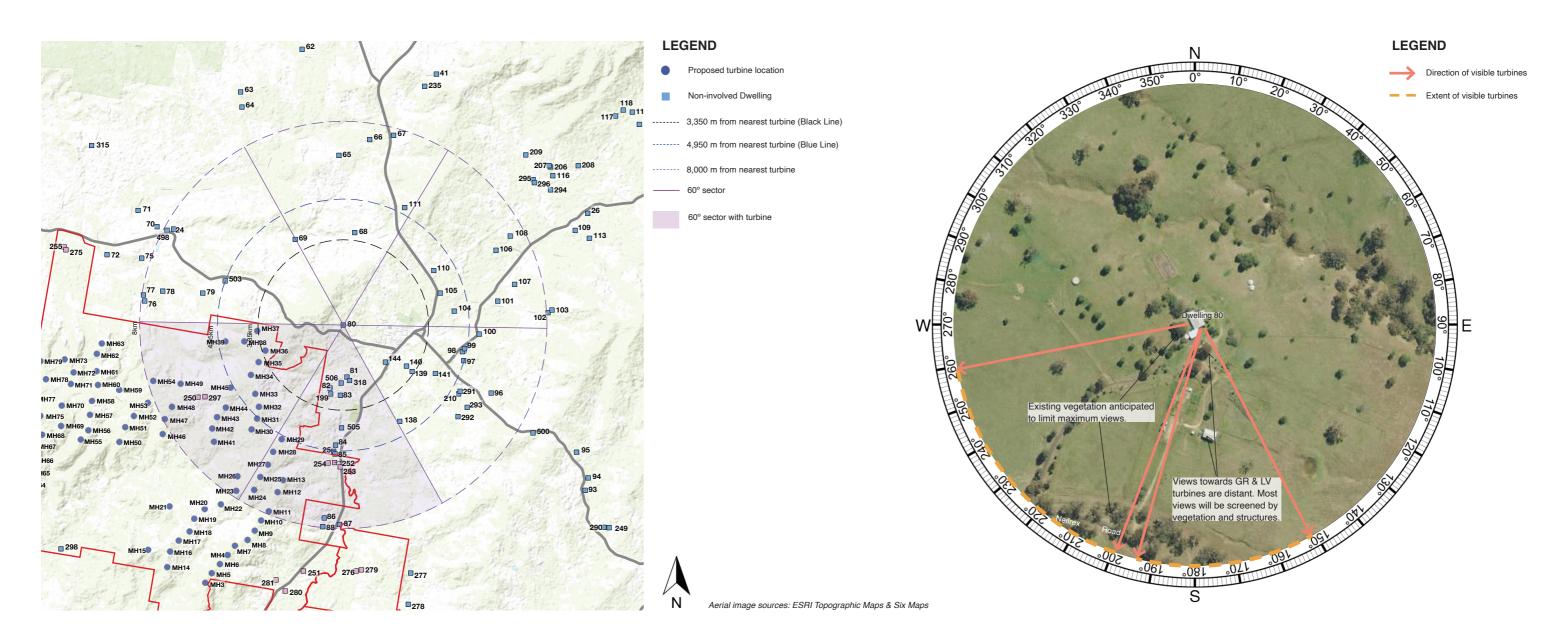
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation and topographical changes are likely to screen views of turbines.

Landscape Scenic Integrity: The Project will have a low impact on scenic integrity at this location. The proposed turbines do not have the potential to be a key feature in the visual catchment at this location.

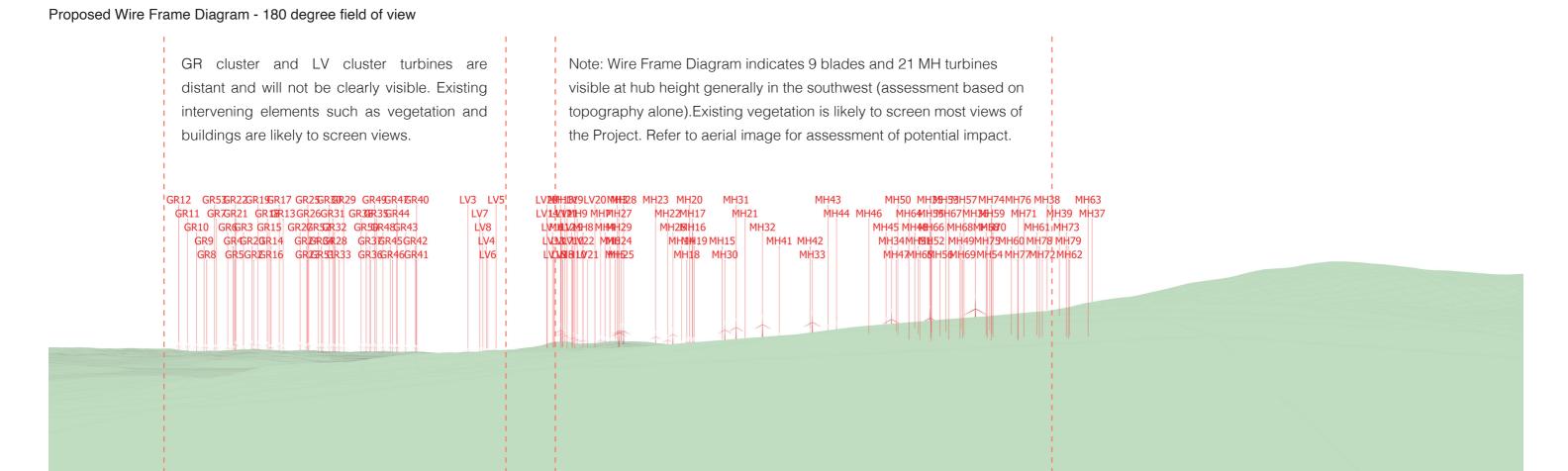
Key Feature Disruption: The turbines are likely to be partially visible element in the landscape, but will not diminish the key landscape features as viewed from this dwelling due to existing vegetation and topographical changes around the house.

### Mitigation Measures:

No mitigation measures are required.



### E.6. Dwelling Assessment Dwelling 80



### Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.

### E.7. Dwelling Assessment Dwelling 83 (Linked to Dwelling 82,199)

DWELLING 83				
Nearest proposed turbine (km):	2.88 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black Line (3350 m):	3	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU03: Agricultural flats	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	72 9 at tip 63 at hub	Visual Influence Zone:	VIZ2	

Visual Impact Rating: Moderate

#### Assessment Notes:

An assessment based on topography alone identified a total of 72 turbines (9 at tip height and 63 at hub height) would be visible, of which 40 turbines of the MH cluster are located within 8km of this dwelling. This assessment is a representation of the potential visual impact on Dwellings 83, 82 and 199. A viewpoint was taken on Scully Road to represent views from Dwelling 83 and surrounding dwellings. Aerial imagery indicates that Dwelling 199 and 82 are surrounded by dense vegetation which will help limit views. Dwelling 83's openings are oriented generally east-west. It is surrounded by dense vegetation to the north/northwest and scattered vegetation in the south/southwest. Prominent views of the Project will be available generally in the western direction. A gentle rise in the topography to the northwest and associated vegetation will help screen views towards some turbines in this direction. Existing vegetation along the dwelling's western boundary will help fragment some views but given the close proximity and elevated position of the Project, it is likely that the turbines will be visible. The visual impact resulting from the Project has been rated as *Moderate* from Dwelling 83.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Three (3) turbines (MH29, MH32, MH33) are located within the black line of visual magnitude. 15 turbines are located between the black & blue lines of visual magnitude but it is likely that most of these will be screened.

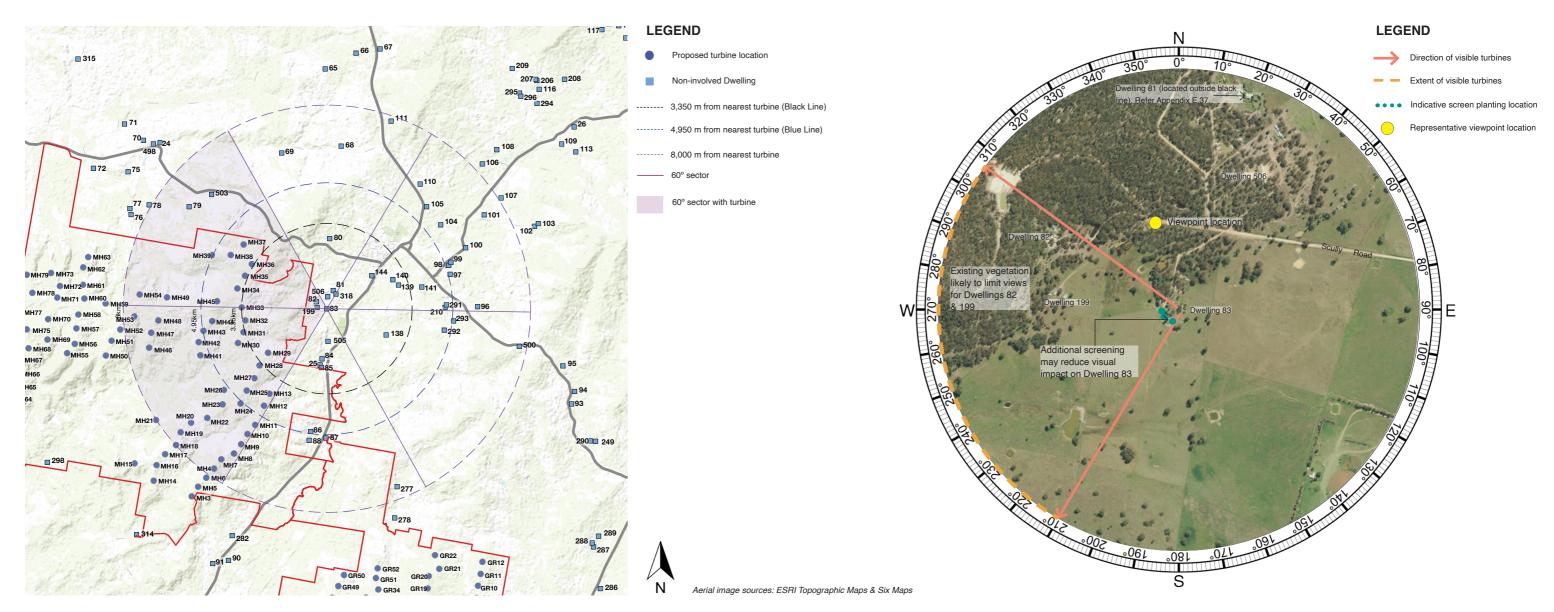
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation and topographical changes are likely to screen views.

Landscape Scenic Integrity: The Project will have a moderate to low impact on scenic integrity at this location. The proposed turbines have the potential to be visible at this location.

Key Feature Disruption: The Project will be visible on the ridgeline in the southwestern direction. However, views will be partially fragmented by existing vegetation. Additional screening is recommended.

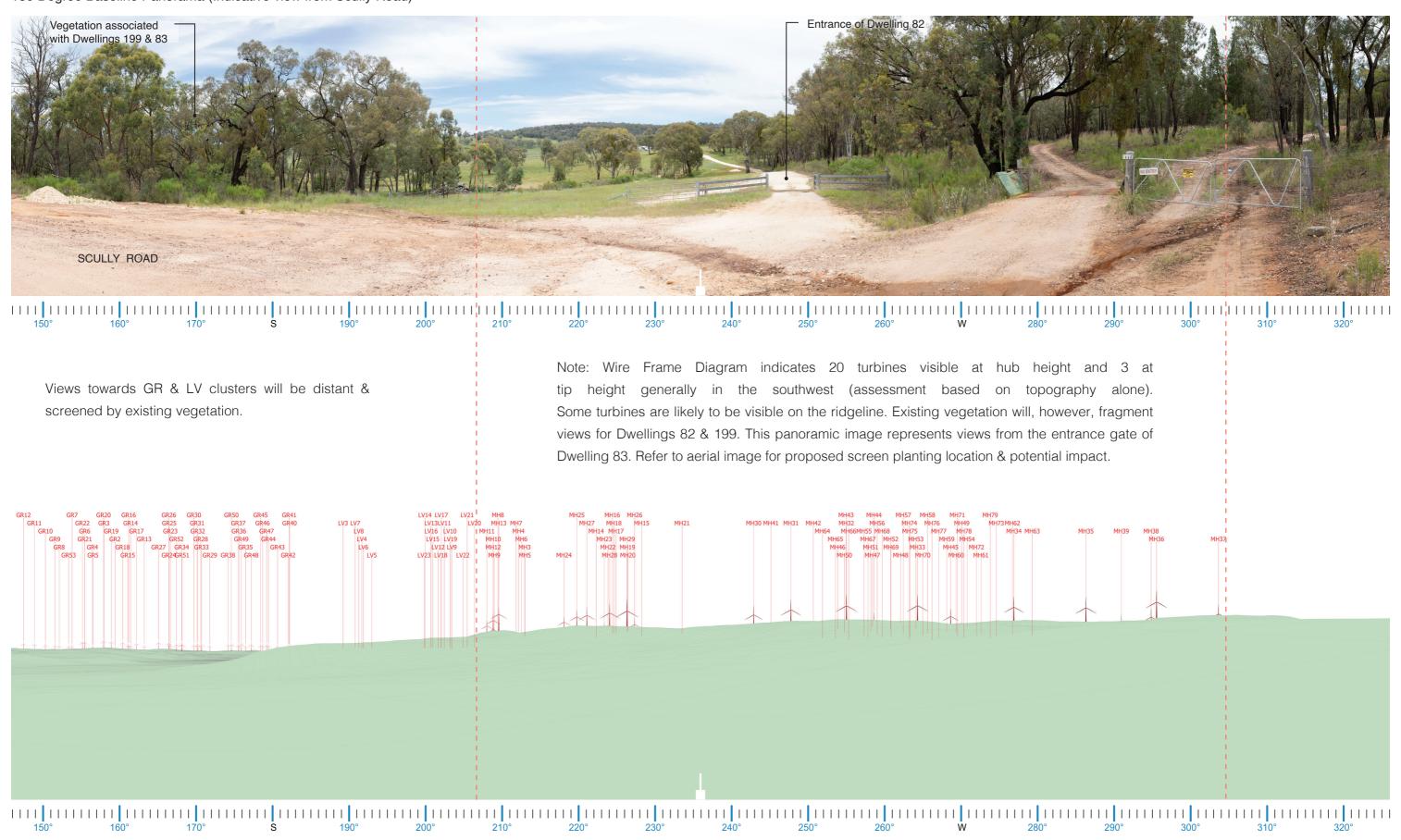
### Mitigation Measures:

If deemed necessary, screen planting to the southwest of Dwelling 83 would screen views to the Project and reduce the potential visual impact. Existing vegetation, however, would be sufficient in screening views to the northwest. Consultation with the landowner would be required to discuss appropriate mitigation methods for Dwelling 83. No mitigation measures required for Dwellings 82 & 199.



### E.7. Dwelling Assessment Dwelling 83

180 Degree Baseline Panorama (Indicative view from Scully Road)



Proposed Wire Frame Diagram - 180 degree field of view from Scully Road

### E.8. Dwelling Assessment Dwelling 84

DWELLING 84			
Nearest proposed turbine (km):	2.13 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	7	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU03: Agricultural flats
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	66 11 at tip 55 at hub	Visual Influence Zone:	VIZ2

Visual Impact Rating: High

#### Assessment Notes:

An assessment based on topography alone identified a total of 66 turbines (11 at tip height and 55 at hub height) would be visible, of which 47 turbines are located within 8 km of this dwelling. Aerial imagery indicates that the openings of the dwelling are generally orientated east-west and the residence is surrounded by scattered to moderately dense vegetation. Prominent views of the Project will be in the western direction and the dwelling is surrounded by scattered windbreak plantations on the western side. A gentle rise in the topography to the northwest and sparse vegetation on the mound will help fragment few views towards the MH turbines. Existing vegetation along the dwelling's western boundary will also help to partially fragment views but given the close proximity of the Project, it is likely that the turbines will be visible. The visual impact resulting from the Project has been rated as *High* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Seven (7) turbines are located within the black line of visual magnitude. 19 turbines are located between the black & blue lines of visual magnitude and it is likely that some views will be fragmented.

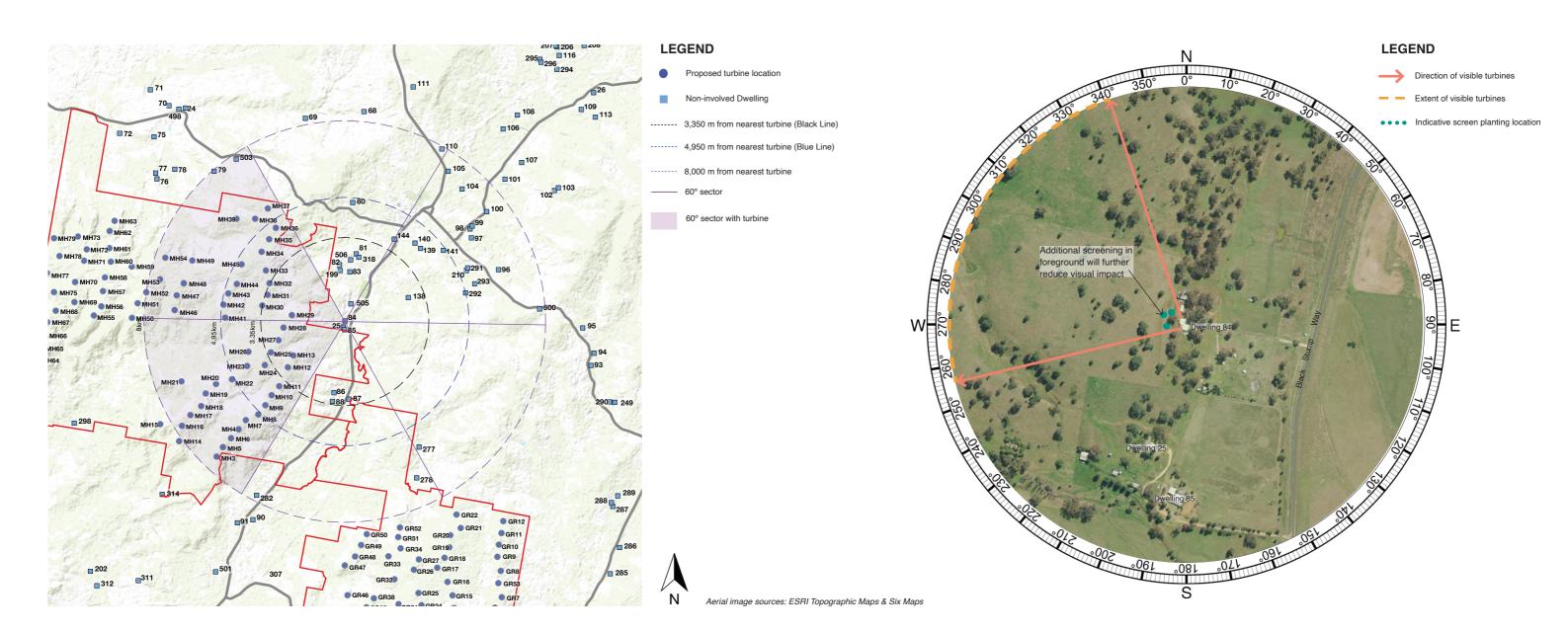
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation and topographical changes are likely to screen views towards turbines in the southwestern direction.

Landscape Scenic Integrity: The Project will have a high impact on scenic integrity at this location. The proposed turbines have the potential to be a dominant feature in the visual catchment of this dwelling.

Key Feature Disruption: The Project will be a dominant element on the ridgeline, especially in the western direction.

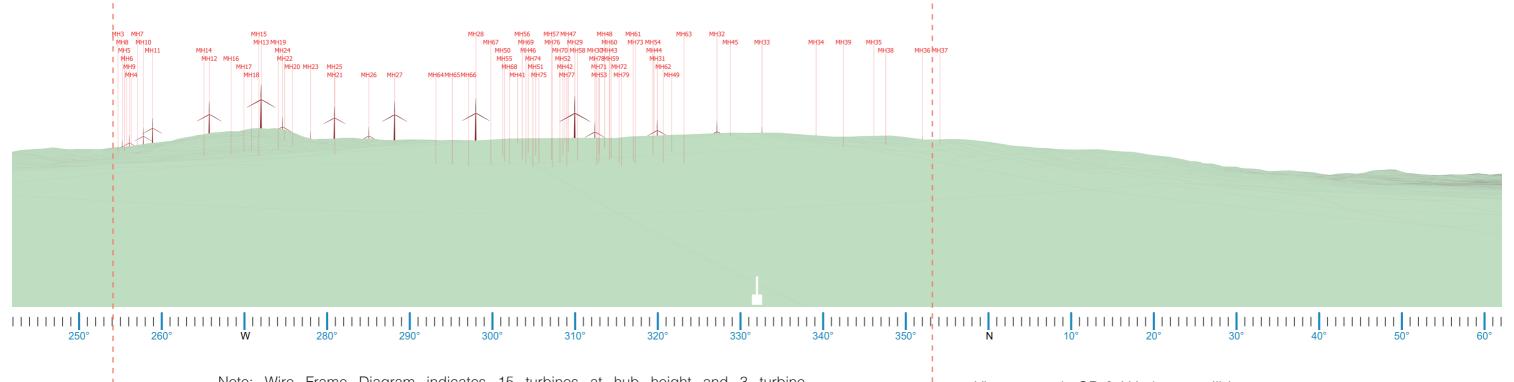
#### Mitigation Measures

Supplementary screen planting generally in the west is recommended in order to reduce potential visual impact of the turbines. Consultation with the landowner would be required to discuss appropriate mitigation methods.



### E.8. Dwelling Assessment Dwelling 84

Proposed Wire Frame Diagram - 180 degree field of view (Generally Northwest)



Note: Wire Frame Diagram indicates 15 turbines at hub height and 3 turbine blades visible generally in the northwest (assessment based on topography alone). Some turbines are likely to be visible on the ridgeline due to lack of intervening elements. Refer to aerial image for proposed screen planting location & potential impact.

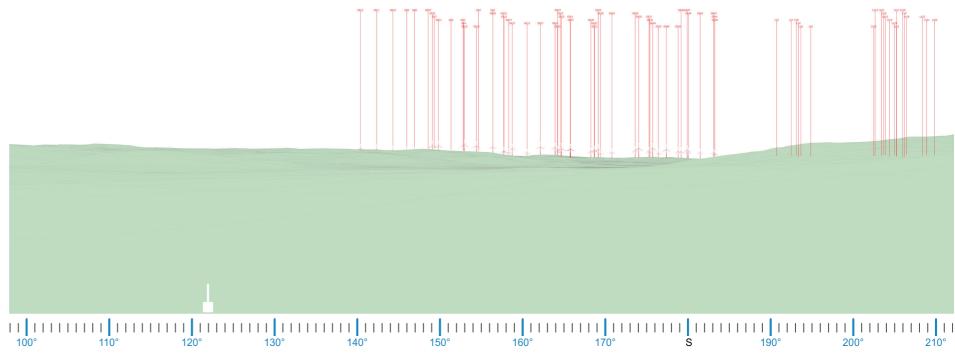
Views towards GR & LV clusters will be distant & unclear. These are likely to be screened by vegetation and buildings.

### Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.



Proposed Wire Frame Diagram - 180 degree field of view (Generally South)

### E.9. Dwelling Assessment Dwelling 85

DWELLING 85				
Nearest proposed turbine (km):	2.18 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black Line (3350 m):	6	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU03: Agricultural flats	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	<b>76</b> 17 at tip 59 at hub	Visual Influence Zone:	VIZ2	

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified that a total of 76 turbines (17 at tip height and 59 at hub height) would be visible, of which 47 turbines are within 8 km of this dwelling. A viewpoint was taken in the backyard on the western side of the house to assess the impact of the Project on the views from this property. Aerial imagery indicates that the dwelling is surrounded by dense vegetation generally in the western direction. Prominent views of the Project will be available in this direction. A gentle rise in the topography closer to the north/northwest will help screen views towards some turbines. Views in all other directions are likely to be screened by vegetation or existing structures. The presence of dense vegetation in the dwelling's foreground will help screen most views and it is antitipcated that most views to turbine blades will be partially screened. There are eight (8) turbines within the black line of visual magnitude and 12 within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Six (6) turbines are located within the black line of visual magnitude. 12 turbines are located between the black & blue lines of visual magnitude but it is highly likely that views will be fragmented.

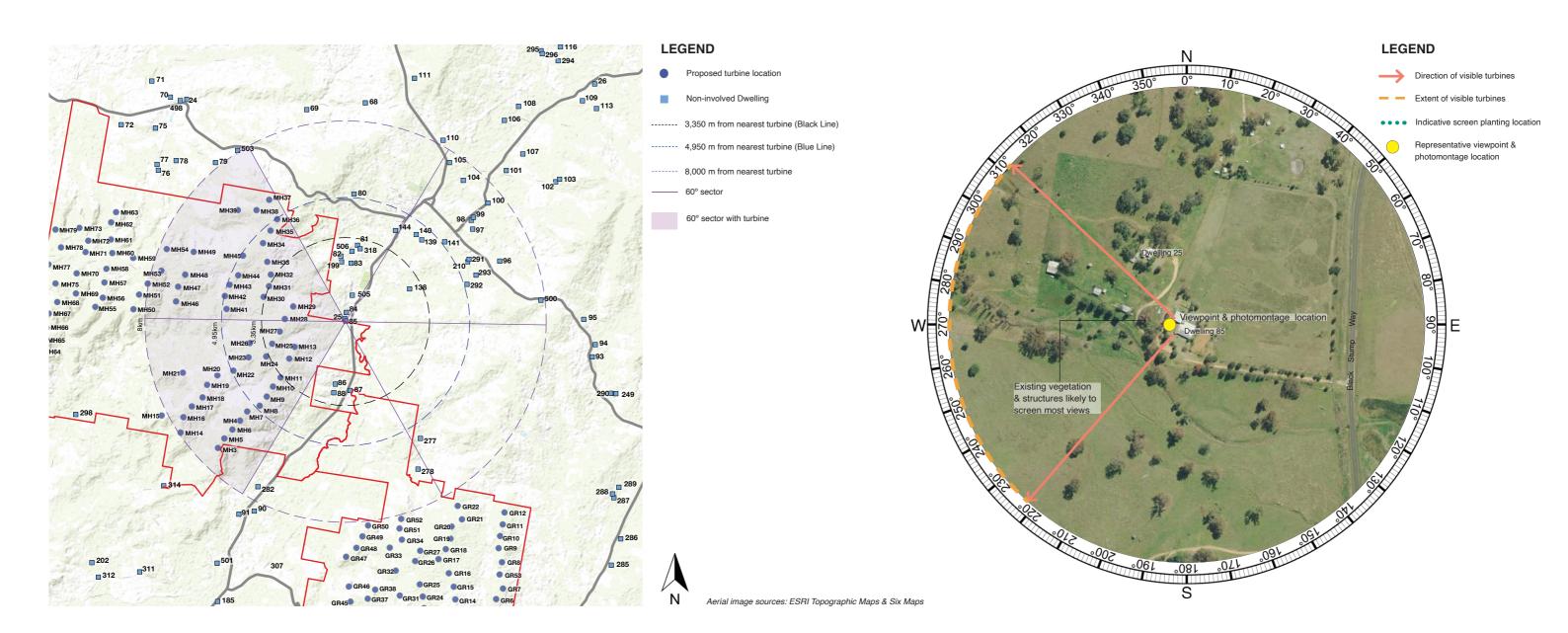
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation and topographical changes will limit most views of the Project.

Landscape Scenic Integrity: The Project will have a low impact on scenic integrity at this location. The proposed turbines have the potential to be partially visible at this location but majority of the turbines will be screened.

Key Feature Disruption: The Project will not disrupt views to any key landscape features as viewed from this dwelling. Existing vegetation limits views to undulations.

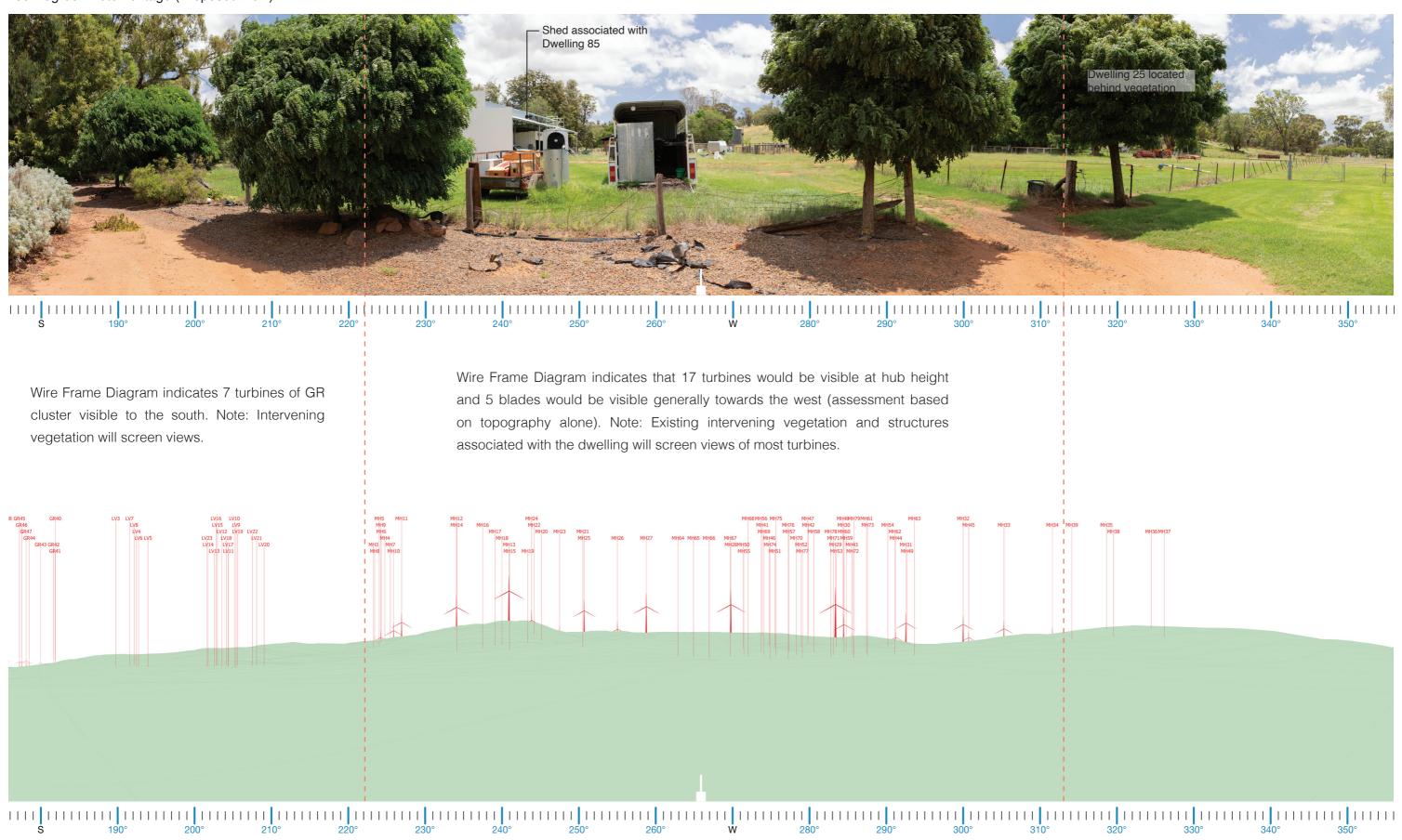
### Mitigation Measures:

Existing vegetation along the house's boundary would be sufficient to screen views. No mitigation measures required.



### E.9. Dwelling Assessment Dwelling 85

180 Degree Photomontage (Proposed view)



Proposed Wire Frame Diagram - 180 degree field of view

### E.10. Dwelling Assessment Dwelling 86 (Linked to Dwelling 88)

DWELLING 86				
Nearest proposed turbine (km):	2.10 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black Line (3350 m):	10	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	4	Landscape Character Unit:	LCU02: Undulating farmlands	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Moderate	
Number of potentially visible turbines (Based on topography alone)	65 4 at tip 61 at hub	Visual Influence Zone:	VIZ2	

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 65 turbines (4 at tip height and 61 at hub height) would be visible from Dwelling 86. This assessment also considers the potential impact of the Project on Dwelling 88. A viewpoint was taken along the western fenceline of Dwelling 86 to assess the visual impact of the Project on the dwelling and it can be concluded that majority of the views of turbines will be screened by existing vegetation and topographical changes. Dwelling 88 is surrounded by dense vegetation on the west and the east which will help limit all views of the Project. Dwelling 86 is located on a moderately undulating terrain. Aerial imagery indicates a patch of moderately dense vegetation in the middleground to the west of Dwelling 86 which is likely to assist in limit some views of the MH turbines. Vegetation to the east/southeast of the dwelling will help in limiting views of the GR turbines. There are 10 turbines within the black line of visual magnitude and 16 within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: 10 turbines (MH8, MH9, MH10, MH11, MH12, MH13, MH24, MH25, MH27 & MH28) are located within the black line of visual magnitude. 16 turbines are located between the black & blue lines of visual magnitude but it is highly likely that these will be screened by topography and vegetation.

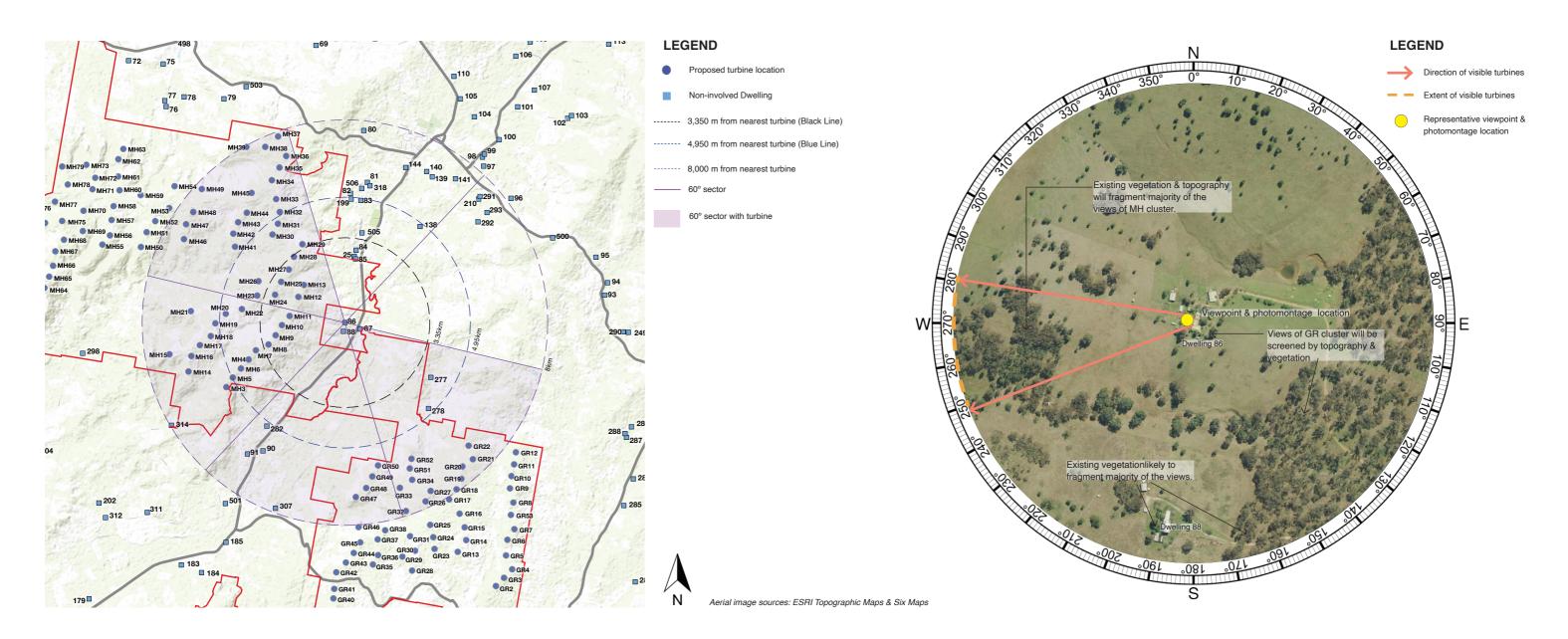
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to four (4) 60 degree sectors. However, existing vegetation & terrain will screen views of most turbines.

Landscape Scenic Integrity: The Project will have a low impact on scenic integrity at this location. The proposed turbines have the potential to be partially visible at this location.

Key Feature Disruption: The Project will be partially visible on the ridgeline, however, it will not disrupt views to any key features.

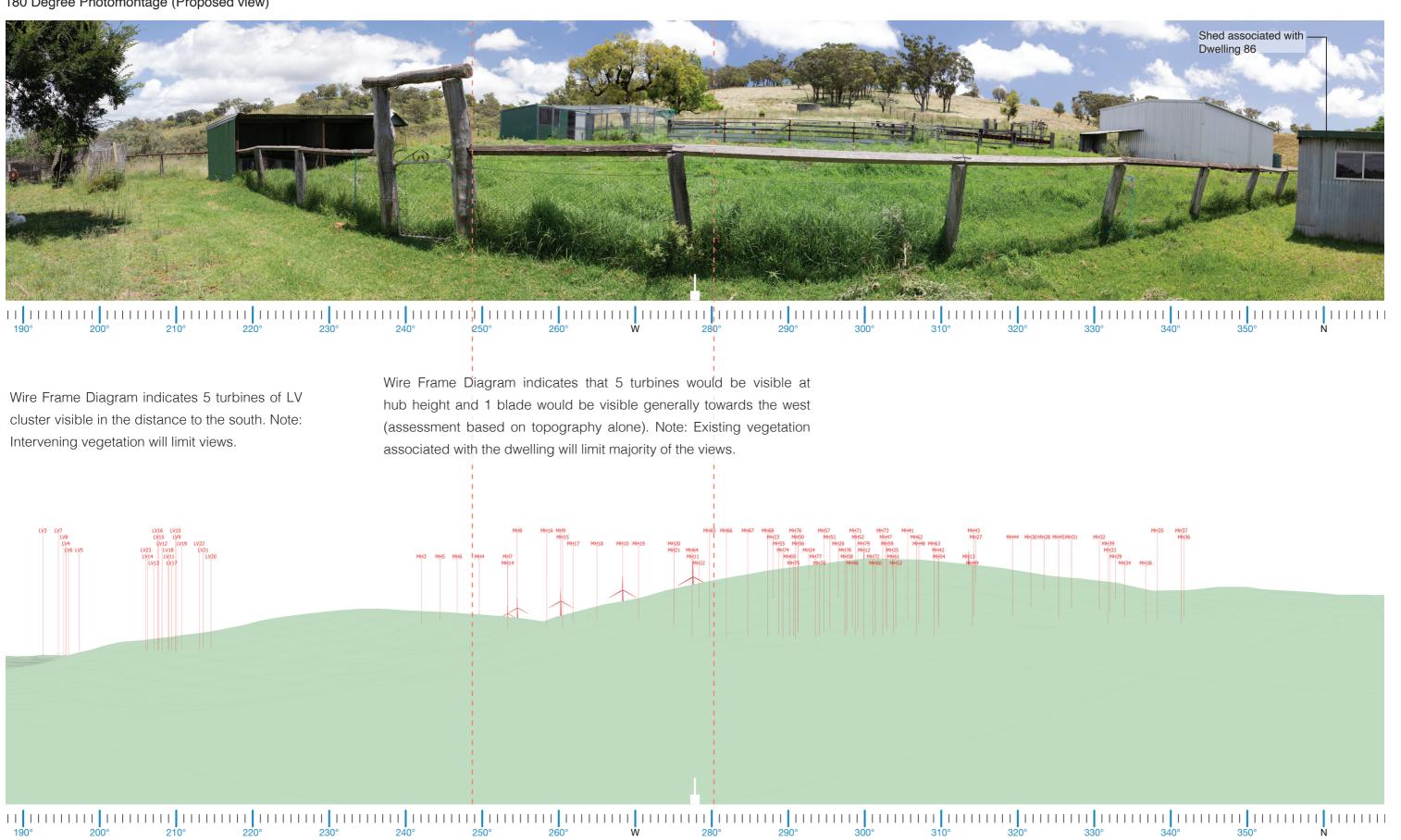
#### Mitigation Measures:

Existing vegetation around the western and eastern boundaries of both Dwellings 86 & 88 would be sufficient to screen views. No mitigation measures required.



### E.10. Dwelling Assessment Dwelling 86

180 Degree Photomontage (Proposed view)



Proposed Wire Frame Diagram - 180 degree field of view

### E.11. Dwelling Assessment Dwelling 87

DWELLING 87				
Nearest proposed turbine (km):	2.74 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black Line (3350 m):	5	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	4	Landscape Character Unit:	LCU03: Alluvial plains	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	89 18 at tip 71 at hub	Visual Influence Zone:	VIZ2	

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 89 turbines (18 at tip height and 71 at hub height) would be visible within 8000m from Dwelling 87. The dwelling is located on a fairly flat terrain near the Coolaburragundy River. Aerial imagery indicates that the house is not surrounded by dense vegetation in the foreground, however, there is a belt of dense vegetation on the western side of Black Stump Way which will help in limiting views of the MH cluster. Towards the southeast, the riparian vegetation associated with the Coolaburragundy River will help in limiting views of the GR and LV clusters. There are five (5) turbines within the black line of visual magnitude and twelve (12) within the blue line of this dwelling. Views towards the turbines, however, are likely to be fragmented by existing vegetation. It is likely that the blades of some turbines might be visible at this location. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Five (5) turbines (MH9, MH10, MH11, MH12, MH13) are located within the black line of visual magnitude. Twelve (12) turbines are located between the black & blue lines of visual magnitude.

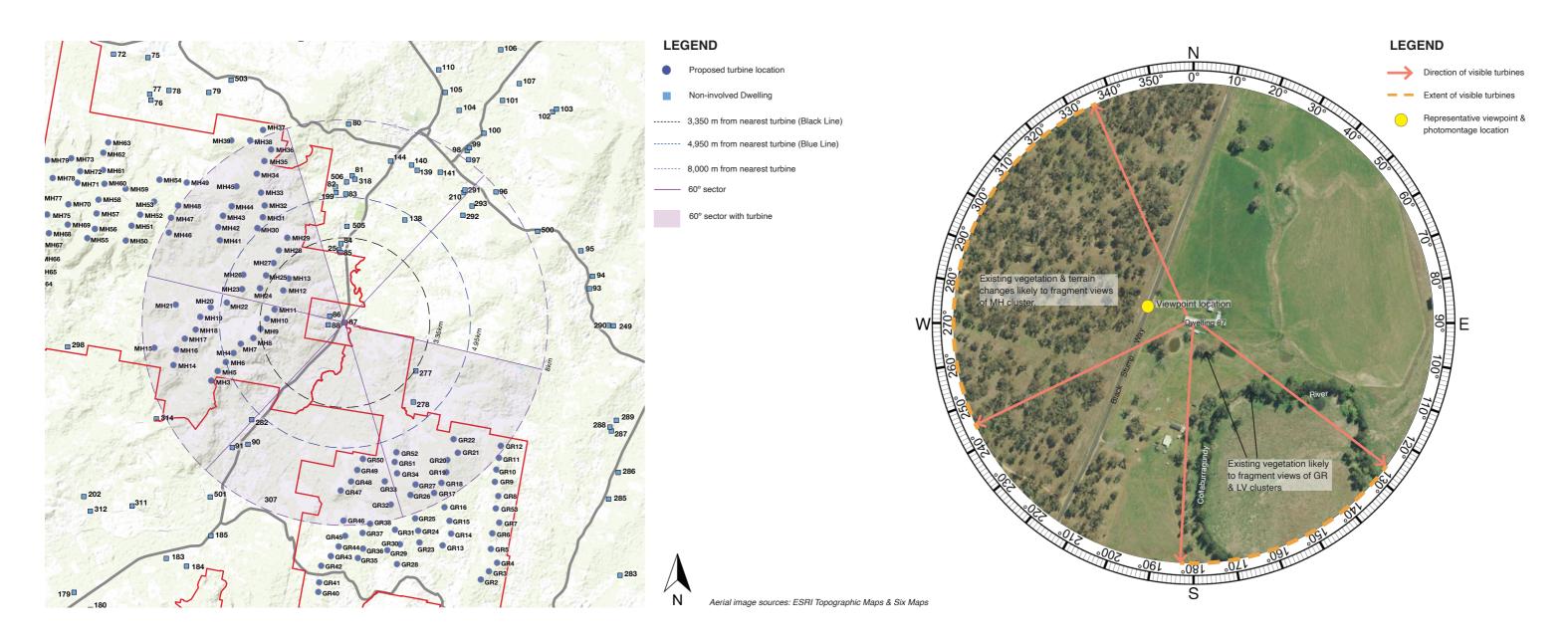
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to four (4) 60 degree sectors. However, existing vegetation is likely to screen most views towards turbines.

Landscape Scenic Integrity: The Project will have a low impact on scenic integrity at this location. It is highly likely that turbines within 3350m will be screened by existing vegetation.

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

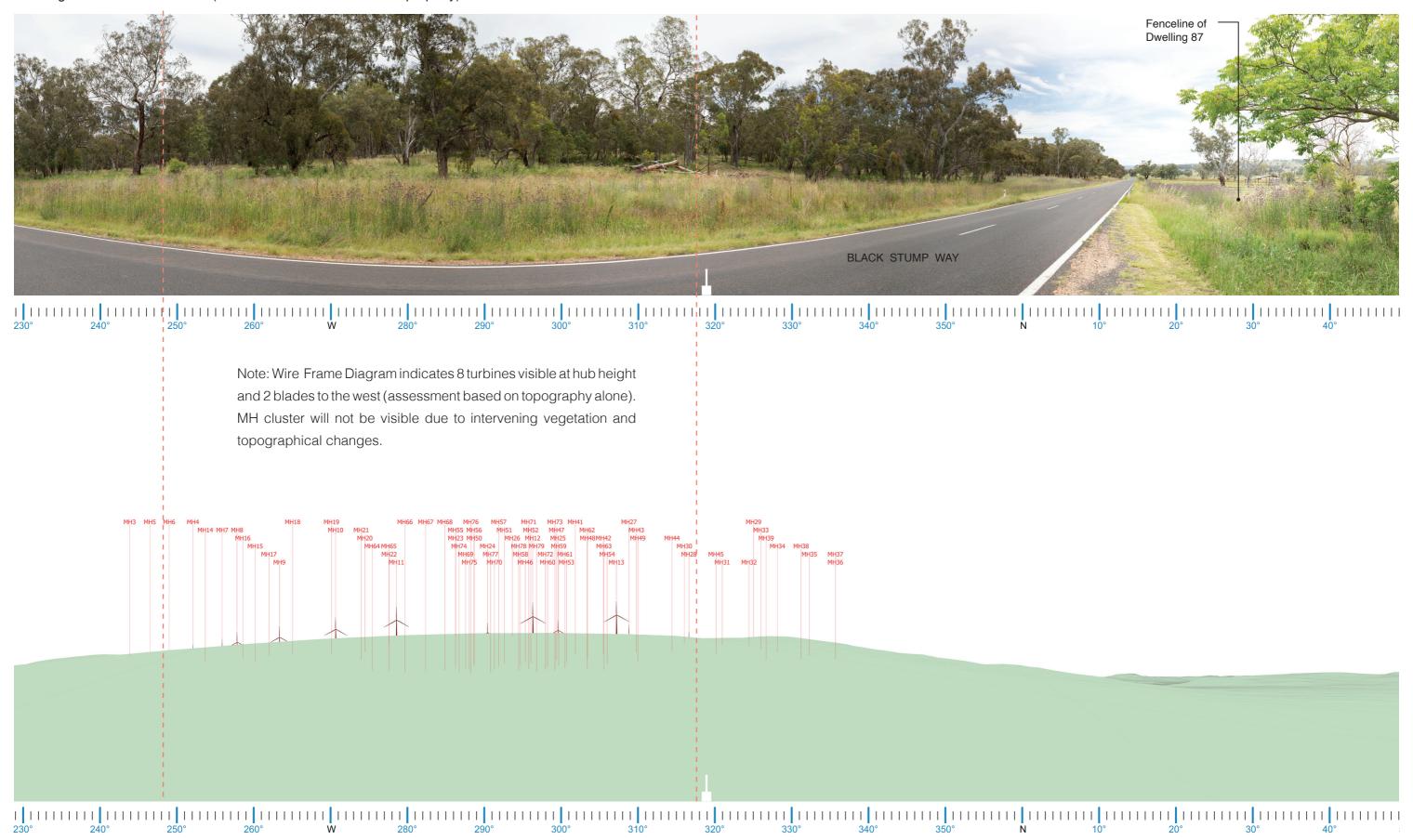
### Mitigation Measures:

No mitigation measures are required



### E.11. Dwelling Assessment Dwelling 87

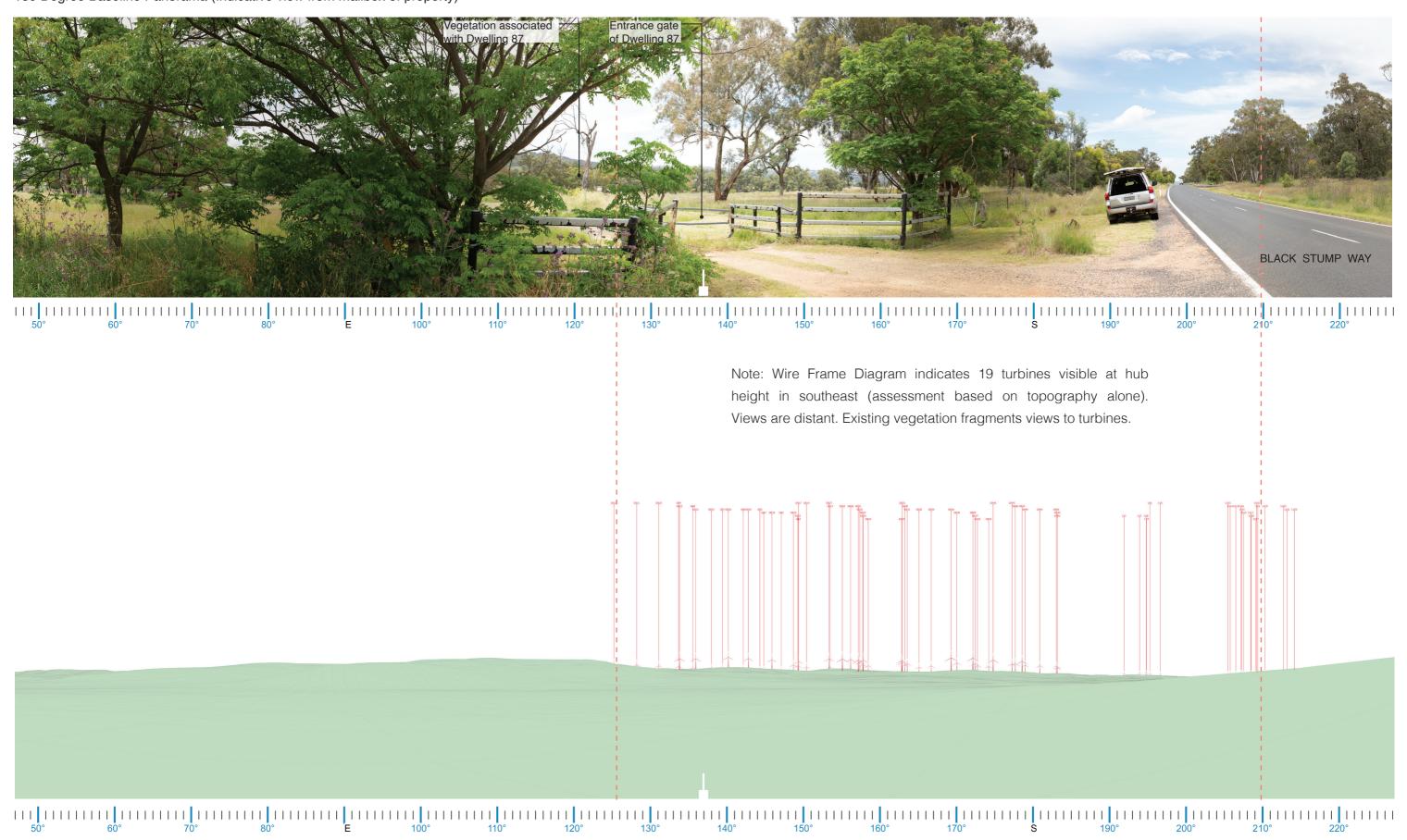
180 Degree Baseline Panorama (Indicative view from mailbox of property)



Proposed Wire Frame Diagram - 180 degree field of view from mailbox of property

### E.11. Dwelling Assessment Dwelling 87

180 Degree Baseline Panorama (Indicative view from mailbox of property)



### E.12. Dwelling Assessment Dwelling 90 (Linked to Dwelling 91)

DWELLING 90				
Nearest proposed turbine (km):	2.90 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black Line (3350 m):	2	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	4	Landscape Character Unit:	LCU03: Alluvial plains	
Number of visible 60° Sectors (Based on 3D Assessment):	3	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	97 17 at tip 80 at hub	Visual Influence Zone:	VIZ2	

Visual Impact Rating: Moderate

#### Assessment Notes:

An assessment based on topography alone identified a total of 97 turbines (17 at tip height and 80 at hub height) would be visible from this dwelling. Of these, 58 turbines are located within 8km of the dwelling. A viewpoint was taken west of the dwelling to represent views from the residence. The viewpoint also represents views from Dwelling 91 which is surrounded by dense vegetation in the northern and southeastern directions, thus eliminating the need for mitigation. Generally, Dwelling 90 is orientated east-west and is surrounded by dense vegetation in the northern, eastern and southeastern directions as seen in the aerial imagery. Nearest wind turbines that would be potentially visible belong to the MH cluster in the north/northwest direction. Existing windbreak vegetation in the foreground will fragment some views but it is likely that the turbines will be visible due to their elevated position. Additional screening is recommended to limit all views of the Project. It is highly unlikely that turbines associated with the GR and LV clusters would not be visible from the dwelling. This is due to the existing vegetation that borders the eastern and southern boundaries. There are two (2) turbines within the black line of visual magnitude and 13 within the black and blue lines of this dwelling. The visual impact resulting from the Project has been rated as *Moderate* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Two (2) turbines (MH3 & MH5) are located within the black line of visual magnitude. 13 turbines are located between the black & blue lines of visual magnitude.

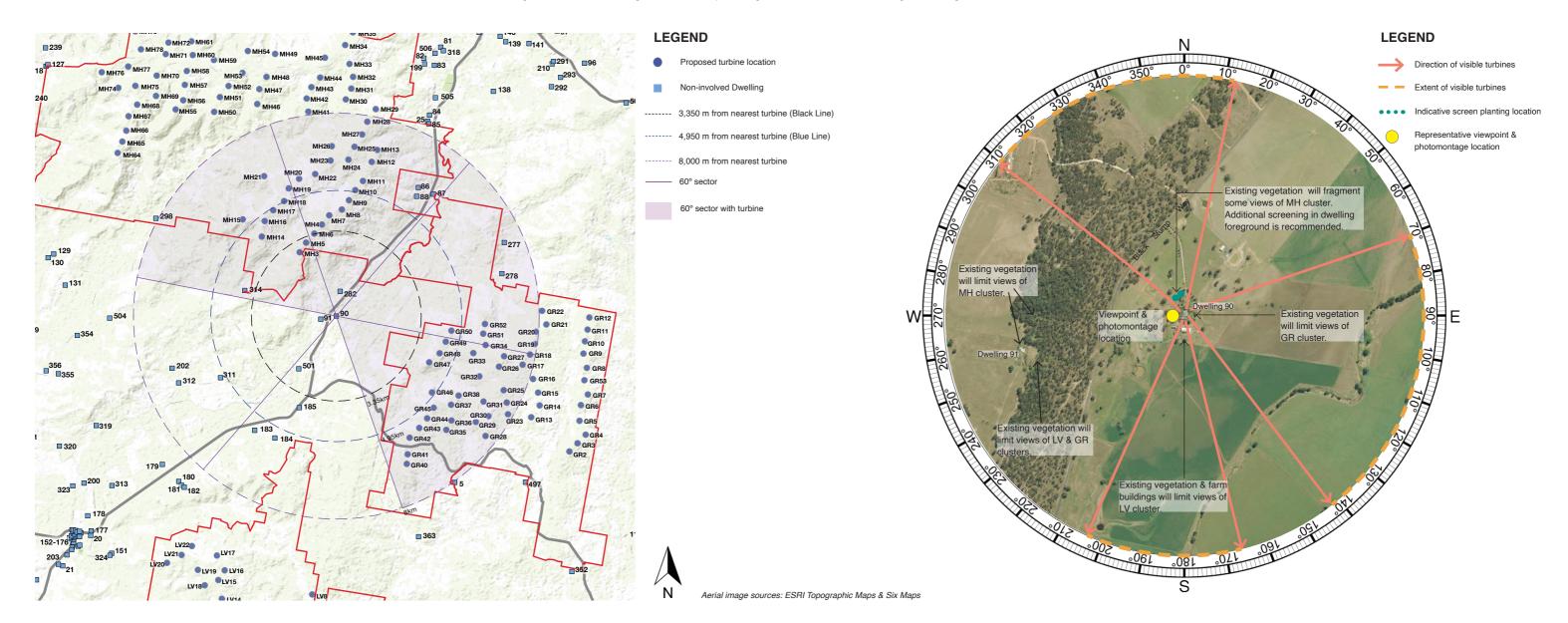
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to four (4) 60 degree sectors. However, existing vegetation and topographical changes are likely to fragment some views.

Landscape Scenic Integrity: The proposed turbines have the potential to be visible at this location. The Project will have a moderate to low impact on scenic integrity at this location.

Key Feature Disruption: Views towards key landscape features will be partially disrupted in the northwest.

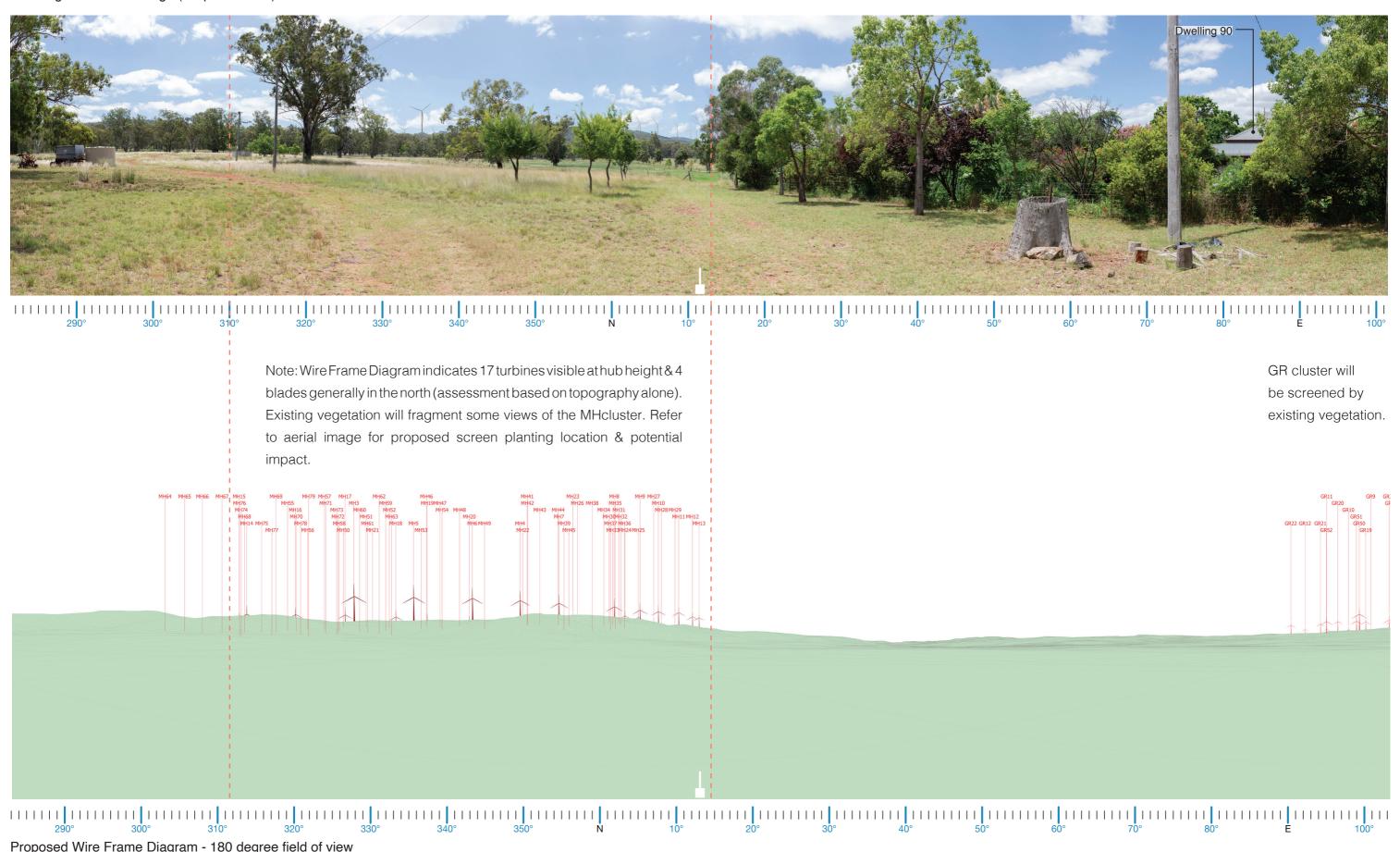
### Mitigation Measures:

Additional screen planting to the northwest of Dwelling 90 would help screen views of MH cluster and reduce the potential visual impact. Consultation with the landowner would be required to discuss appropriate mitigation methods. Dwelling 91 does not require mitigation measures due to existing intervening elements.



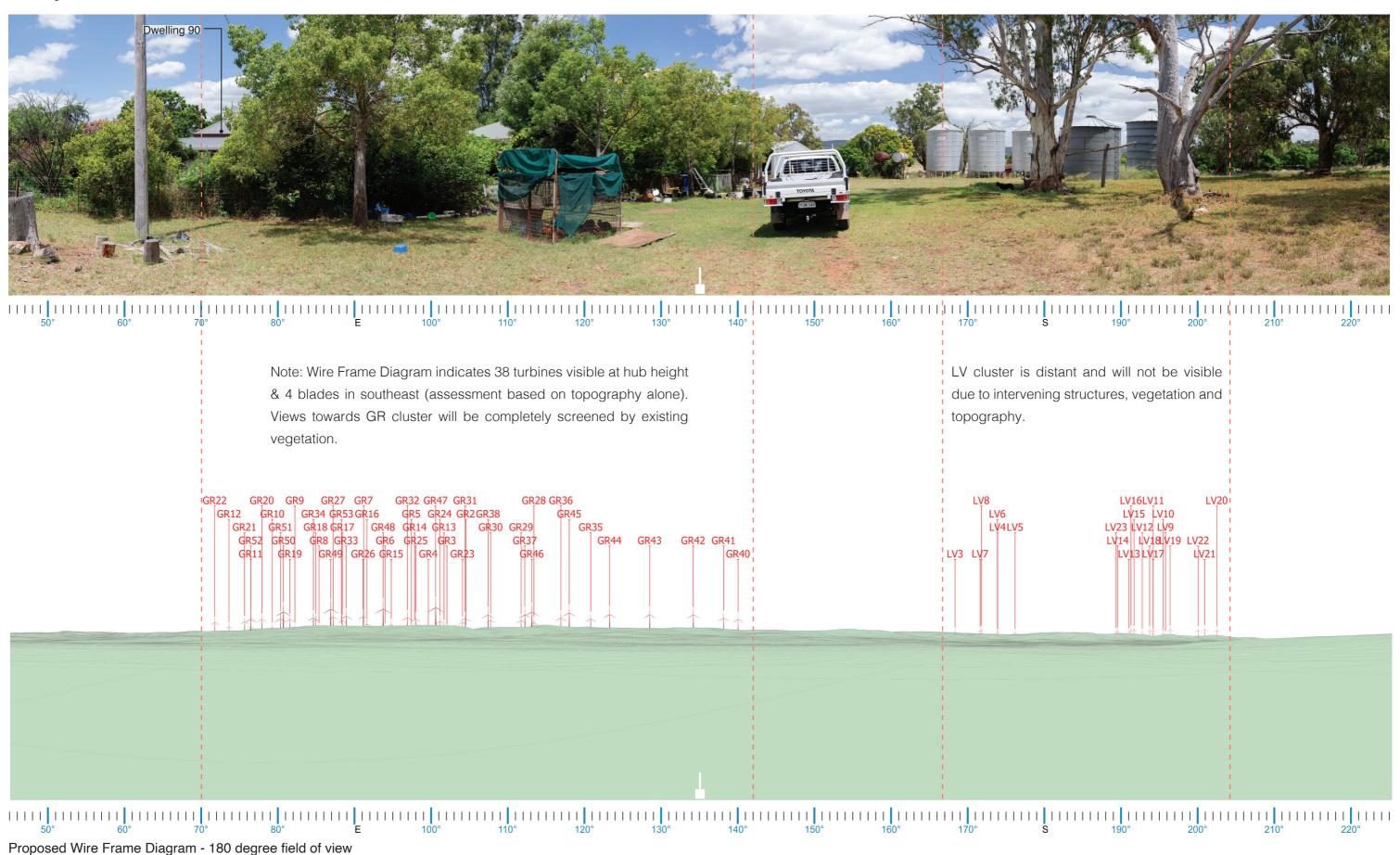
### E.12. Dwelling Assessment Dwelling 90

180 Degree Photomontage (Proposed view)



## E.12. Dwelling Assessment Dwelling 90

## 180 Degree Baseline Panorama



## E.13. Dwelling Assessment Dwelling 239

DWELLING 239			
Nearest proposed turbine (km):	2.42 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	3	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU01: Vegetated hills
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Moderate
Number of potentially visible turbines (Based on topography alone)	94 36 at tip 58 at hub	Visual Influence Zone:	VIZ2

**Visual Impact Rating: Negligible** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 94 turbines (36 at tip height and 58 at hub height) would be visible from this dwelling however only 30 turbines are located within 8km of this dwelling. Aerial imagery indicates that the dwelling is surrounded by dense vegetation in all directions. The house is located on an undulating terrain and a 3D assessment suggests that the topography limits views in the eastern direction. Views of the Project will be available generally in the southeast. The terrain gradually falls from north to south and vegetation associated with the hill will help screen views towards turbines in the east. Views towards the southeast will be fragmented and it is highly likely that majority of the Project will be screened. There are three (3) turbines within the black line of visual magnitude and twelve (12) within the blue line of this dwelling. The visual impact resulting from the Project has been rated as **Negligible** from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Three (3) turbines (MH74, MH76 & MH79) are located within the black line of visual magnitude. 15 turbines are located between the black & blue lines of visual magnitude.

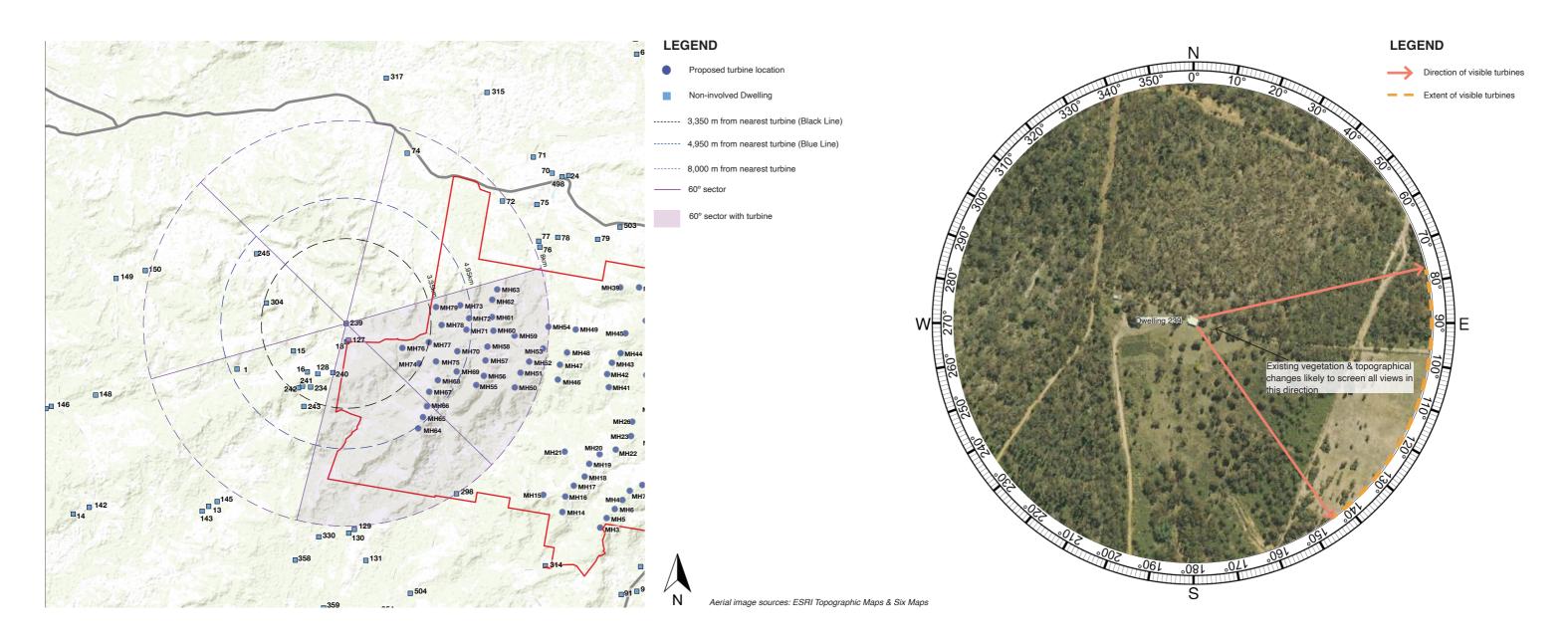
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation and topographical changes are likely to screen views towards majority of the Project.

Landscape Scenic Integrity: The Project will have no impact on scenic integrity at this location since views are likely to be screened by existing vegetation and topography.

Key Feature Disruption: The Project will not disrupt any key features viewed from this location.

#### Mitigation Measures:

No mitigation measures are required.



# E.14. Dwelling Assessment Dwelling 240

DWELLING 240			
Nearest proposed turbine (km):	2.91 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	1	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU02: Undulating farmlands
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Moderate
Number of potentially visible turbines (Based on topography alone)	13 6 at tip 7 at hub	Visual Influence Zone:	VIZ2

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 13 turbines (6 at tip height and 7 at hub height) would be visible within 8 km of Dwelling 240. The dwelling is located on a gently undulating terrain. Aerial imagery indicates that the house is surrounded by scattered vegetation in the foreground. Turbines are likely to be visible in the eastern direction but majority of these will be screened by stands of existing vegetation and topographical changes. It is possible that only the tips of some turbines may be visible. Terrain in the eastern direction is generally undulating with stands of windbreak vegetation. There is one (1) turbine within the black line of visual magnitude and 12 within the blue line of this dwelling. The visual impact resulting from the Project has been rated as **Low** from this dwelling.

## Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: One (1) turbine (MH76) is located within the black line of visual magnitude. 12 turbines are located between the black & blue lines of visual magnitude.

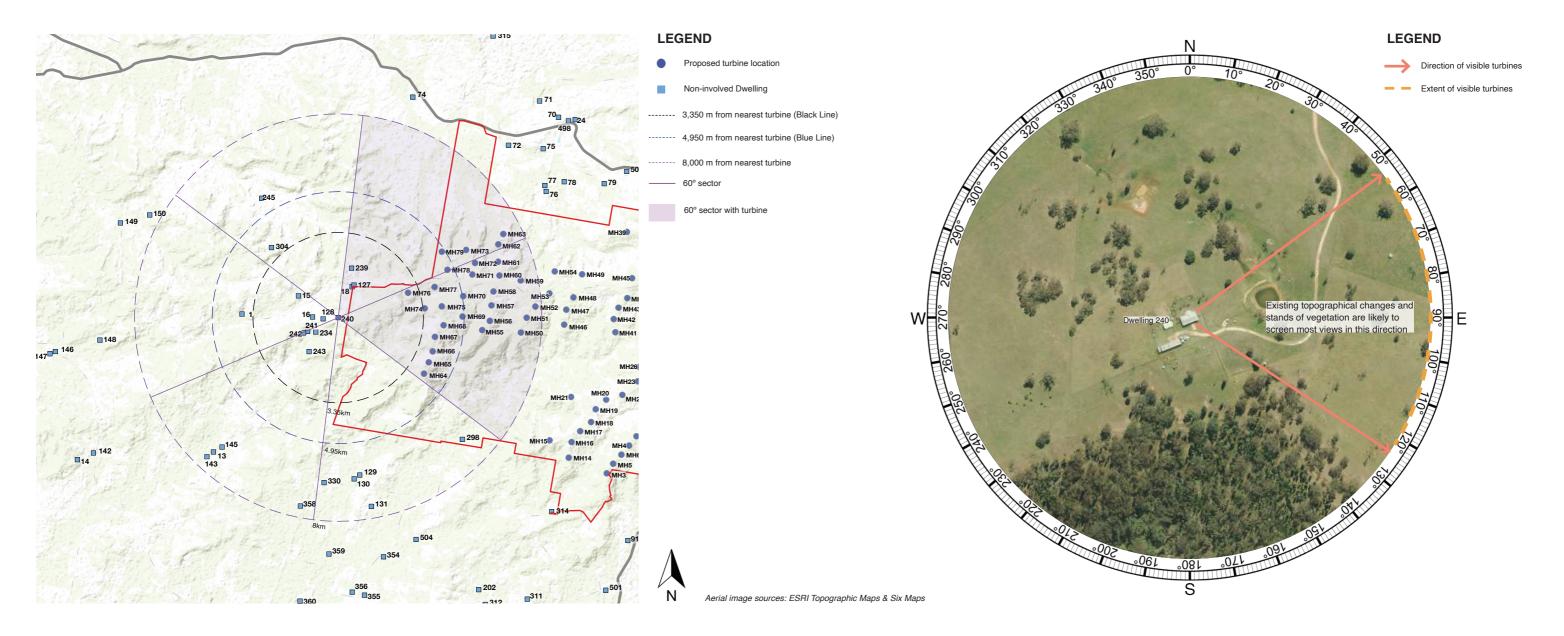
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation and terrain are likely to screen views of turbines.

Landscape Scenic Integrity: The Project will have not impact the scenic intergrity because it is highly likely that majority of the turbines will be screened by topography.

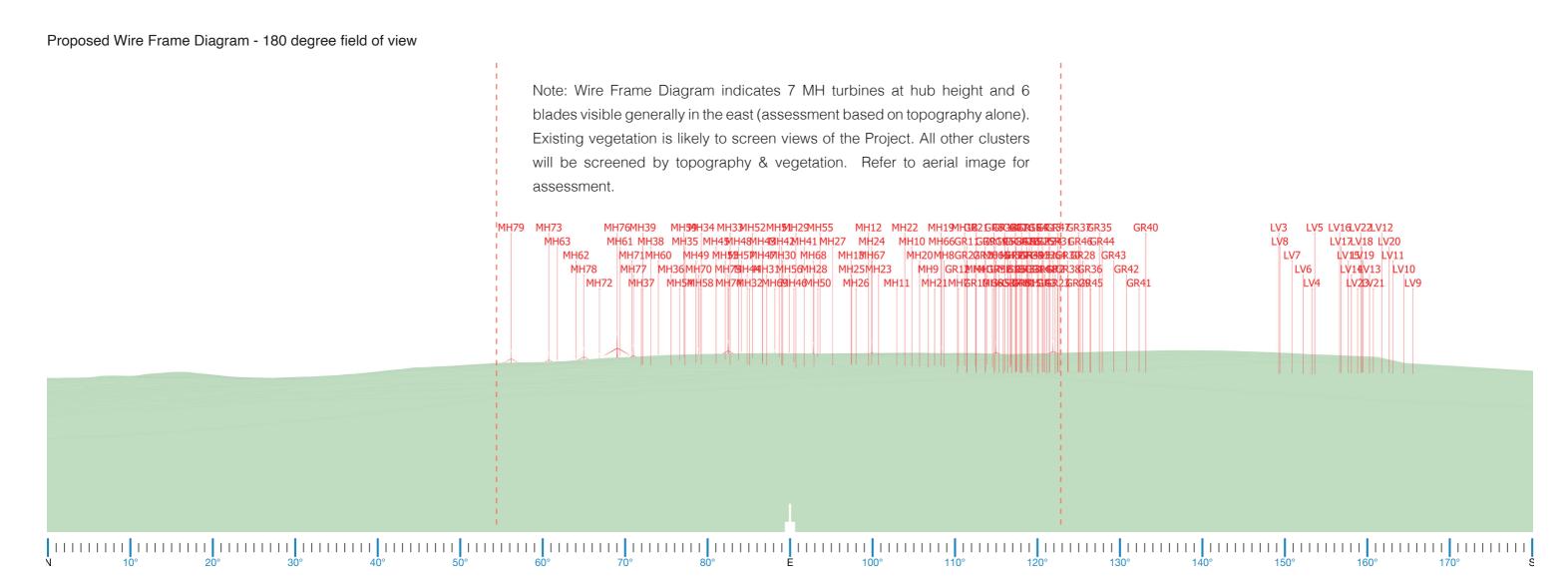
Key Feature Disruption: The Project will not be visible and will be screened by existing landscape elements. No key features will be disrupted.

#### Mitigation Measures:

No mitigation measures are required



# E.14. Dwelling Assessment Dwelling 240



## Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.

## E.15. Dwelling Assessment Dwelling 282

DWELLING 282			
Nearest proposed turbine (km):	2.22 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	6	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	4	Landscape Character Unit:	LCU04: Agricultural flats
Number of visible 60° Sectors (Based on 3D Assessment):	3	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	89 10 at tip 79 at hub	Visual Influence Zone:	VIZ2

Visual Impact Rating: Moderate

#### Assessment Notes:

An assessment based on topography alone identified a total of 89 turbines (10 at tip height and 79 at hub height) would be visible from this dwelling. A viewpoint was taken on the southwestern side of the dwelling to assess the potential visual impact. Aerial imagery indicates that the dwelling is surrounded by moderately dense vegetation in all directions. Moderate to dense roadside vegetation along Black Stump Way helps screen views of the GR and LV clusters in the southeast/south directions. The dwelling is situated on a flat terrain but is surrounded by dense windbreak plantations to the north which helps fragment most views of the MH cluster (nearest wind turbines). It is likely that the tips of some of the MH turbines might be visible due to their elevated position. There are six (6) turbines within the black line of visual magnitude and 13 within the blue line of this dwelling. The visual impact has been rated as *Moderate* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Six (6) turbines (MH3, MH5, MH6, MH4, MH7 & MH8) are located within the black line of visual magnitude. 13 turbines are located between the black & blue lines of visual magnitude.

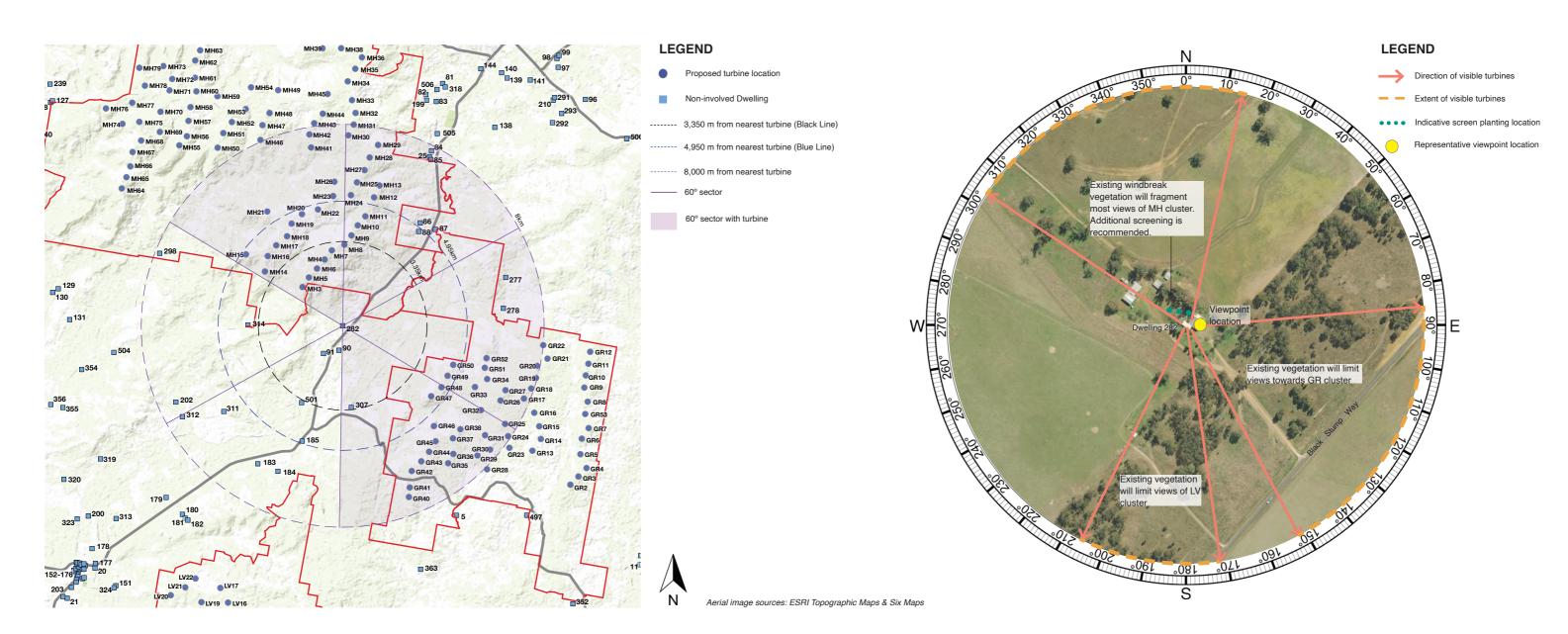
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to four (4) 60 degree sectors. However, existing vegetation is likely to fragment views towards most turbines.

Landscape Scenic Integrity: The Project will have a low impact on scenic integrity at this location. Most turbines will be screened by existing vegetation and will not dominate the visual catchment at this location.

Key Feature Disruption: The Project will be partially visible along the ridgeline in the northwestern direction.

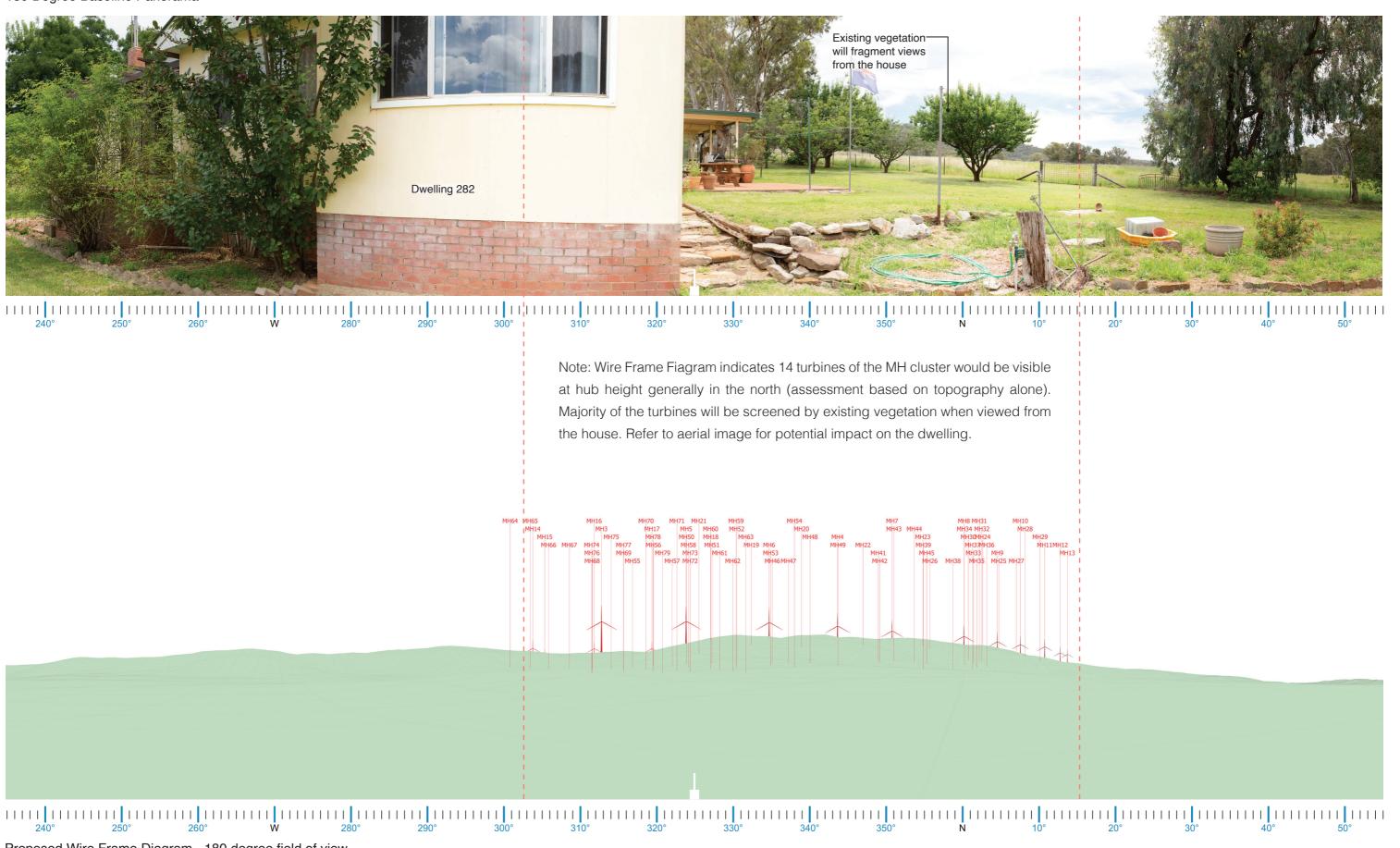
### Mitigation Measures:

Additional screen planting to the northwest of Dwelling 282 would help screen views of MH cluster and reduce the potential visual impact. Consultation with the landowner would be required to discuss appropriate mitigation methods.



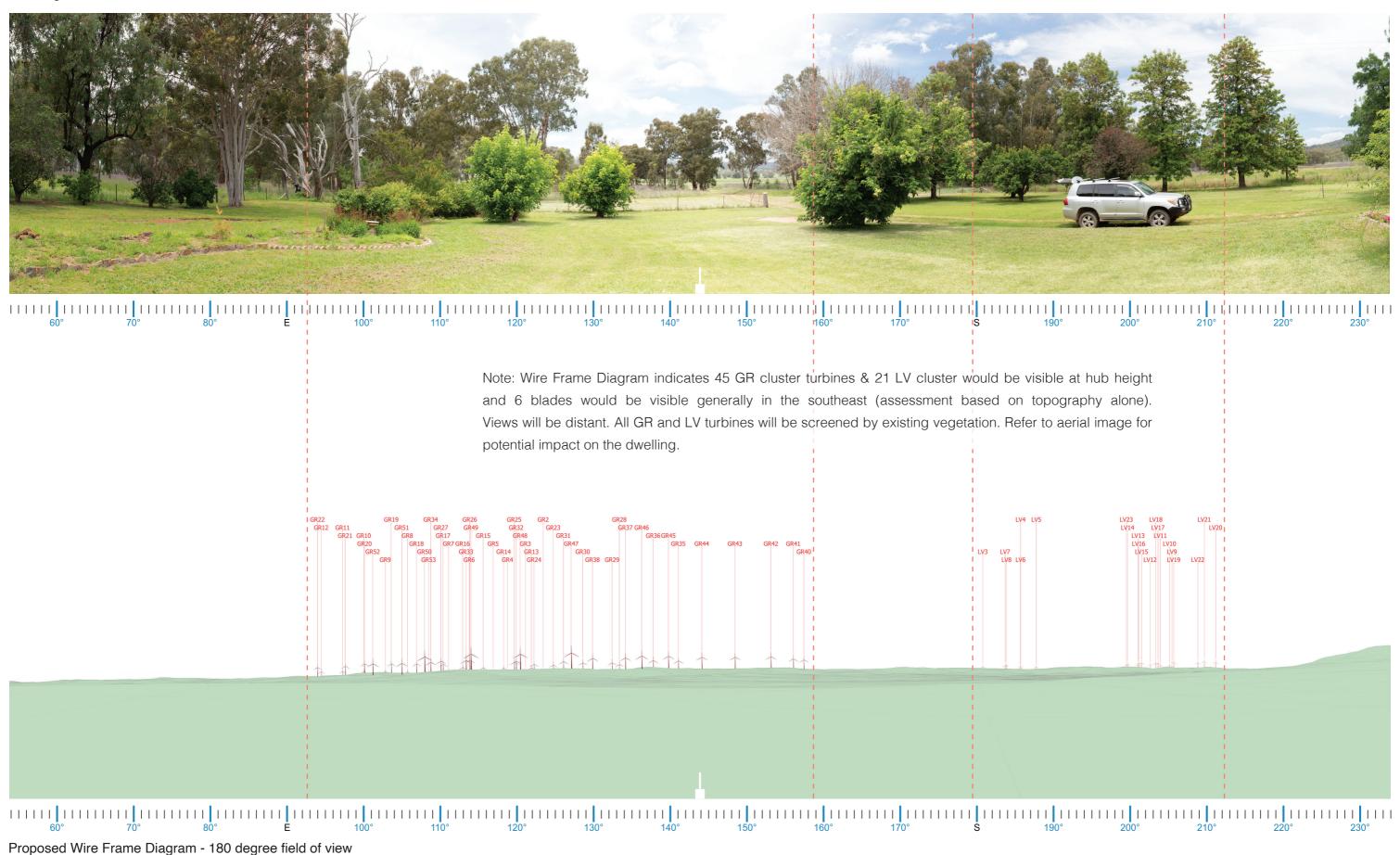
# E.15. Dwelling Assessment Dwelling 282

180 Degree Baseline Panorama



## E.15. Dwelling Assessment Dwelling 282

180 Degree Baseline Panorama



## E.16. Dwelling Assessment Dwelling 298

DWELLING 298			
Nearest proposed turbine (km):	2.99 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	2	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	3	Landscape Character Unit:	LCU02: Undulating farmlands
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Moderate
Number of potentially visible turbines (Based on topography alone)	69 14 at tip 55 at hub	Visual Influence Zone:	VIZ2

**Visual Impact Rating: Moderate** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 69 turbines (14 at tip height and 55 at hub height) would be visible from Dwelling 298. A viewpoint was taken on the northern side of the dwelling to assess the potential visual impact. The dwelling is located on an undulating terrain and appears to be orientated north-south with entertaining areas on the northern side of the dwelling. Aerial imagery indicates that surroundings of the dwelling are characterized by scattered vegetation to the north which is the direction in which the closest turbines are located. Existing vegetation on the northern and eastern boundaries may fragment certain views of the turbines but it is likely that some turbines will be visible generally in the northern direction. A combination of vegetation and topography will help screen views towards the east/southeast. There are two (2) turbines within the black line of visual magnitude and 12 within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *Moderate* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Two (2) turbines (MH64 & MH65) are located within the black line of visual magnitude. 12 turbines are located between the black & blue lines of visual magnitude and some views will be fragmented.

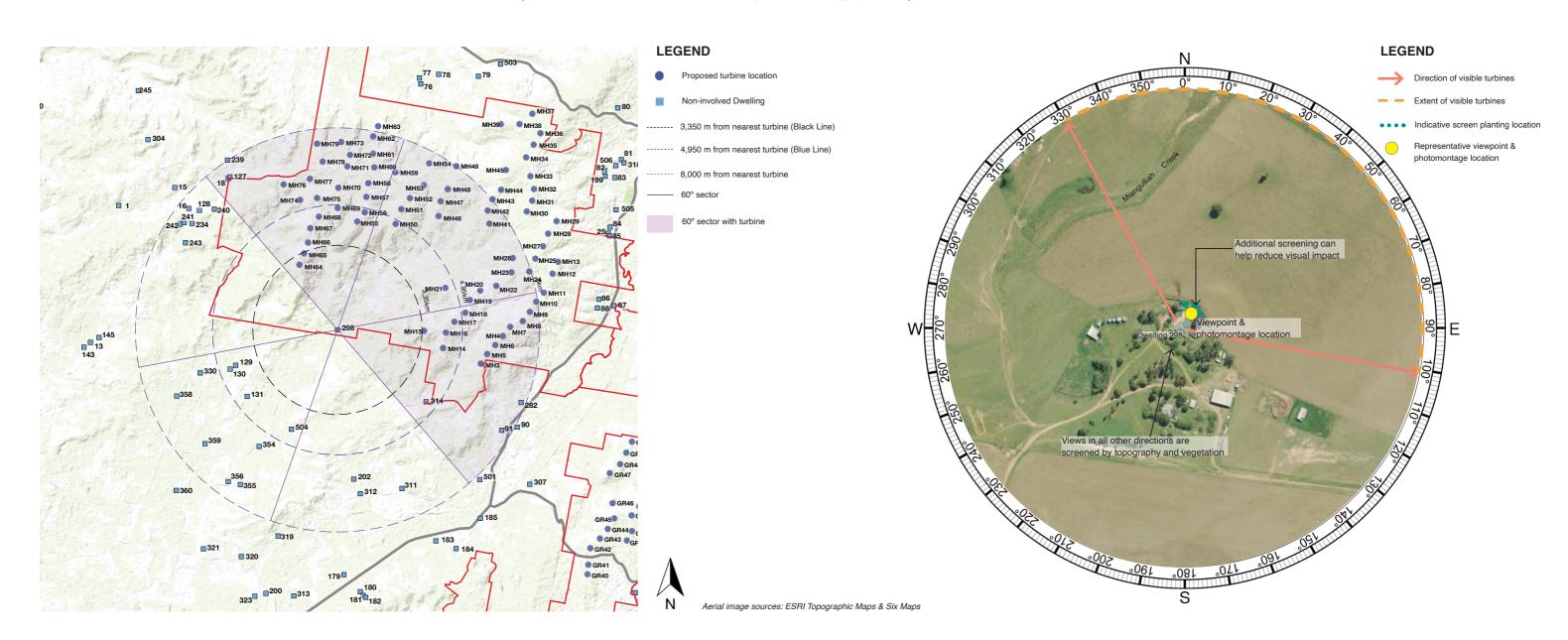
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. Some views will be fragmented.

Landscape Scenic Integrity: The Project will have a moderate impact on scenic integrity at this location. The proposed turbines have the potential to be visible at this location but most turbines will be screened by vegetation associated with the undulations.

Key Feature Disruption: The Project will be a visible element on the ridgeline in the north, however the vegetated hills are likely to remain the dominant feature.

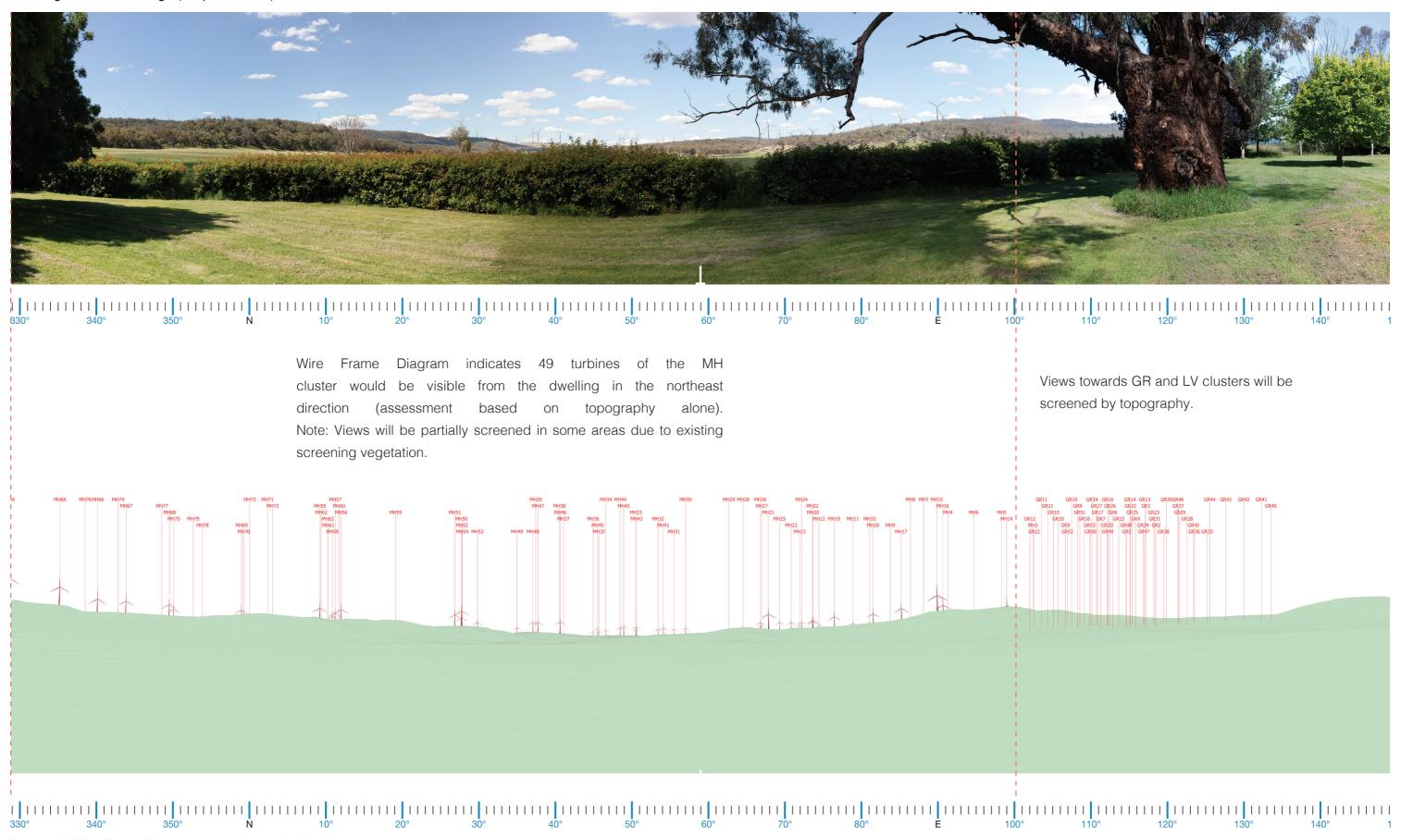
#### Mitigation Measures:

Supplementary screen planting in the entertaining areas along the northern boundary is recommended in order to reduce potential visual impact of the turbines, however this would also screen views of the vegetated ridges. Consultation with the landowner would be required to discuss appropriate mitigation methods.



# E.16. Dwelling Assessment Dwelling 298

180 Degree Photomontage (Proposed view)



Proposed Wire Frame Diagram - 180 degree field of view

## E.17. Dwelling Assessment Dwelling 314

DWELLING 314			
Nearest proposed turbine (km):	2.23 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	5	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	3	Landscape Character Unit:	LCU01: Vegetated hills
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Moderate
Number of potentially visible turbines (Based on topography alone)	30 7 at tip 23 at hub	Visual Influence Zone:	VIZ2

Visual Impact Rating: Moderate

#### Assessment Notes:

An assessment based on topography alone identified a total of 30 turbines (7 at tip height and 23 at hub height) would be visible within 8000m from Dwelling 314. A viewpoint was taken from a location north of the dwelling to represent views in this direction. The dwelling is located on an undulating terrain surrounded by densely vegetated hills. Aerial imagery indicates that the dwelling is surrounded by scattered vegetation to the north/northeast which is the direction in which the closest turbines are located. A combination of vegetation and topography will help screen some views towards the northeast and it is likely that a few turbines will be visible generally in the northern direction. There are five (5) turbines within the black line of visual magnitude and eight (8) within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *Moderate* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Five (5) turbines (MH14, MH15, MH16, MH3 & MH5) are located within the black line of visual magnitude. Eight (8) turbines are located between the black & blue lines of visual magnitude.

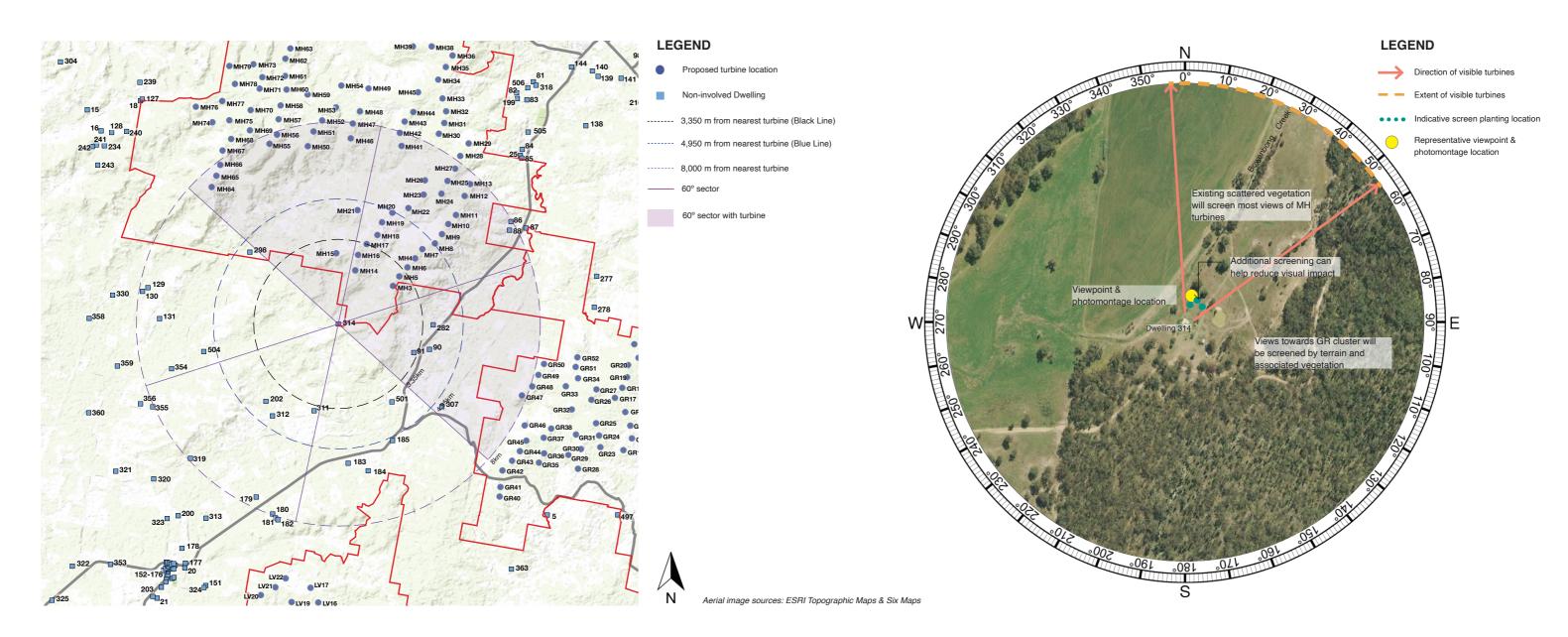
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to three (3) 60 degree sectors. However, existing vegetation and topography are likely to screen most views towards turbines.

Landscape Scenic Integrity: The turbines will likely to dominate the visual catchment in the northern direction. The scenic integrity will be moderately impacted.

Key Feature Disruption: The turbines are likely to be a visible element in the landscape, but will not extensively diminish the key landscape features as viewed from this dwelling.

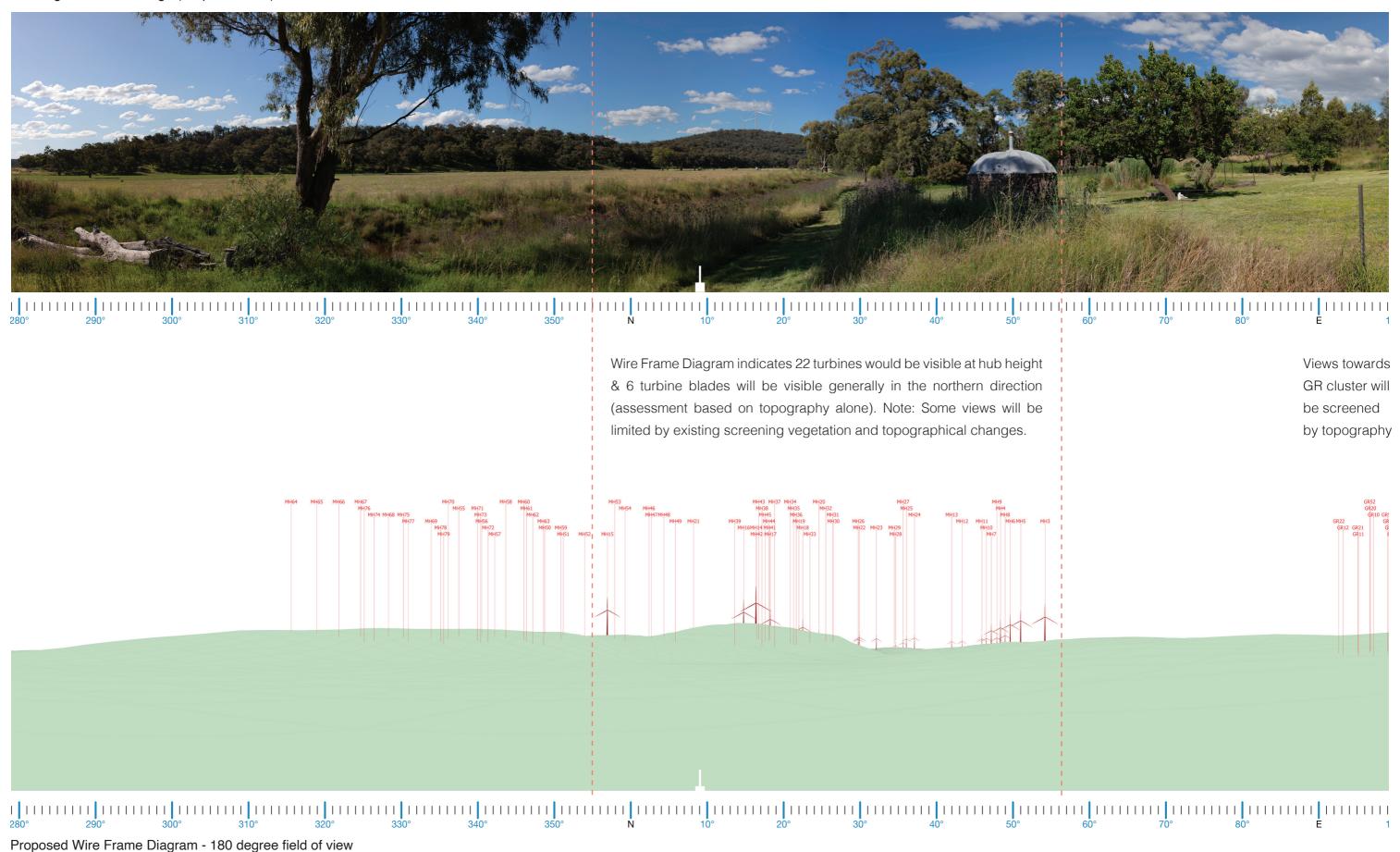
#### Mitigation Measures:

Supplementary screen planting to the northeast of the dwelling in keeping with the existing vegetation character is recommended in order to reduce potential visual impact of the turbines. Consultation with the landowner would be required to discuss appropriate mitigation methods.



# E.17. Dwelling Assessment Dwelling 314

180 Degree Photomontage (Proposed view)



## E.18. Dwelling Assessment Dwelling 503

DWELLING 503			
Nearest proposed turbine (km):	2.33 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	4	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU04: Agricultural flats
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	1 At tip height	Visual Influence Zone:	VIZ2

Visual Impact Rating: Nil

#### Assessment Notes:

An assessment based on topography alone identified that one (1) turbine would be visible at tip height from Dwelling 503. An indicative viewpoint was taken from Neilrex Road to the north of the dwelling as shown in the figure below. The dwelling is located on the flatter side of an undulation associated with the MH cluster. The dwelling appears to be orientated towards Neilrex Road and is surrounded by scattered vegetation in all directions as per the aerial imagery. Turbines would be potentially visible in the southern/southwestern direction. A 3D assessment suggests that the rise in topography to the south is likely to screen most aspects of the Project. Some of the existing scattered vegetation south of the dwelling will also help in screening views of any possible turbine blades that may be visible. There are four (4) turbines within the black line of visual magnitude and six (6) within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *NiI* from this dwelling.

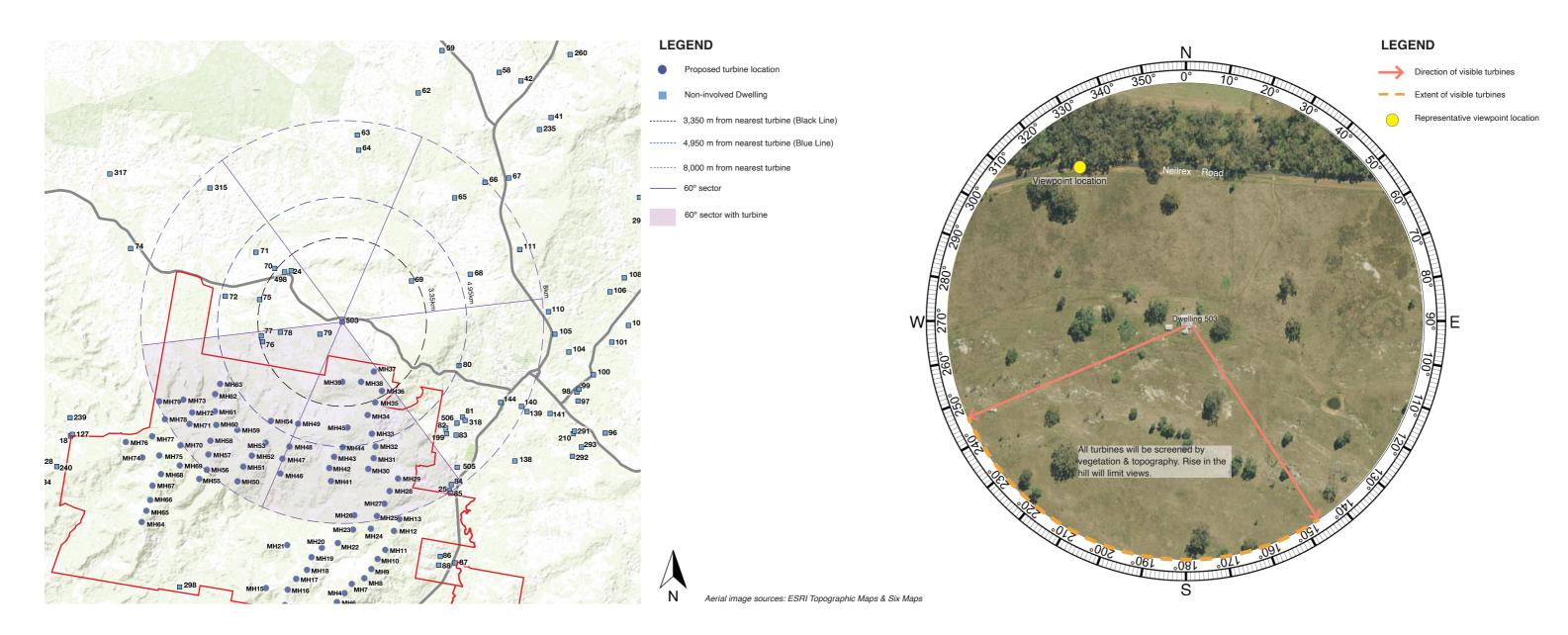
#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Four (4) turbines (MH36, MH37, MH38 & MH39) are located within the black line of visual magnitude. Eight (8) turbines are located between the black & blue lines of visual magnitude. Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation and topography are likely to screen views towards most turbines. Landscape Scenic Integrity: The turbines are not likely to be visible. The scenic integrity will remain intact.

Key Feature Disruption: The turbines are not likely to be a visible and will not diminish the key landscape features as viewed from this dwelling.

#### Mitigation Measures:

No mitigation measures are required.



# E.18. Dwelling Assessment Dwelling 503

180 Degree Baseline Panorama (Indicative view from Neilrex Road near the property) Dwelling 503 NEILREX ROAD Note: Wire Frame Diagram indicates 2 turbines would be visible at hub height & 2 blades would be visible gerenally in the south (assessment based on topography alone). All turbines will be screened by topography & vegetation. Refer to aerial image for potential impact on the dwelling. This photograph was taken from Neilrex Road near the property's fenceline. 

Proposed Wire Frame Diagram - 180 degree field of view from Neilrex Road near the property

## E.19. Dwelling Assessment Dwelling 505

DWELLING 505			
Nearest proposed turbine (km):	2.40 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	6	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU02: Undulating farmlands
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Moderate
Number of potentially visible turbines (Based on topography alone)	67 11 at tip 56 at hub	Visual Influence Zone:	VIZ2

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 67 turbines (11 at tip height and 56 at hub height) would be visible from this dwelling but 43 turbines of MH cluster turbines are located within 8km of the dwelling. Aerial imagery indicates that the dwelling is generally orientated north-south and is surrounded by patches of vegetation towards the west, south & east. The dwelling is situated on a gently undulating terrain with a gentle rise in the topography on the western side which will limit all views in the west/northwest. Existing vegetation along the dwelling's western & southwestern boundaries will help fragment most views of the MH cluster of wind turbines. It is possible that the turbines towards the southwest will be partially visible but most views will be fragmented by existing vegetation. There are six (6) turbines within the black line of visual magnitude and 14 within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Six (6) turbines (MH13, MH27, MH28, MH29, MH31 & MH32) are located within the black line of visual magnitude. 14 turbines are located between the black & blue lines of visual magnitude.

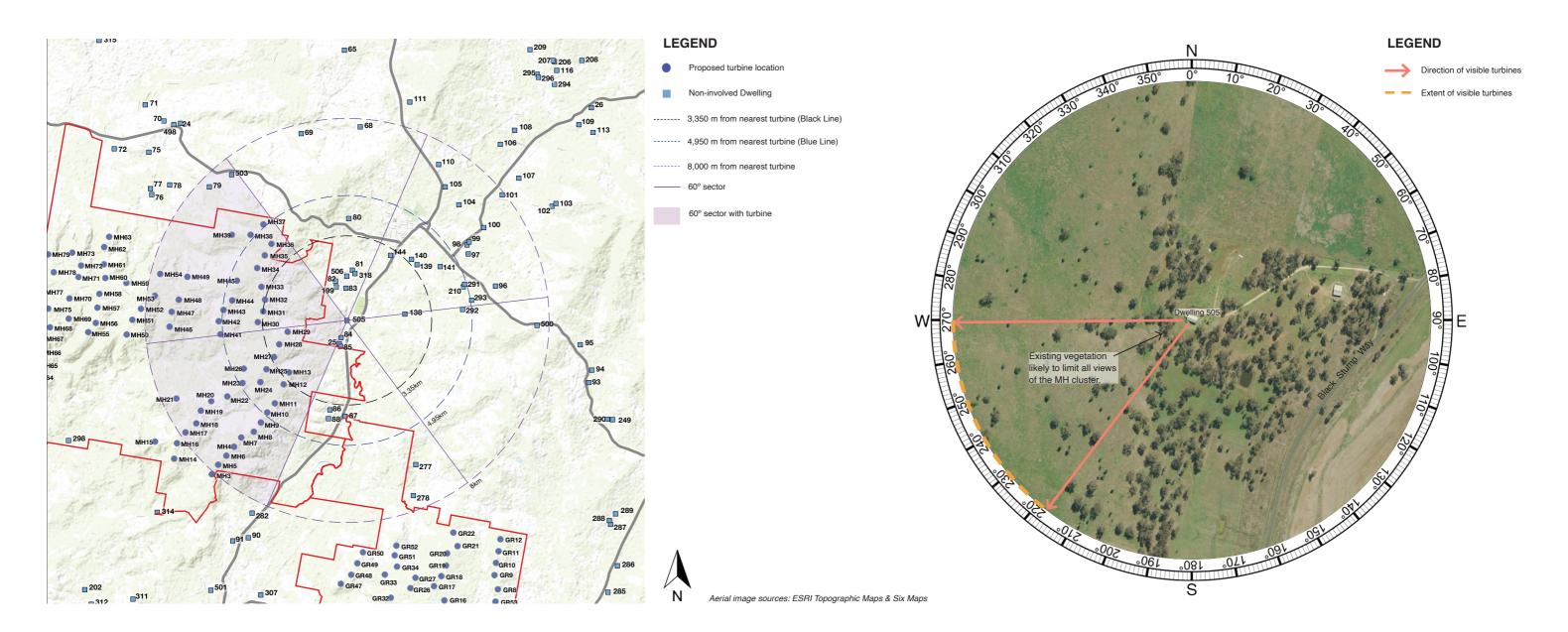
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation and topography are likely to screen and fragment views.

Landscape Scenic Integrity: The Project will have a low impact on scenic integrity at this location. It is highly likely that the turbines will be screened by existing topography and vegetation.

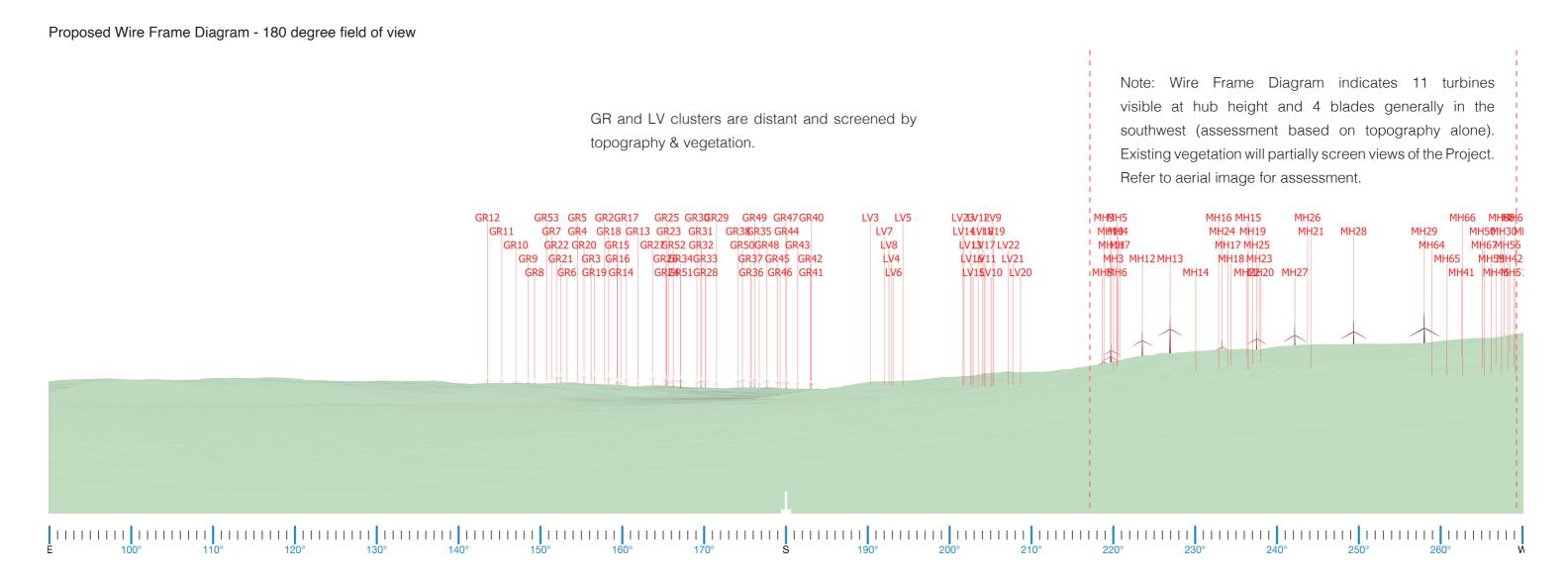
Key Feature Disruption: The Project will be a visible element on the ridgeline in the southwestern direction but there is opportunity for views to be screened by existing vegetation.

#### Mitigation Measures:

No mitigation measures are required.



# E.19. Dwelling Assessment Dwelling 505



## Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.

## E.20. Dwelling Assessment Dwelling 506

DWELLING 506			
Nearest proposed turbine (km):	3.22 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	3	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU04: Agricultural flats
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	89 15 at tip 74 at hub	Visual Influence Zone:	VIZ2

Visual Impact Rating: Nil

#### Assessment Notes:

Assessment based on topography alone identified a total of 89 turbines (15 at tip height and 74 at hub height) would be visible from Dwelling 506 of which only the Mount Hope (MH) cluster of turbines is located within 8km of the dwelling. The dwelling is located on a flat to gently undulating terrain and appears to be surrounded by dense vegetation in all directions as indicated in the aerial imagery. Wind turbines would be predominantly visible in the west/southwest direction. Existing vegetation will limit all views of turbines in this direction. There are three (3) turbines within the black line of visual magnitude and 14 within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *Nil* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Three (3) turbines (MH29, MH35 & MH36) are located within the black line of visual magnitude. 14 turbines are located between the black & blue lines of visual magnitude.

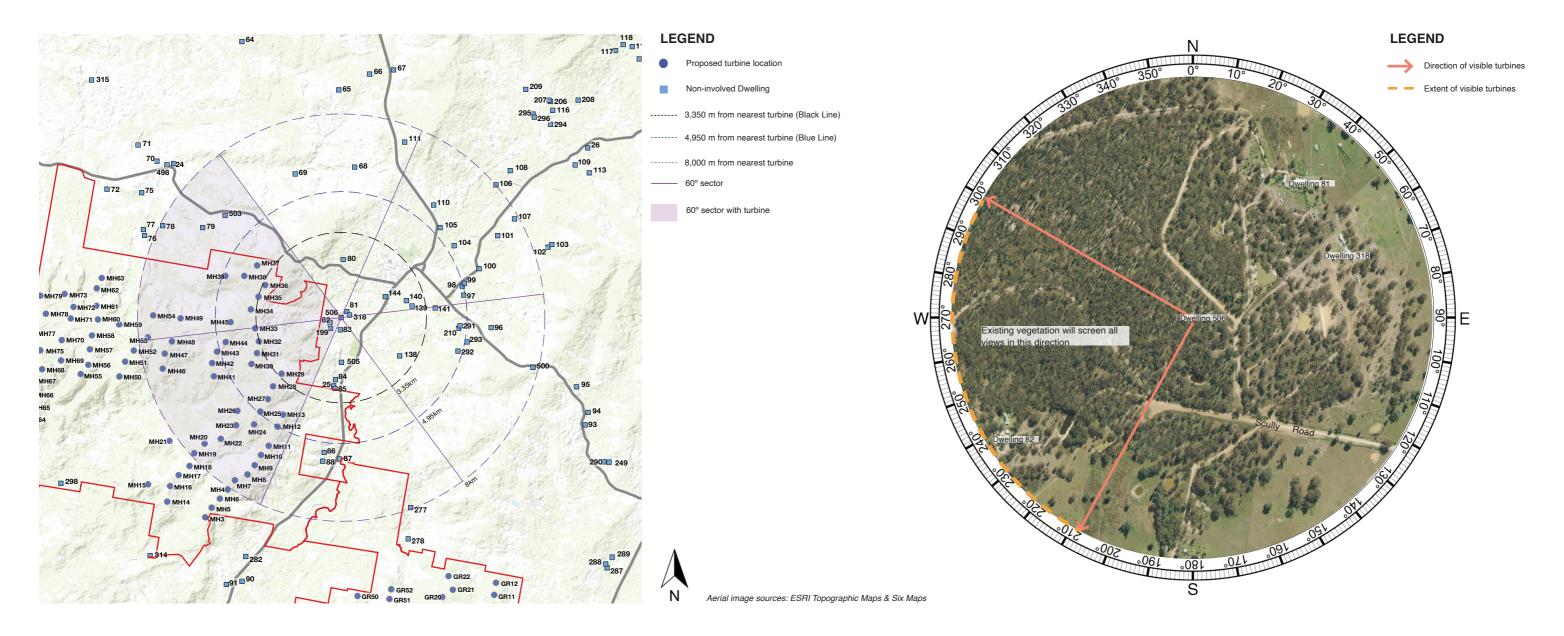
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation is likely to screen views towards majority of the turbines.

Landscape Scenic Integrity: The Project will not have any impact on scenic integrity at this location. The proposed turbines do not have the potential to be a key feature in the visual catchment at this location.

Key Feature Disruption: The turbines are not likely to be a visible element in the landscape.

## Mitigation Measures:

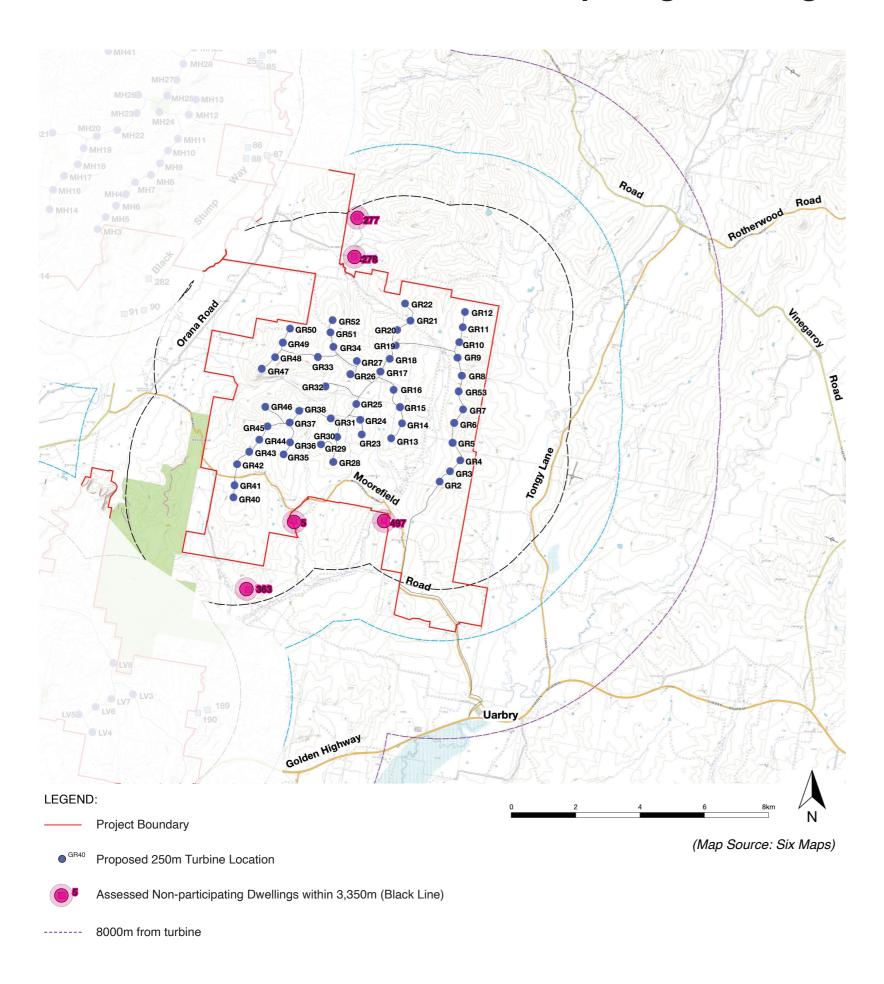
No mitigation measures are required.





Dwellings within 3350m associated with Girragulang Road (GR) cluster

# GR Cluster: Location of Non-Participating Dwellings within 3,350 m (Black Line)



wellings within 3,350m		
Representative Dwelling	Linked Dwellings	MLA Comments
Dwelling 5		Refer Appendix E.21.
Dwelling 277		Refer Appendix E.22.
Dwelling 278		Refer Appendix E.23.
Dwelling 363		Refer Appendix E.24.
Dwelling 497		Refer Appendix E.25.

## E.21. Dwelling Assessment Dwelling 5

DWELLING 5			
Nearest proposed turbine (km):	2.02 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	12	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	4	Landscape Character Unit:	LCU02: Undulating farmlands
Number of visible 60° Sectors (Based on 3D Assessment):	4	Scenic Quality Rating:	Moderate
Number of potentially visible turbines (Based on topography alone)	49 10 at tip 39 at hub	Visual Influence Zone:	VIZ2

**Visual Impact Rating: High** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 49 turbines (10 at tip height and 39 at hub height) would be visible from Dwelling 5. A viewpoint was taken along the fenceline northeast of the dwelling to represent views in a photomontage. The dwelling is located on an undulating terrain. Aerial imagery indicates that the dwelling is surrounded by dense vegetation to the south/southwest and patchy vegetation to the north/northeast which is the direction in which the closest turbines are located. Existing vegetation and topographical changes will help fragment certain views of turbines towards the northeast but it is likely that turbines generally towards the north will be visible. A patch of remnant vegetation is located further to the east and is likely to help fragment views of turbines in this direction. To the immediate north of the dwelling, existing dense vegetation may help in reducing views of the Project from within the dwelling. There are 12 turbines within the black line of visual magnitude and 12 within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *High* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: 12 turbines are located within the black line of visual magnitude. 12 turbines are located between the black & blue lines of visual magnitude.

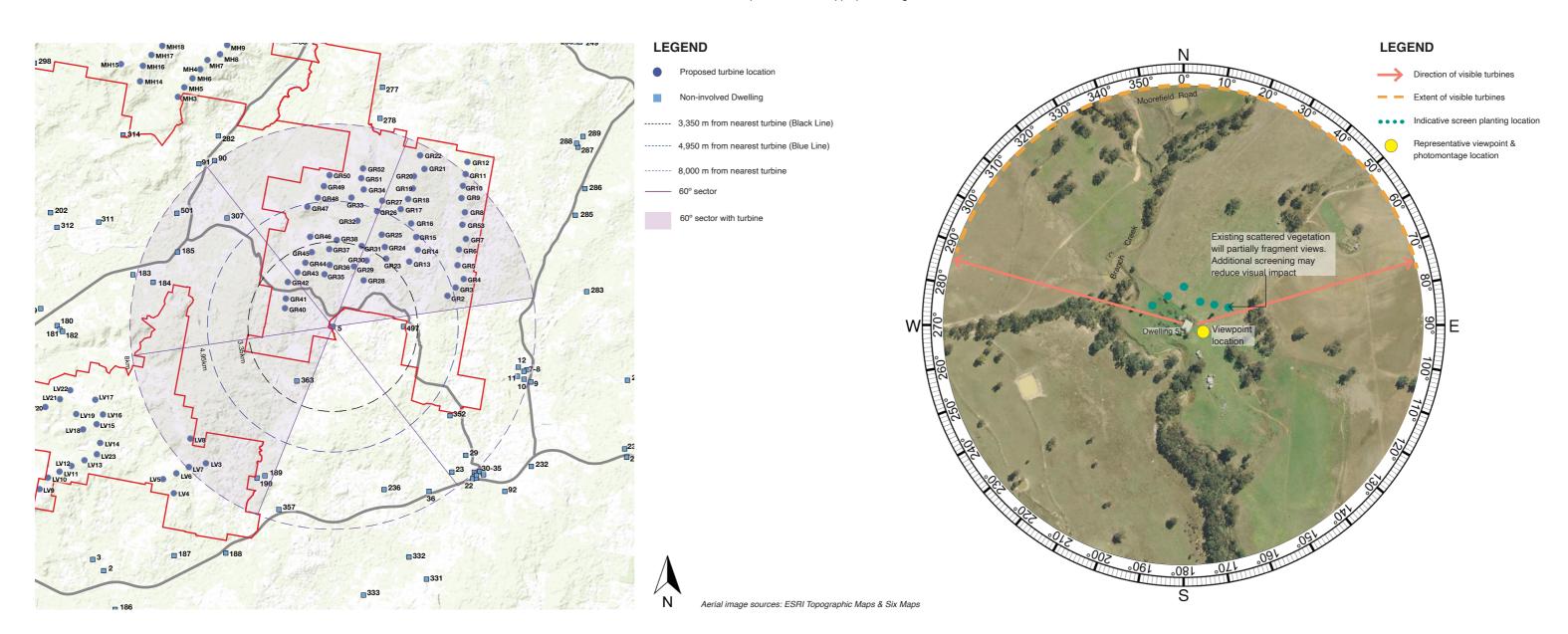
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to four (4) 60 degree sectors. However, existing vegetation is likely to screen views towards turbines in the southwestern direction.

Landscape Scenic Integrity: The Project will have a high impact on scenic integrity at this location. The proposed turbines have the potential to be a dominant feature in the visual catchment at this location.

Key Feature Disruption: The Project will be a dominant element on the ridgeline, especially to the north of the dwelling.

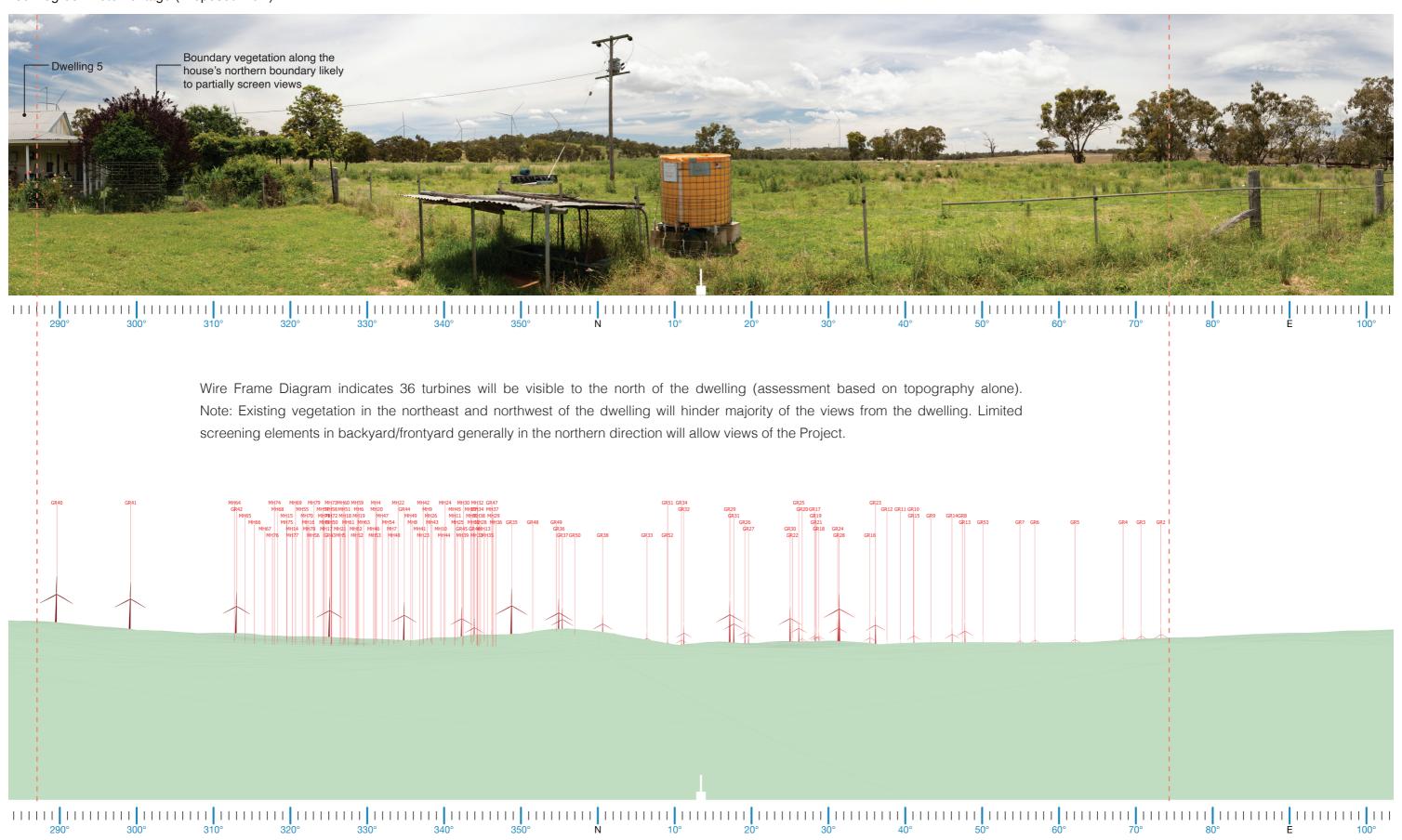
#### Mitigation Measures:

The dwelling is currently surrounded by dense screening in the foreground. If required, additional screen planting along the dwelling's northern boundary and in the middleground to the north can be provided to screen views. Consultation with the landowner would be required to discuss appropriate mitigation methods.



# E.21. Dwelling Assessment Dwelling 5

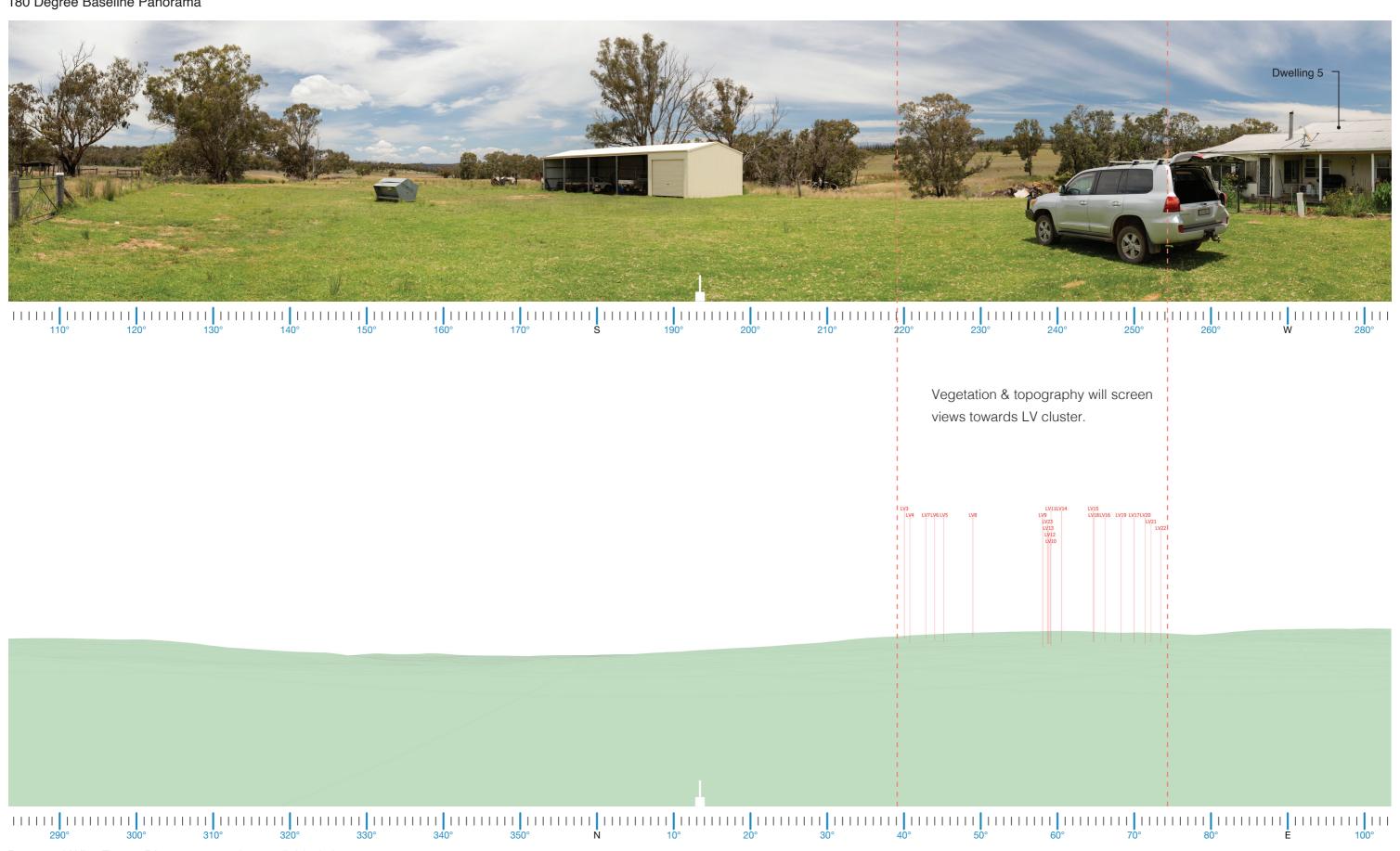
180 Degree Photomontage (Proposed view)



Proposed Wire Frame Diagram - 180 degree field of view

# E.21. Dwelling Assessment Dwelling 5

180 Degree Baseline Panorama



## E.22. Dwelling Assessment Dwelling 277

DWELLING 277			
Nearest proposed turbine (km):	3.07 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	2	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	4	Landscape Character Unit:	LCU02: Undulating farmlands
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Moderate
Number of potentially visible turbines (Based on topography alone)	48 6 at tip 42 at hub	Visual Influence Zone:	VIZ2

Visual Impact Rating: High

#### Assessment Notes:

An assessment based on topography alone identified a total of 48 turbines (6 at tip height and 42 at hub height) would be visible from Dwelling 277. The dwelling is orientated to the south and a viewpoint was taken from this boundary in order to assess the visual impact of the Project. Aerial imagery indicates that the dwelling is surrounded by scattered vegetation generally to the south which is the direction in which the closest turbines are located. This vegetation, however, will not be sufficient to screen views of the Girragulang cluster. Existing vegetation and topographical changes in the west/northwest is likely to screen all possible views of MH cluster. There are two (2) turbines within the black line of visual magnitude and 14 within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *High* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Two (2) turbines (GR22 & GR52) are located within the black line of visual magnitude. 14 turbines are located between the black & blue lines of visual magnitude.

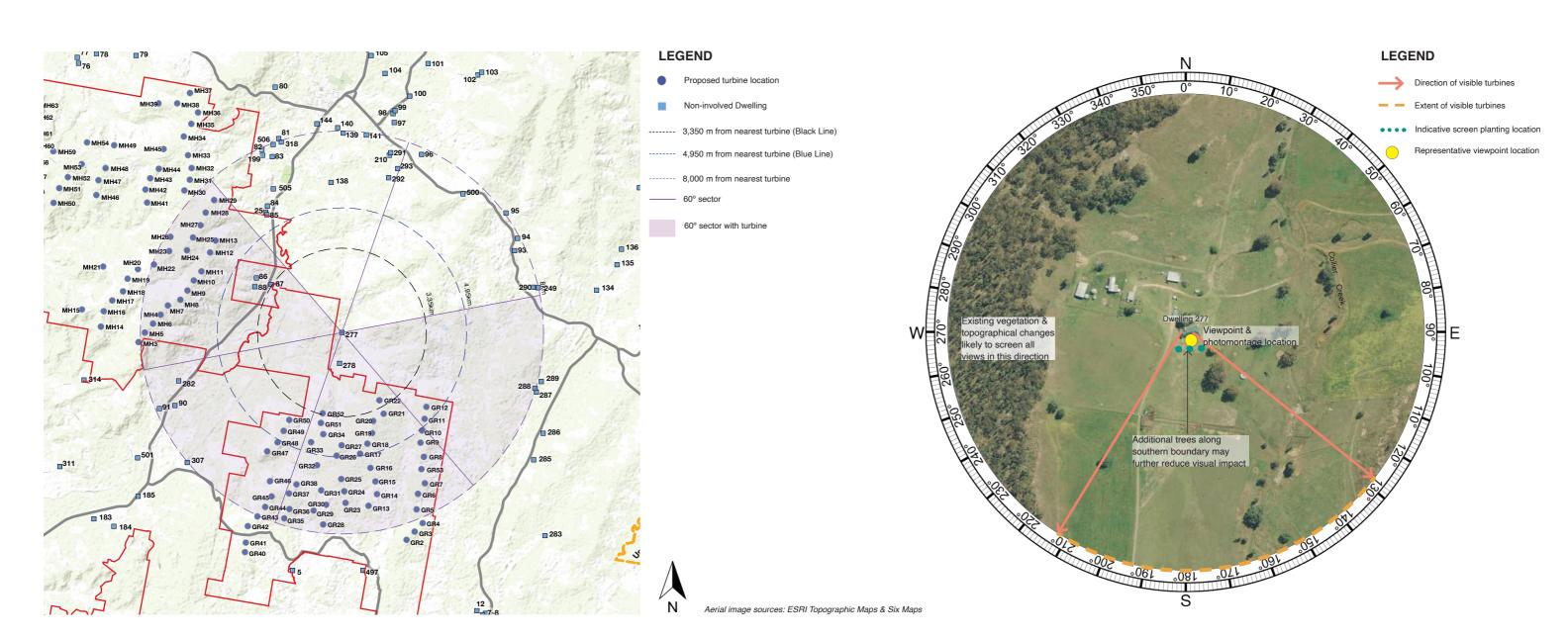
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to four (4) 60 degree sectors. However, existing vegetation and terrain is likely to screen views to the northwest/west and views will be available only in the south/southeast.

Landscape Scenic Integrity: The Project will have a moderate impact on scenic integrity at this location. The proposed turbines have the potential to be a visible in the southern direction.

Key Feature Disruption: The Project will be a dominant feature along the undulations viewed from the southern side of the dwelling.

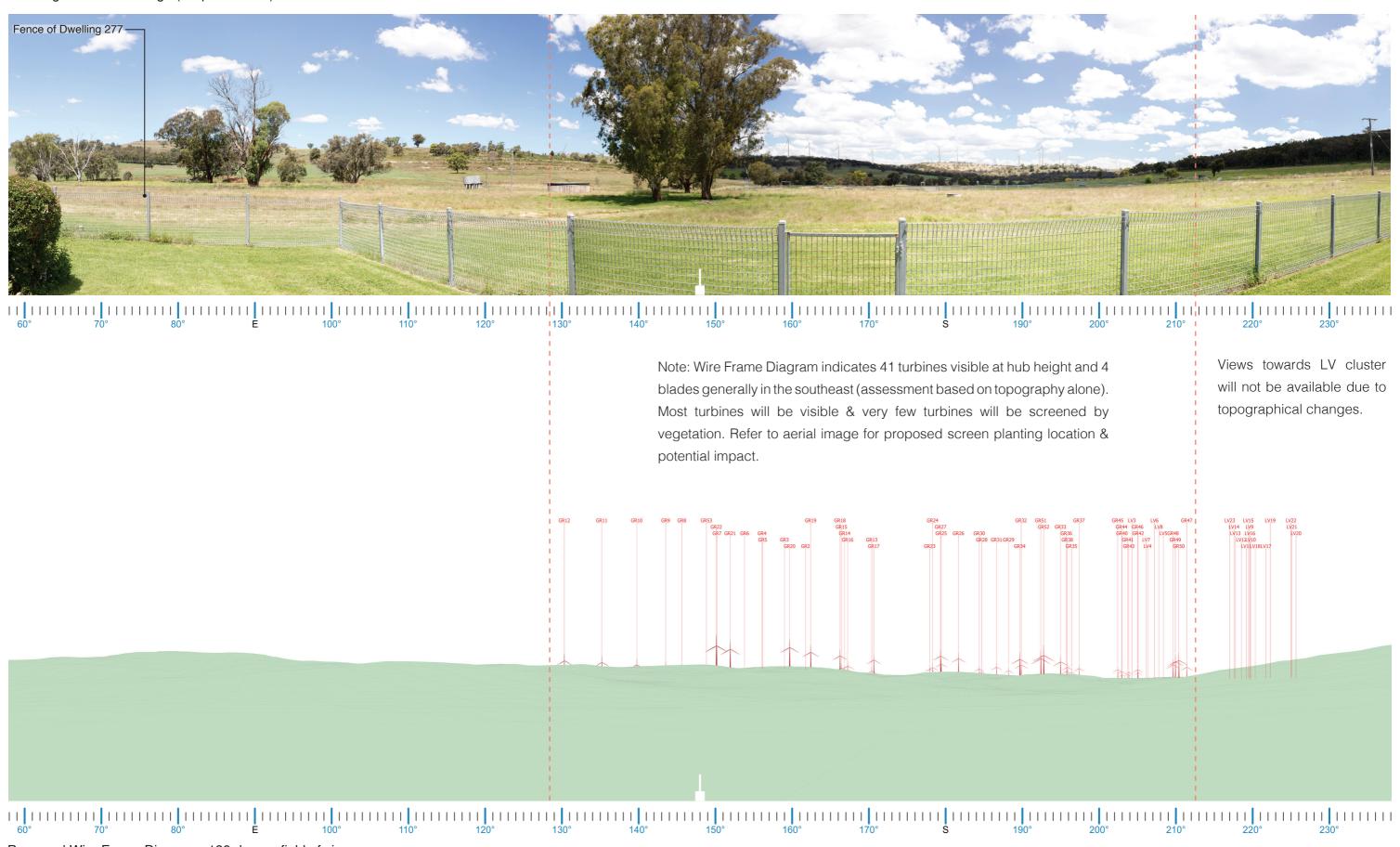
### Mitigation Measures:

Supplementary screen planting to the south of the dwelling in keeping with the existing vegetation character is recommended in order to reduce potential visual impact of the turbines. Consultation with the landowner would be required to discuss appropriate mitigation methods.



# E.22. Dwelling Assessment Dwelling 277

180 Degree Photomontage (Proposed view)



Proposed Wire Frame Diagram - 180 degree field of view

## E.23. Dwelling Assessment Dwelling 278

DWELLING 278			
Nearest proposed turbine (km):	2.09 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	10	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	4	Landscape Character Unit:	LCU02: Undulating farmlands
Number of visible 60° Sectors (Based on 3D Assessment):	4	Scenic Quality Rating:	Moderate
Number of potentially visible turbines (Based on topography alone)	83 30 at tip 53 at hub	Visual Influence Zone:	VIZ2

Visual Impact Rating: Low

#### Assessment Notes:

An assessment based on topography alone identified a total of 83 turbines (30 at tip height and 53 at hub height) would be visible from this dwelling. The dwelling is located on a gently undulating terrain. Aerial imagery indicates that the dwelling is surrounded by a dense vegetation all along the structure's western and southern boundaries. These are the directions in which the MH and GR turbines would be potentially visible. The vegetation plays an important role in limiting majority of the views from the dwelling, and thus, no additional mitigation is required. The MH cluster will be partially visible along the ridgeline. Due to the close proximity of the Project and it is likely that the tips of the turbines from GR cluster will be partially visible through windbreak plantations to the south. There are 10 turbines within the black line of visual magnitude and 12 within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: 10 turbines are located within the black line of visual magnitude. 12 turbines are located between the black & blue lines of visual magnitude.

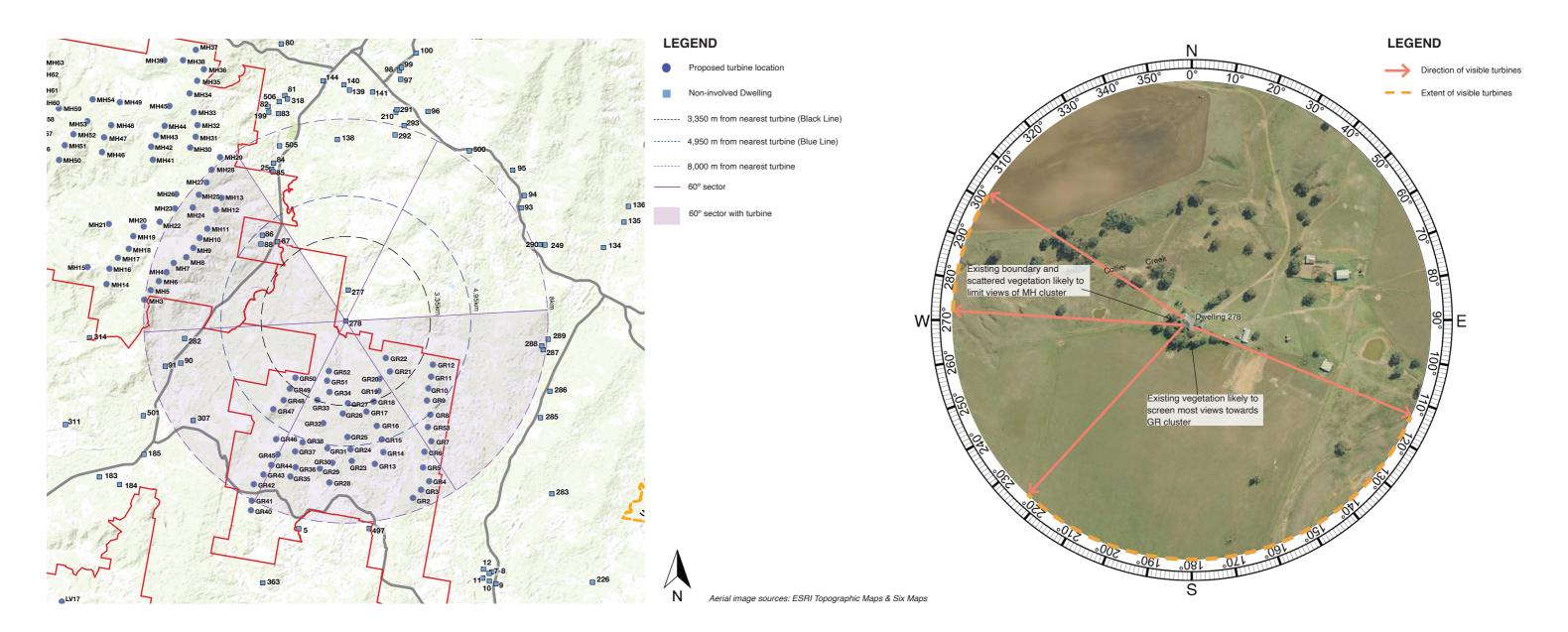
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to four (4) 60 degree sectors. However, existing vegetation is likely to screen majority of the views of the turbines in both directions.

Landscape Scenic Integrity: The Project will have a low impact on scenic integrity at this location. It is possible that the tips of some turbines will be visible.

Key Feature Disruption: Tips of turbines are likely to be partially visible and but no key features will be disrupted.

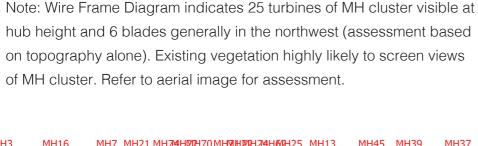
### Mitigation Measures:

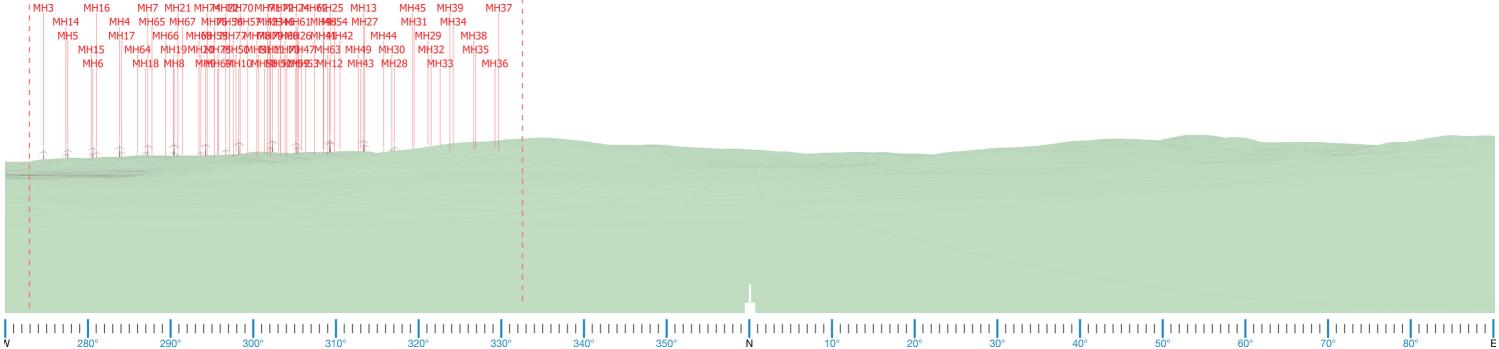
No mitigation measures are required.



# E.23. Dwelling Assessment Dwelling 278







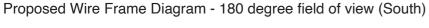


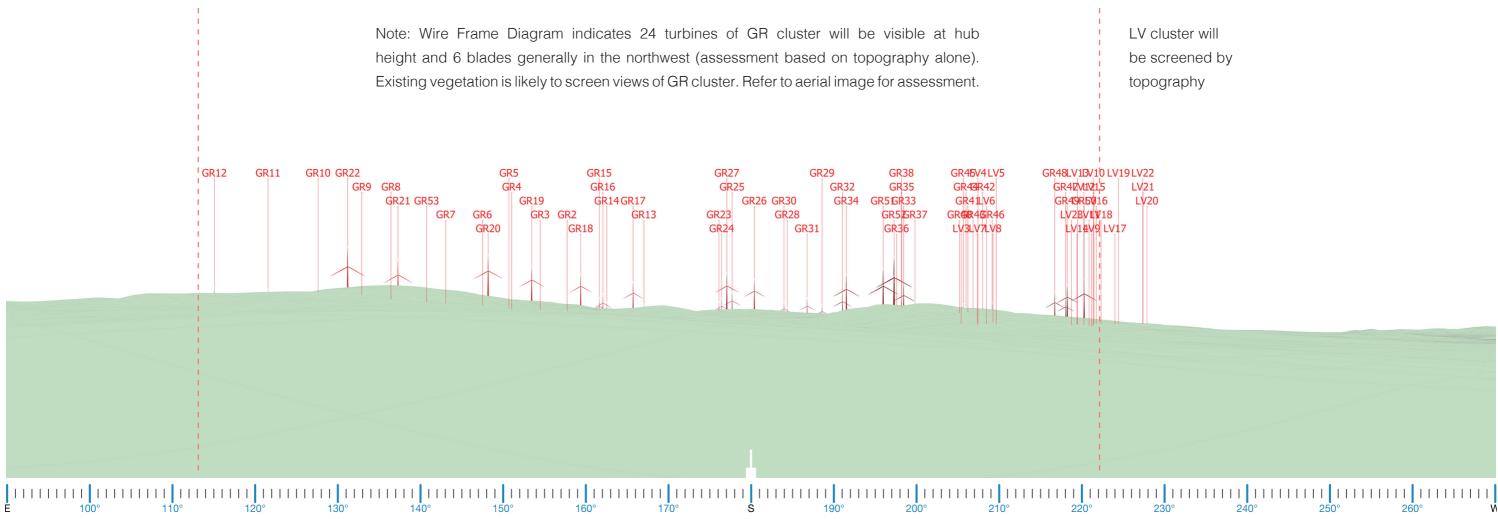
No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.

## E.23. Dwelling Assessment Dwelling 278





## Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.

# E.24. Dwelling Assessment Dwelling 363

DWELLING 363					
Nearest proposed turbine (km):	2.91 km	Visibility Distance Zone:	Near Middleground (NM)		
Number of proposed turbines within Black Line (3350 m):	2	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)		
Number of theoretical 60° Sectors (Based on 2D Plan):	4	Landscape Character Unit:	LCU01: Vegetated Hills		
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Moderate		
Number of potentially visible turbines (Based on topography alone)	28 19 at tip 9 at hub	Visual Influence Zone:	VIZ2		

Visual Impact Rating: Nil

#### Assessment Notes:

An assessment based on topography alone identified a total of 28 turbines (19 at tip height and 9 at hub height) would be visible from this dwelling. The dwelling is located in an undulating setting and appears to be surrounded by dense vegetation in all directions which will help reduce the potential visual impact to a large extent. Views of turbines will be potentially available in the north & southwest which are densely wooded. A gentle rise in the topography towards the north will also help screen all views towards the GR cluster. There are two (2) turbines within the black line of visual magnitude and six (6) turbines between the black & blue lines of this dwelling. The visual impact resulting from the Project has been rated as *NiI* from this dwelling.

## Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Two (2) turbines (GR41 & GR40) are located within the black line of visual magnitude. Six (6) turbines are located between the black and blue lines of visual magnitude.

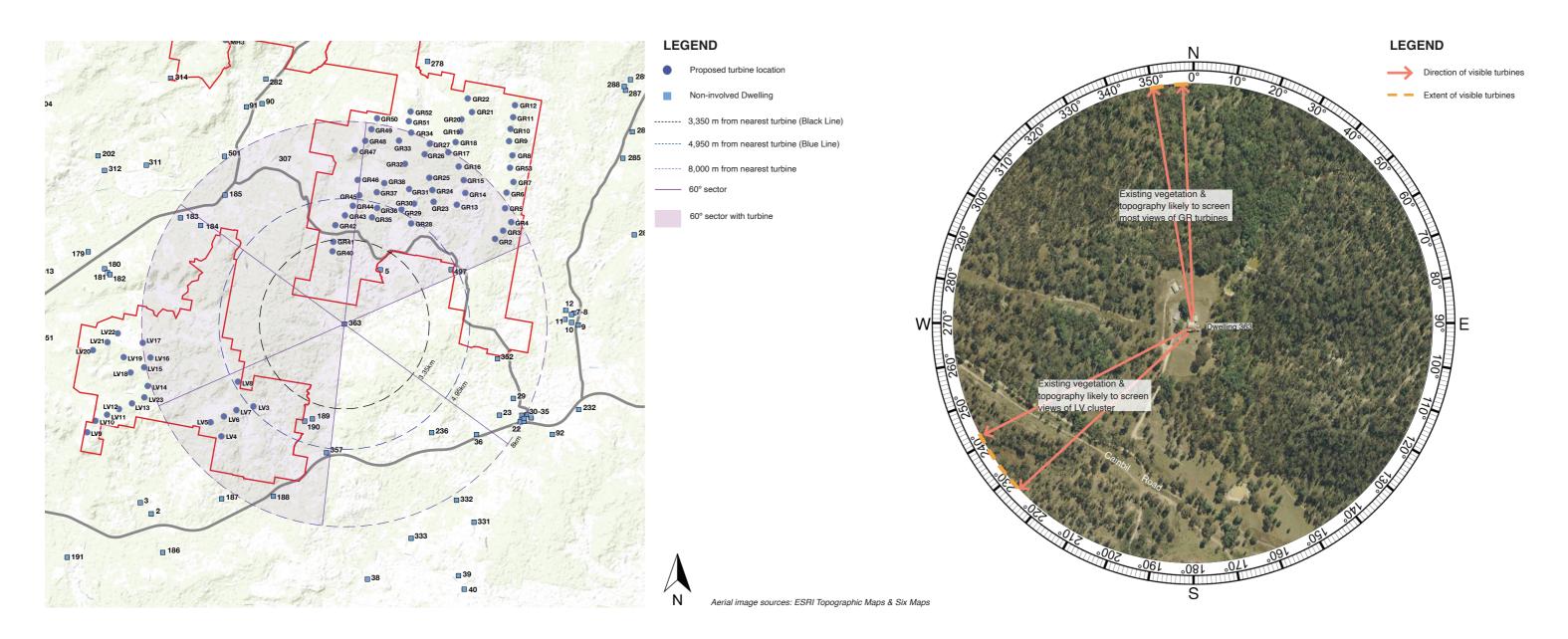
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation and topographical changes are likely to screen views towards the Project.

Landscape Scenic Integrity: The Project will not have any impact on the scenic integrity at this location. The proposed turbines do not have the potential to be visible because of the existing dense vegetation.

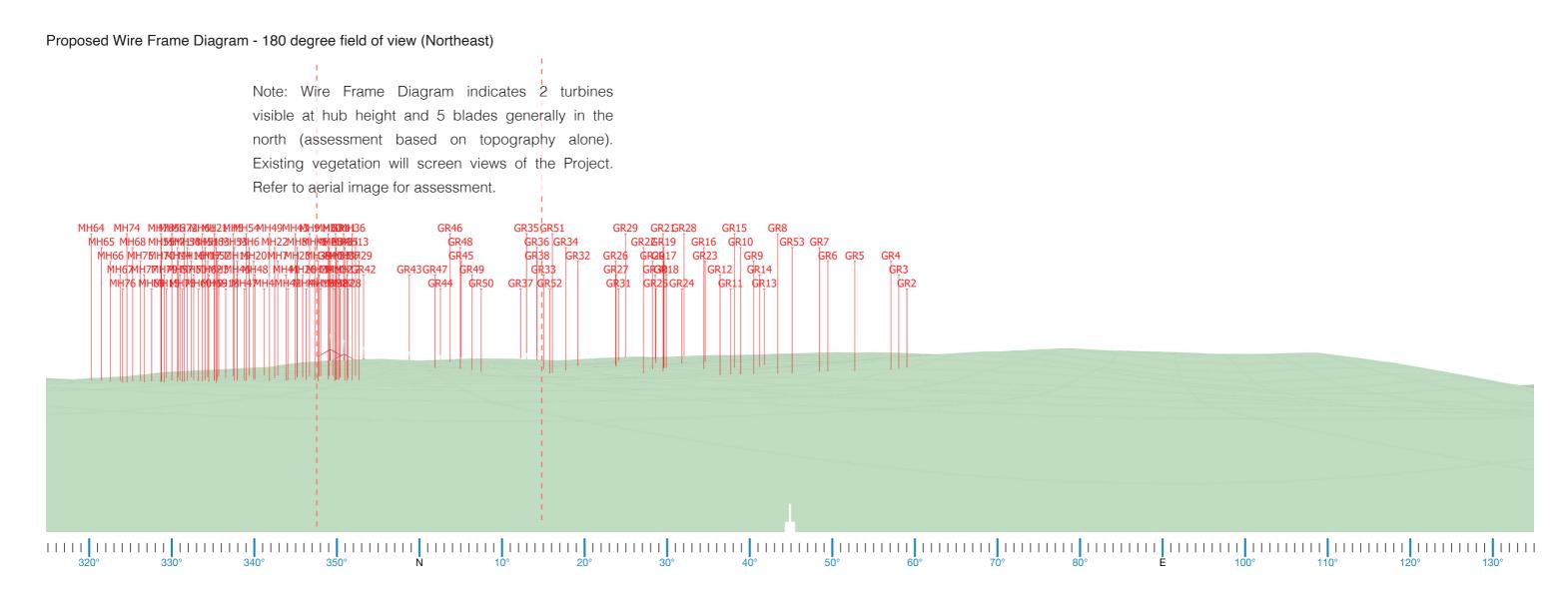
Key Feature Disruption: No key visual features will be disrupted by the Project.

### Mitigation Measures:

No mitigation measures are required.



# E.24. Dwelling Assessment Dwelling 363



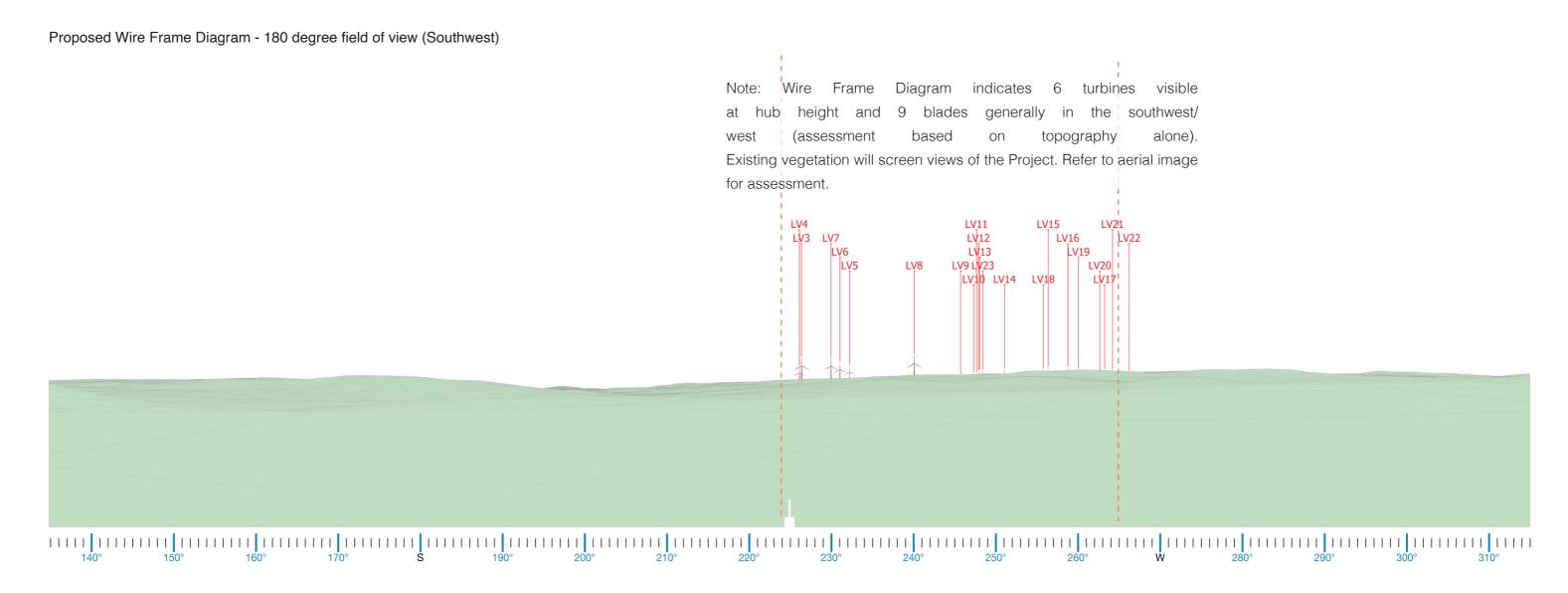
## Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.

# E.24. Dwelling Assessment Dwelling 363



## Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.

## E.25. Dwelling Assessment Dwelling 497

DWELLING 497					
Nearest proposed turbine (km):	2.11 km	Visibility Distance Zone:	Near Middleground (NM)		
Number of proposed turbines within Black Line (3350 m):	11	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)		
Number of theoretical 60° Sectors (Based on 2D Plan):	3	Landscape Character Unit:	LCU01: Vegetated hills		
Number of visible 60° Sectors (Based on 3D Assessment):	3	Scenic Quality Rating:	Moderate		
Number of potentially visible turbines (Based on topography alone)	115 34 at tip 81 at hub	Visual Influence Zone:	VIZ2		

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 115 turbines (34 at tip & 81 at hub height) would be visible from Dwelling 497 of which only those that belong to Girragulang cluster are located with 8km of the dwelling. Moir LA conducted a site visit to take a viewpoint from the entrance gate of the dwelling in order to assess the impact of the Project on the dwelling. The dwelling is located on an undulating terrain surrounded by dense vegetation in all directions. Aerial imagery indicates that the dwelling is surrounded by dense woodlands all along the northern and western sides which will be the predominant viewing directions towards the Project. Maximum number of closest turbines are located in the north/northwest direction. A combination of vegetation and topography will help screen views in these directions and it is likely that only a few turbines will be visible generally in the north. There are 11 turbines within the black line of visual magnitude and 20 within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *Low* for this dwelling.

## Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: 11 turbines are located within the black line of visual magnitude. 20 turbines are located between the black & blue lines of visual magnitude and most views are likely to be screened.

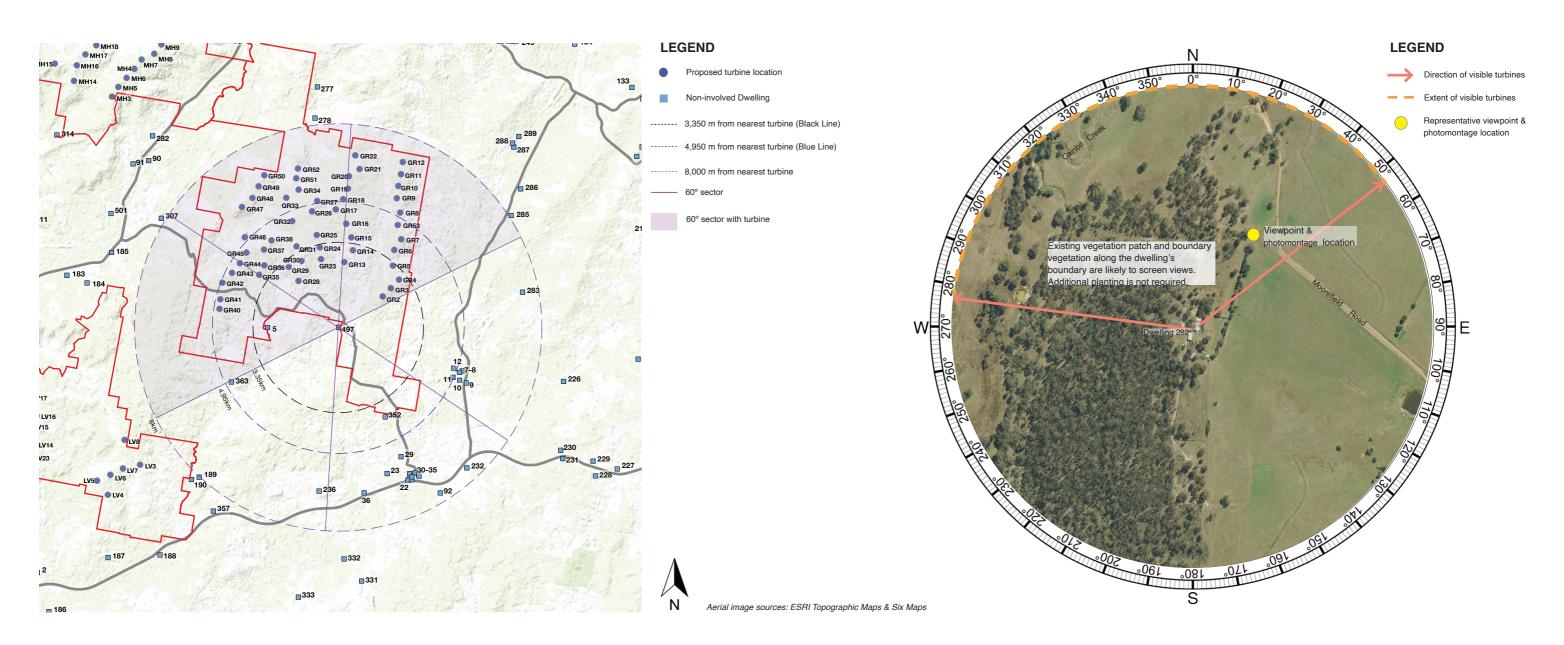
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to three (3) 60 degree sectors. However, existing vegetation and topography are likely to screen views towards some turbines.

Landscape Scenic Integrity: The Project will have a low impact on scenic integrity at this location. The proposed turbines are anticipated to be screened by intervening vegetation.

Key Feature Disruption: The turbines are not likely to be visible at the dwelling because of existing vegetation around the dwelling.

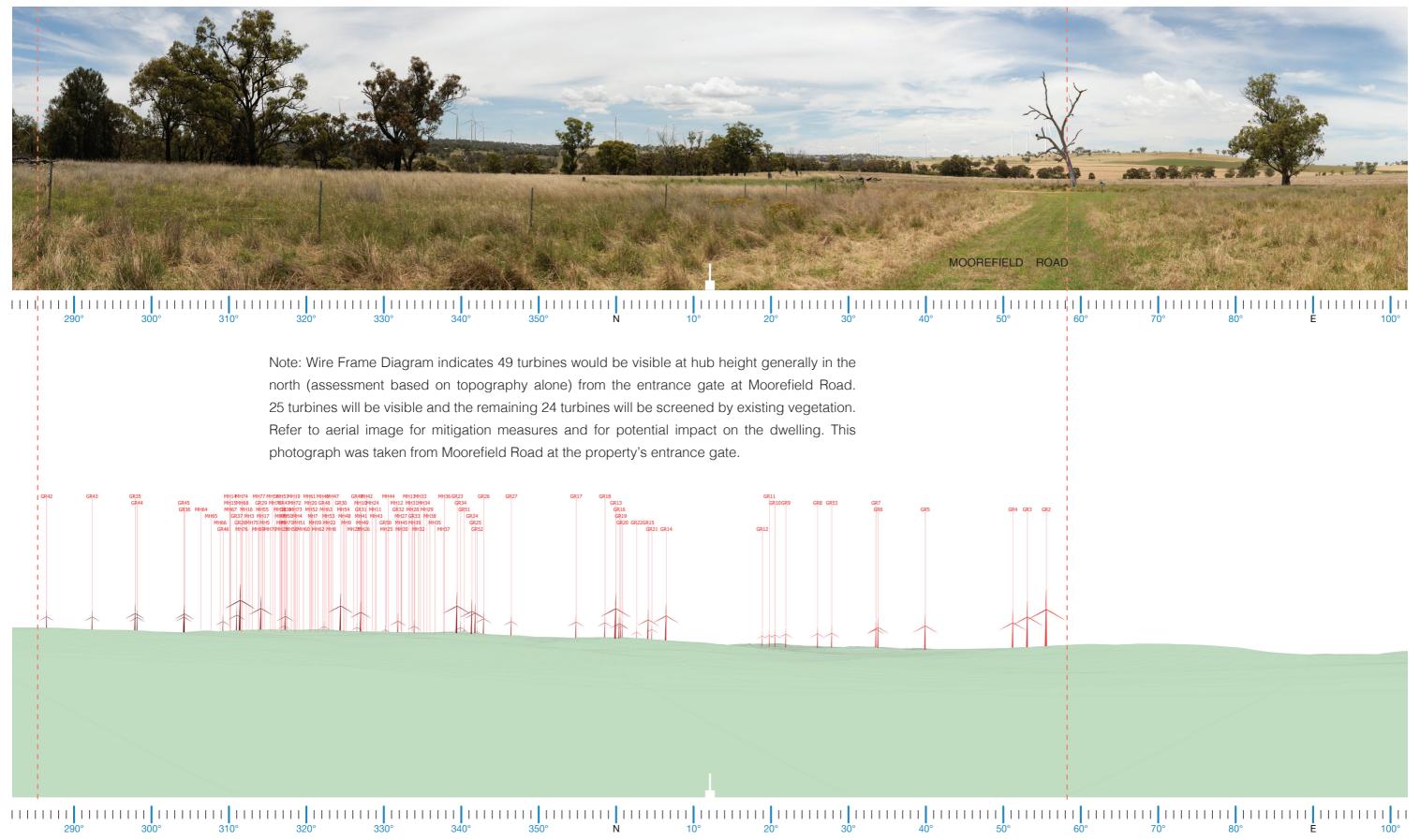
#### Mitigation Measures:

No mitigation measures are required.



# E.25. Dwelling Assessment Dwelling 497

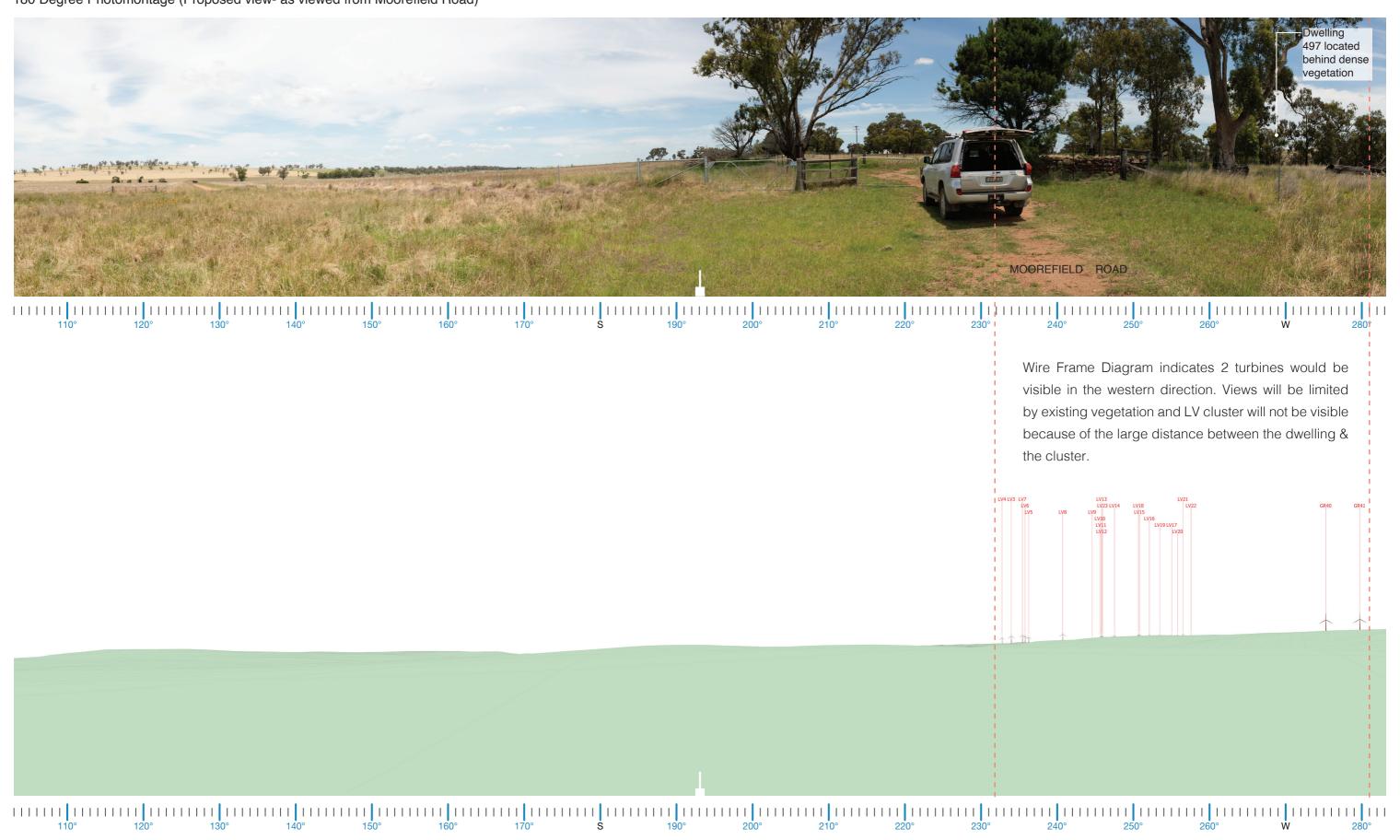
180 Degree Photomontage (Proposed view - as viewed from Moorefield Road)



Proposed Wire Frame Diagram - 180 degree field of view as viewed from Moorefield Road

# E.25. Dwelling Assessment Dwelling 497

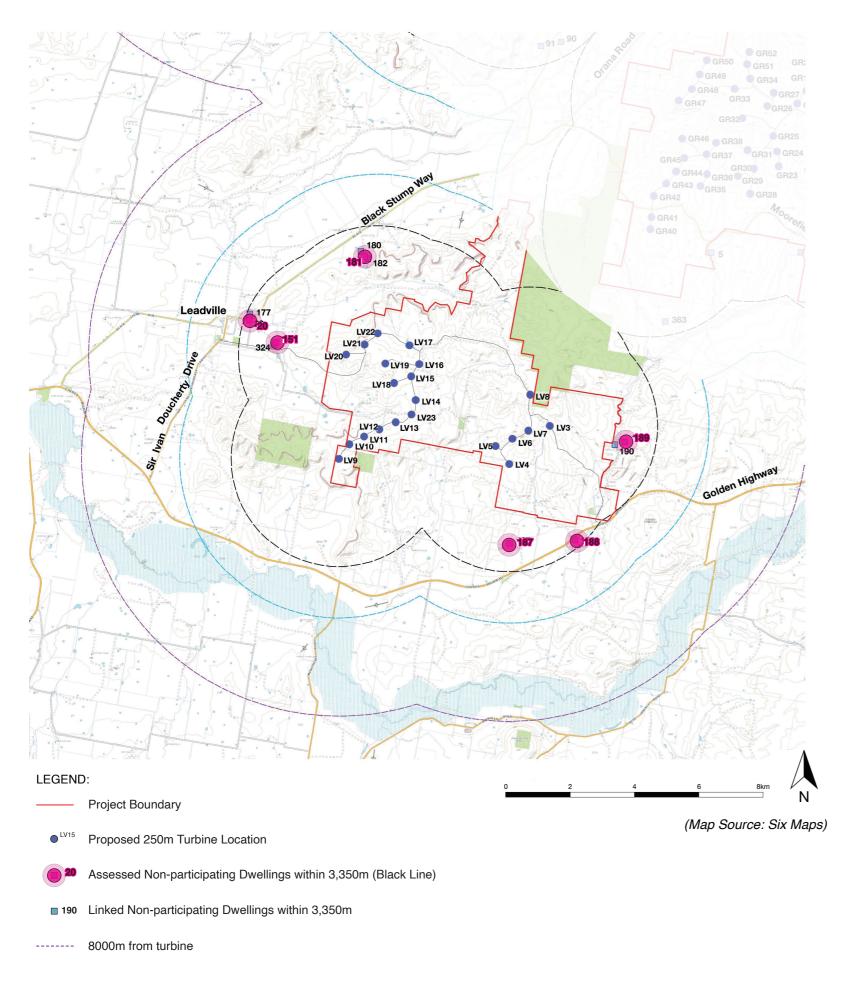
180 Degree Photomontage (Proposed view- as viewed from Moorefield Road)





Dwellings within 3350m associated with Leadville Road (LV) cluster

# LV Cluster: Location of Non-Participating Dwellings within 3,350 m (Black Line)



Dwellings within 3,350m				
Representative Dwelling	Linked Dwellings	MLA Comments		
Dwelling 20	Dwelling 177	Refer Appendix E.26.		
Dwelling 151	Dwelling 324	Refer Appendix E.27.		
Dwelling 181	Dwelling 180 & 182	Refer Appendix E.28.		
Dwelling 187		Refer Appendix E.29.		
Dwelling 188		Refer Appendix E.30.		
Dwelling 189	Dwelling 190	Refer Appendix E.31.		

# E.26. Dwelling Assessment Dwelling 20 (Linked to Dwelling 177)

DWELLING 20					
Nearest proposed turbine (km):	3.20 km	Visibility Distance Zone:	Near Middleground (NM)		
Number of proposed turbines within Black Line (3350 m):	1	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)		
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU07: Towns and settlements		
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low		
Number of potentially visible turbines (Based on topography alone)	122 25 at tip 97 at hub	Visual Influence Zone:	VIZ2		

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 122 turbines (25 at tip & 97 at hub height) would be visible from Dwelling 20. Of these, 15 turbines are located withing 8km of this dwelling. A photomontage has been prepared for a photograph that was taken on Leadville Stock Route on the south eastern side of the residence to represent its views. The dwelling is located on a generally flat terrain and appears to be orientated north-south. Aerial imagery indicates that the dwelling is surrounded by vegetation to the east/southeast which is the direction in which the closest turbines are located. Intermittent vegetation corridors line Black Stump Way and Leadville Stock Route Road. Existing vegetation may fragment certain views of the turbines towards the southeast. There is one (1) turbine within the black line of visual magnitude and four (4) within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: One (1) turbine (LV20) is located within the black line of visual magnitude. Four (4) turbines are located between the black & blue lines of the visual magnitude and it is likely that views will be limited.

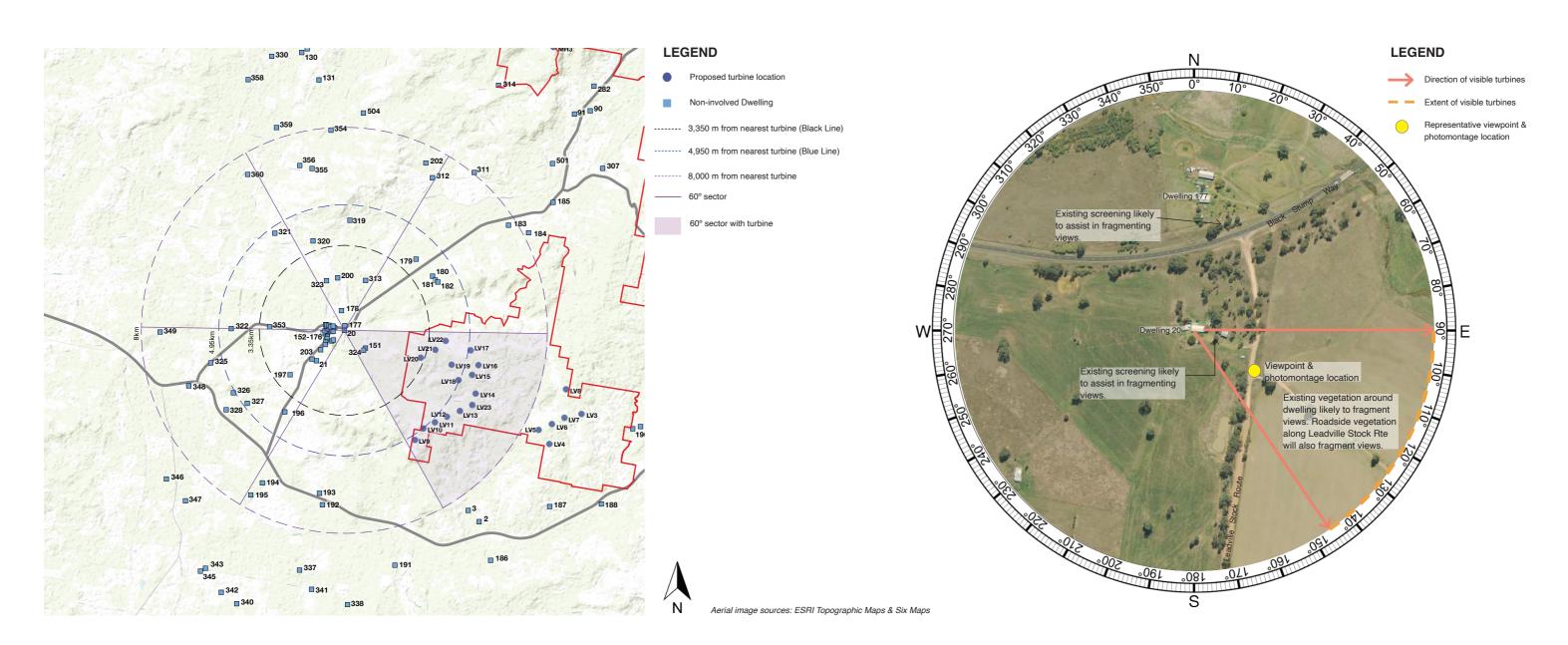
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to one (1) 60 degree sector. However, existing vegetation is likely to partially fragment views of turbines in the southeastern direction.

Landscape Scenic Integrity: The Project will have a moderate to low impact on scenic integrity at this location. The proposed turbines have the potential to be a part of the visual catchment at this location.

Key Feature Disruption: The turbines are likely to be a visible element in the landscape along the undulations on the eastern side of Leadville.

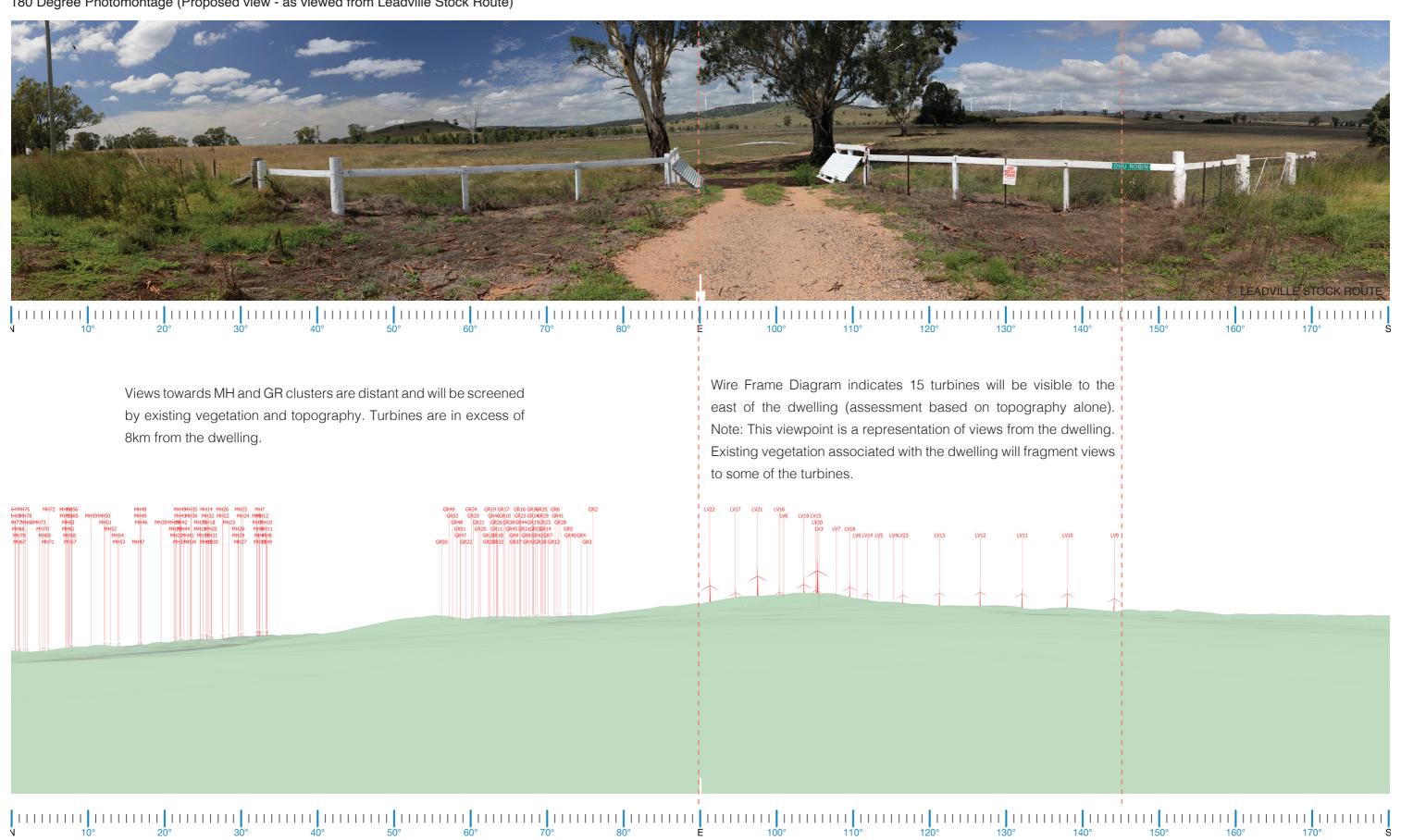
#### Mitigation Measures:

Scattered screen planting to the southeast of the dwelling would help screen views to the Project and reduce the potential visual impact. Existing vegetation, however, will also partially fragment views. Additional vegetation to the south east could assist in reducing views to the Project.



# E.26. Dwelling Assessment Dwelling 20

180 Degree Photomontage (Proposed view - as viewed from Leadville Stock Route)



Proposed Wire Frame Diagram - 180 degree field of view as viewed from Leadville Stock Route

# E.27. Dwelling Assessment Dwelling 151 (Linked to Dwelling 324)

DWELLING 151				
Nearest proposed turbine (km):	2.21 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black Line (3350 m):	3	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU07: Towns & settlements (Leadville)	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	121 34 at tip 87 at hub	Visual Influence Zone:	VIZ2	

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 121 turbines (34 at tip height and 87 at hub height) would be visible from Dwelling 151. However only 19 turbines are located within 8km of Dwellings 151 & 324. The dwellings are located on a relatively flat terrain. Aerial imagery indicates that both dwellings are orientated north-south and a row of windbreak plantations towards the north, east and southeast for both residences. Predominantly turbines will be visible along the undulations in the southeast. The LV cluster of WTGs are likely to be partially visible. Existing vegetation towards the southeast of the dwelling, however, is anticipated to screen most views. There are three (3) turbines within the black line of visual magnitude and 11 within the blue line of this dwelling. Views towards the turbines will be fragmented by existing vegetation for both these dwellings and, therefore, no additional mitigation is required. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Three (3) turbines (LV20, LV21 & LV22) are located within the black line of visual magnitude. 11 turbines are located between the black & blue lines of visual magnitude.

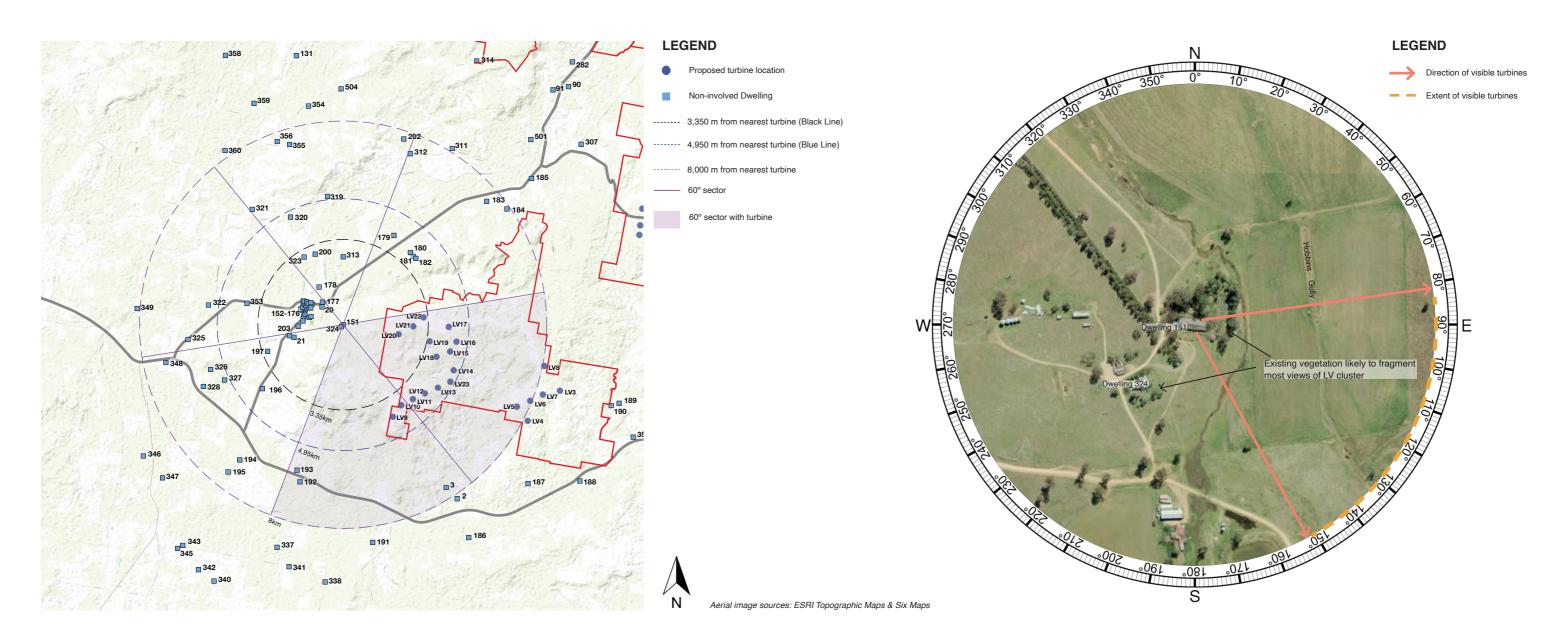
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation is likely to screen views towards turbines for both dwellings.

Landscape Scenic Integrity: The Project will have a low impact on scenic integrity at this location. The proposed turbines are anticipated to be screened by existing vegetation.

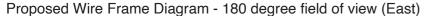
Key Feature Disruption: The Project will not disrupt any key features viewed from these dwellings.

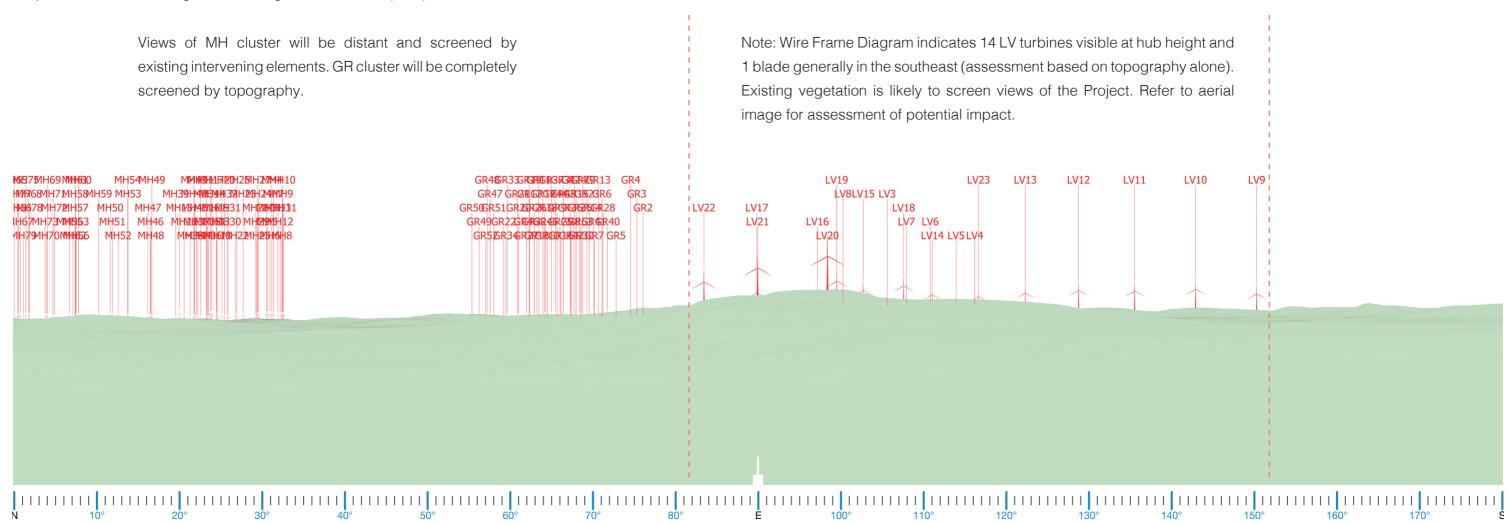
### Mitigation Measures:

No mitigation measures are required



# E.27. Dwelling Assessment Dwelling 151





### Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.

# E.28. Dwelling Assessment Dwelling 181 (Linked to Dwelling 180,182)

DWELLING 181				
Nearest proposed turbine (km):	2.43 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black Line (3350 m):	4	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU03: Alluvial plains	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	89 2 at tip 87 at hub	Visual Influence Zone:	VIZ2	

Visual Impact Rating: Moderate

#### Assessment Notes:

An assessment based on topography alone identified a total of 89 turbines (2 at tip height and 87 at hub height) would be visible from this dwelling. However, only 20 turbines are located within 8km of the dwelling. This assessment is applicable to Dwellings 180 and 182 as well. Aerial imagery indicates that all dwellings are generally orientated north-south and are surrounded by vegetation. Dwellings 181 and 182 are surrounded by dense vegetation and structures which will most likely limit views from these dwellings. Dwelling 181 is situated on a flat to gently undulating terrain which helps screen some of the prominent views in the southeastern direction. Existing vegetation along the dwelling's southern boundary will help fragment some views but given the close proximity of the Project, it is likely that some turbines will be visible. There are four (4) turbines within the black line of visual magnitude and five (5) within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *Moderate* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Four (4) turbines (LV17, LV20, LV21, LV22) are located within the black line of visual magnitude. Five (5) turbines are located between the black & blue lines of visual magnitude.

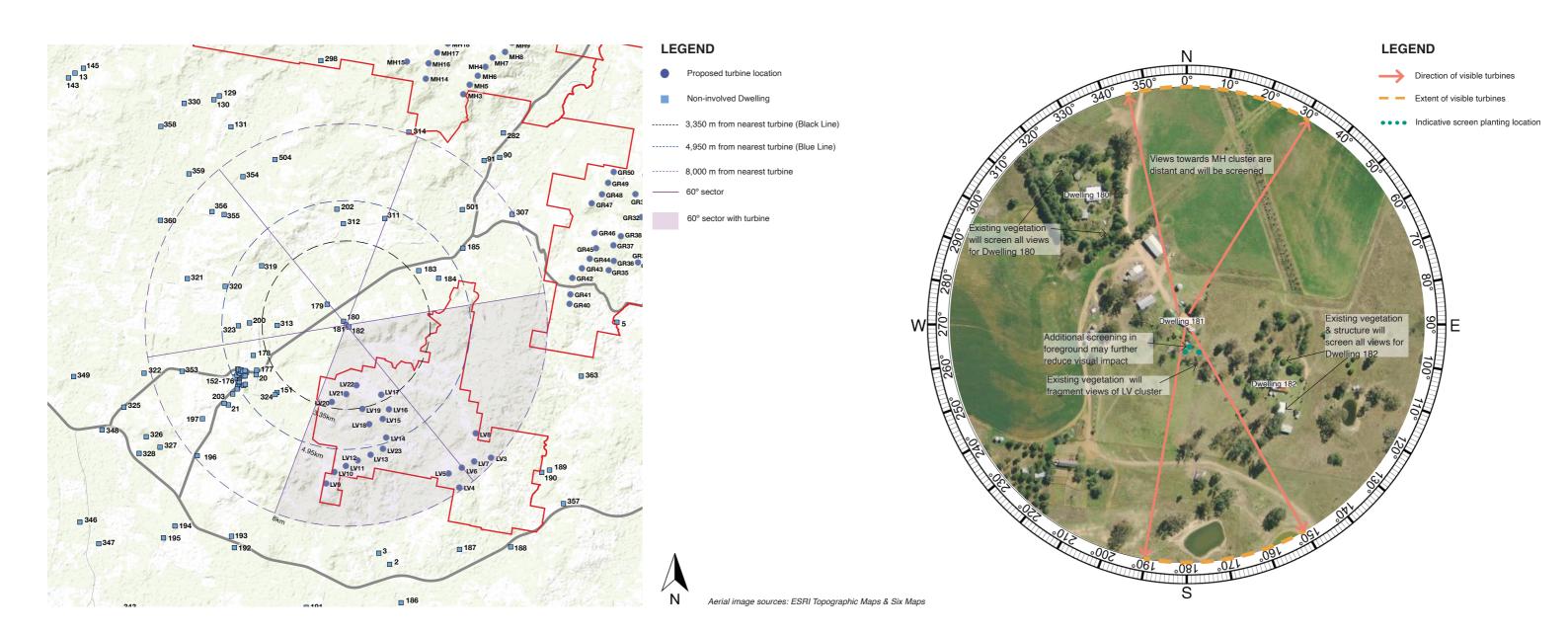
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation is likely to screen views towards turbines in the southeastern direction.

Landscape Scenic Integrity: The Project will have a low impact on scenic integrity at this location. It is likely that the scenic integrity will remain intact.

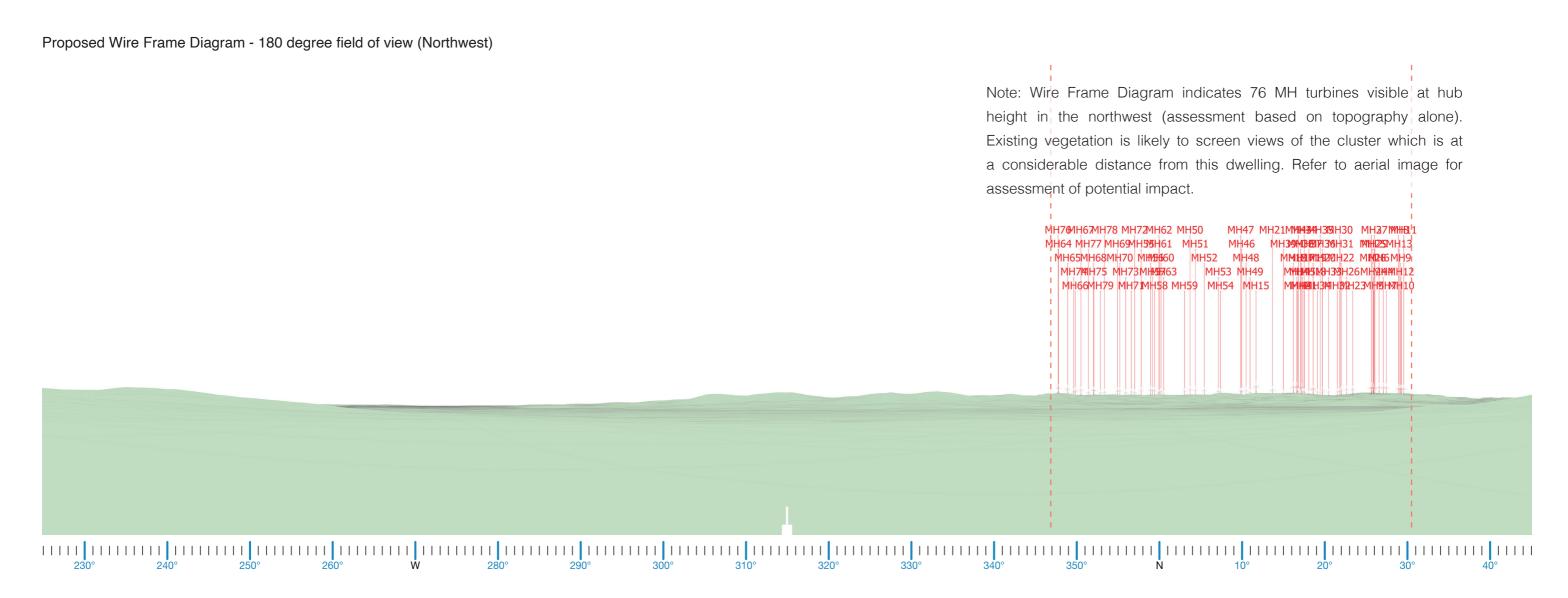
Key Feature Disruption: The Project will not disrupt views to key landscape features from this location.

#### Mitigation Measures:

Supplementary screen planting along the southern boundary of Dwelling 181 in order to reduce potential visual impact of the turbines. Dwellings 180 and 182 will have contained views due to existing vegetation and structures in their surroundings. Consultation with the landowner would be required to discuss appropriate mitigation methods.



# E.28. Dwelling Assessment Dwelling 181



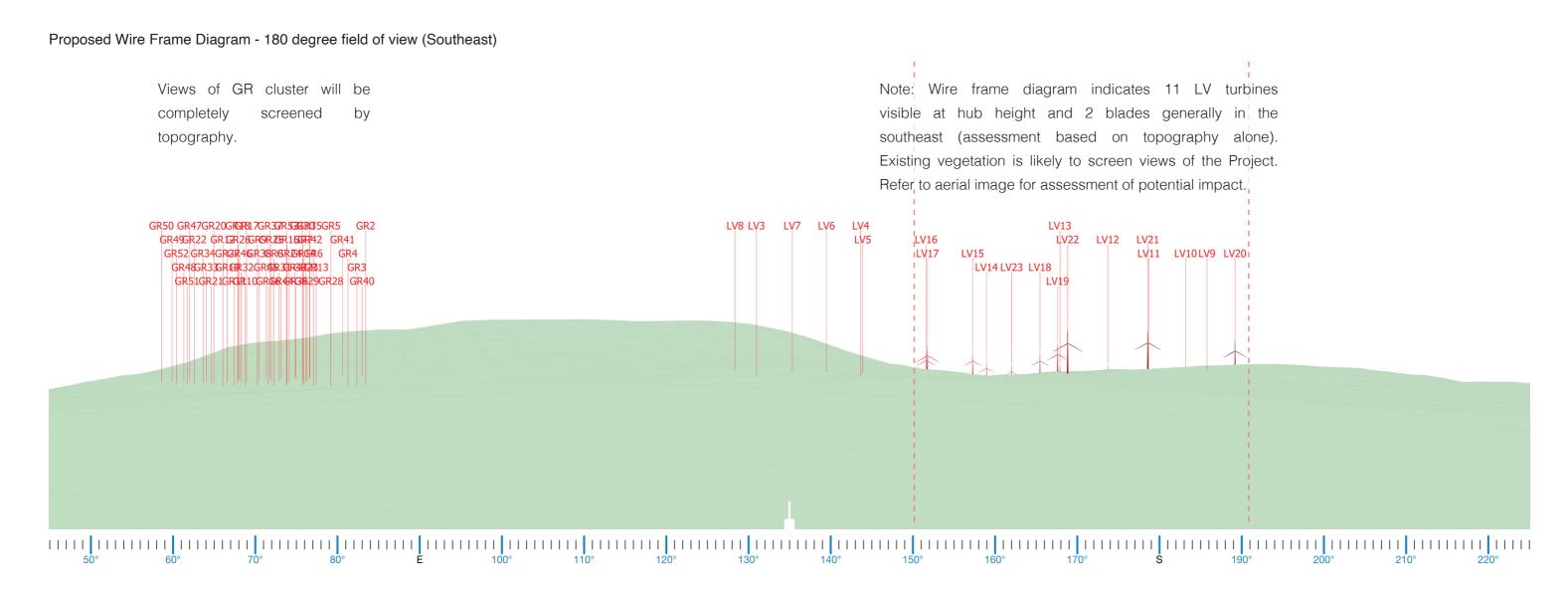
### Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.

# E.28. Dwelling Assessment Dwelling 181



### Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.

# E.29. Dwelling Assessment Dwelling 187

DWELLING 187			
Nearest proposed turbine (km):	2.47 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black Line (3350 m):	3	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU02: Undulating farmlands
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Moderate
Number of potentially visible turbines (Based on topography alone)	8 3 at tip 5 at hub	Visual Influence Zone:	VIZ2

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 8 turbines (3 at tip height and 5 at hub height) would be visible from Dwelling 187. A representative viewpoint was taken on the northern side of Dwelling 187 to assess the impact of the Project. The dwelling is located on a gently undulating terrain and is surrounded by moderately dense to patchy vegetation as seen in the aerial imagery. This vegetation is spread across the north/northwest which is also the direction in which most number of turbines are located. A gentle rise in the topography towards the northwest helps screen views towards most turbines, thus allowing views of upto three (3) turbines that are located within the black line of visual magnitude. It is highly likely that these views will be intermittent. Three (3) turbines are located within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Three (3) turbines (LV4, LV5 & LV6) are located within the black line of visual magnitude. Three (3) turbines are located between the black & blue lines of visual magnitude.

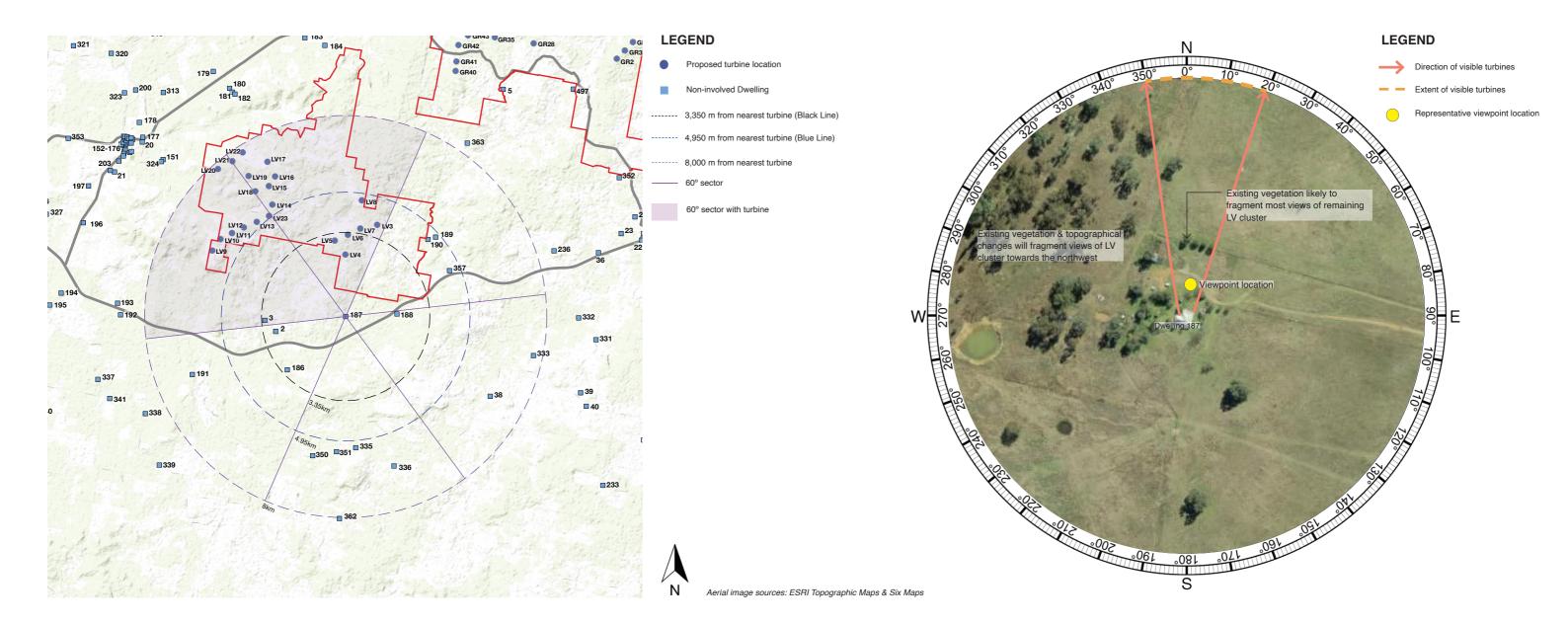
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation and topography are likely to screen views towards turbines.

Landscape Scenic Integrity: The Project will have a low impact on the scenic integrity at this location. The proposed turbines do not have the potential to be clearly visible.

Key Feature Disruption: The Project will be partially visible on the ridgeline. Views, however, are likely to be limited due to existing vegetation topographical changes.

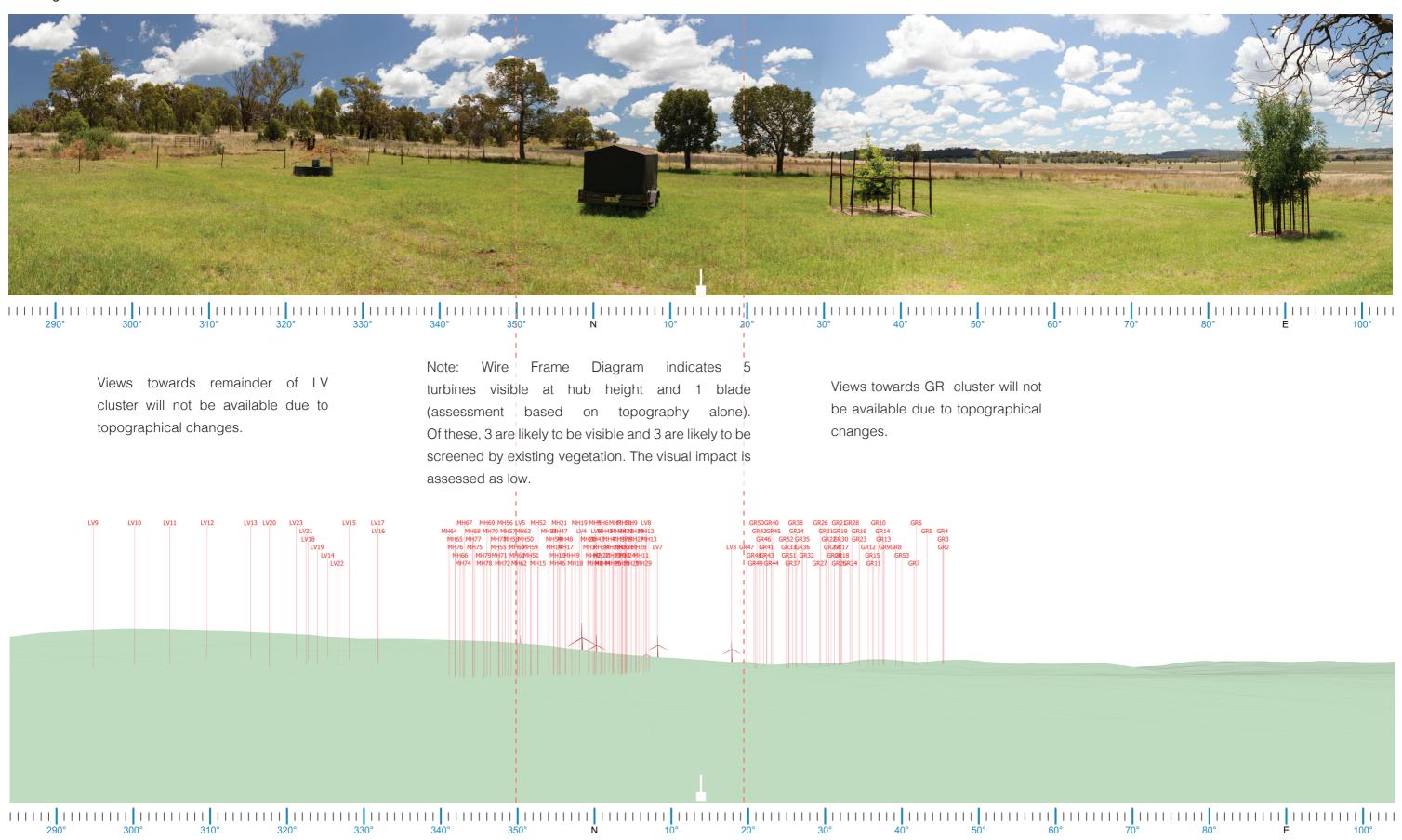
### Mitigation Measures:

No mitigation measures are required



# E.29. Dwelling Assessment Dwelling 187

### 180 Degree Baseline Panorama



Proposed Wire Frame Diagram - 180 degree field of view

# E.30. Dwelling Assessment Dwelling 188

DWELLING 188				
Nearest proposed turbine (km):	3.13 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black Line (3350 m):	1	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU02: Undulating farmlands	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Moderate	
Number of potentially visible turbines (Based on topography alone)	61 17 at tip 44 at hub	Visual Influence Zone:	VIZ2	

Visual Impact Rating: Moderate

#### Assessment Notes:

An assessment based on topography alone identified a total of 61 turbines (17 at tip height and 44 at hub height) would be visible. Of these, 18 turbines are located within 8km from this dwelling. A representative viewpoint was taken from the entrance gate of Dwelling 188 to assess the impact of the Project. Aerial imagery indicates that the dwelling is generally orientated north-south and is surrounded by a patch of moderately dense vegetation to the south and windbreak plantation to the north. Prominent views of the Project will be available in the northern/northwestern direction. The house is located on a generally flat terrain. Existing vegetation along the dwelling's northern boundary will help fragment some views but given the close proximity and elevated position of the LV cluster, it is likely that the turbines will be visible. There is one (1) turbine within the black line of visual magnitude and five (5) within the blue line of this dwelling. The visual impact resulting from the Project has been rated as *Moderate* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: One (1) turbine (LV4) is located within the black line of visual magnitude. Five (5) turbines are located between the black & blue lines of visual magnitude. These are likely to be visible.

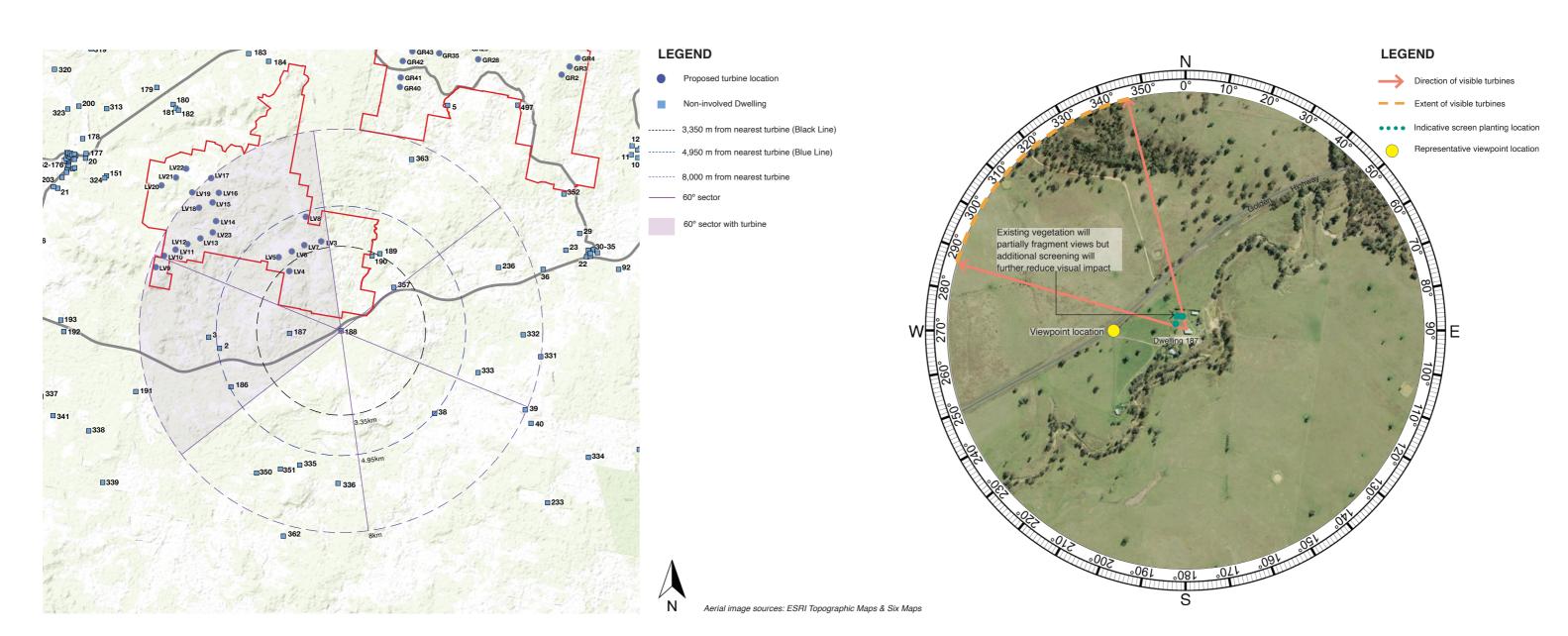
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation may help fragment few views towards turbines.

Landscape Scenic Integrity: The Project will have a moderate to low impact on scenic integrity at this location. The proposed turbines have the potential to be a part of the visual catchment at this location.

Key Feature Disruption: The Project will be a key feature visible on the ridgeline in the northern direction. Existing vegetation may reduce potential visual impact but additional vegetation is recommended.

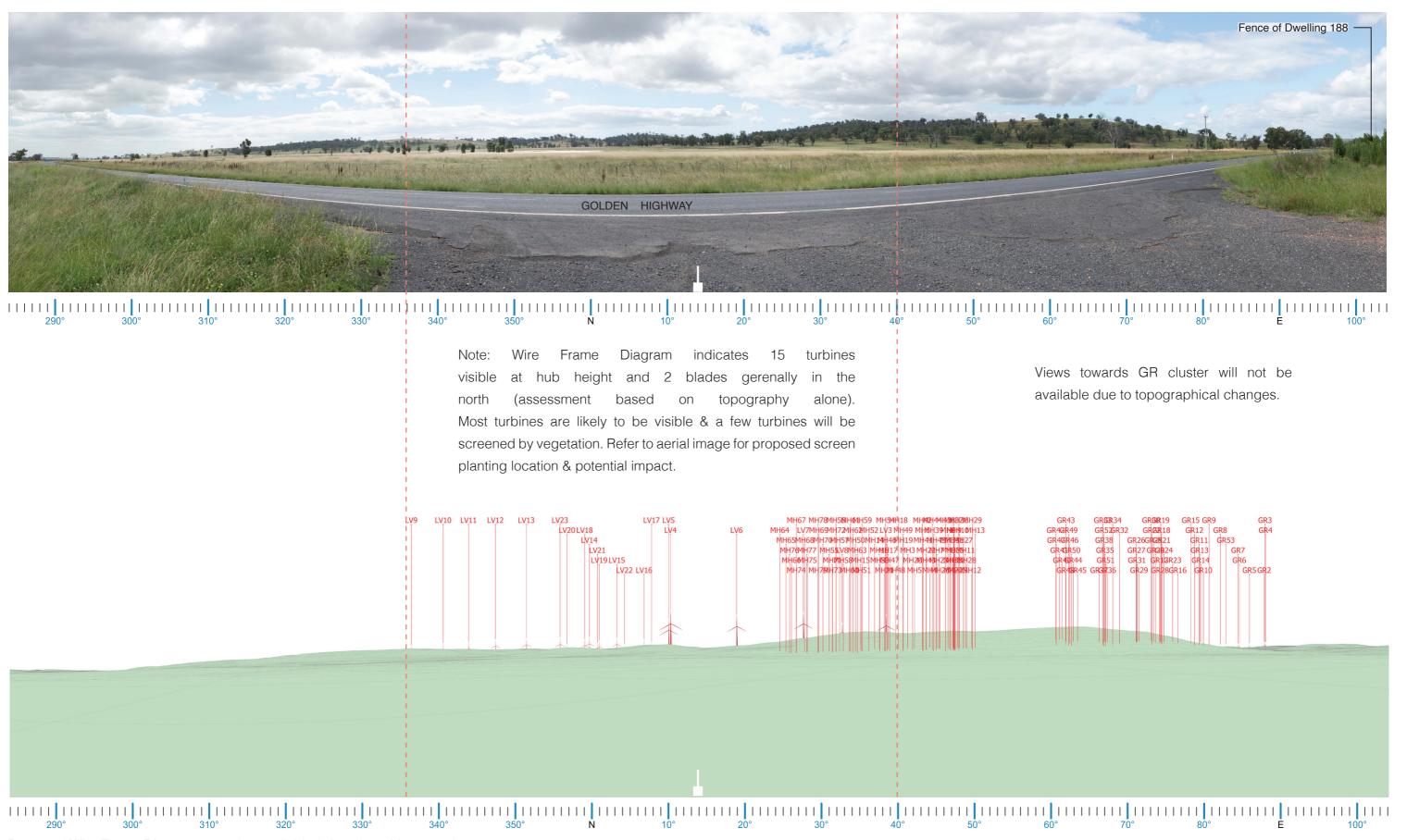
#### Mitigation Measures:

Supplementary screen planting along the northwestern boundary of the dwelling in keeping with the existing vegetation character is recommended in order to reduce potential visual impact of the turbines. Consultation with the landowner would be required to discuss appropriate mitigation methods.



# E.30. Dwelling Assessment Dwelling 188

180 Degree Baseline Panorama (Indicative view from driveway of property)



Proposed Wire Frame Diagram - 180 degree field of view from driveway of property

# E.31. Dwelling Assessment Dwelling 189 (Linked to Dwelling 190)

DWELLING 189				
Nearest proposed turbine (km):	2.38 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black Line (3350 m):	3	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU03: Alluvial plains	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	6 All at hub	Visual Influence Zone:	VIZ2	

Visual Impact Rating: Moderate

#### Assessment Notes:

An assessment based on topography alone identified a total of 6 turbines (all at hub height) would be visible from Dwelling 189. This assessment also gauges the potential visual of the Project on Dwelling 190. A representative viewpoint was taken from the entrance gate of Dwelling 189 to assess the impact of the Project. The dwelling is located on a gently undulating terrain. Aerial imagery indicates that the dwelling is surrounded by dense vegetation to the north, south and east. Dwelling 190 is surrounded by vegetation in the north which is likely to help screen all views in this direction and a rise in the topography on the western side of this dwelling will potentially screen all views of the LV cluster. Closest turbines visible from Dwelling 189 belong to the LV cluster. The GR cluster is generally in the northern direction but is likely to be screened completely by existing vegetation and topographical changes. Views towards the west will also be partially screened by vegetation but it is possible that tips of some turbines will be visible. There are three (3) turbines within the black line of visual magnitude and three (3) turbines between the black & blue lines of this dwelling. The visual impact resulting from the Project has been rated as *Moderate* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Three (3) turbines (LV3, LV7 & LV8) are located within the black line of visual magnitude. Three (3) turbines are located between the black and blue lines of visual magnitude.

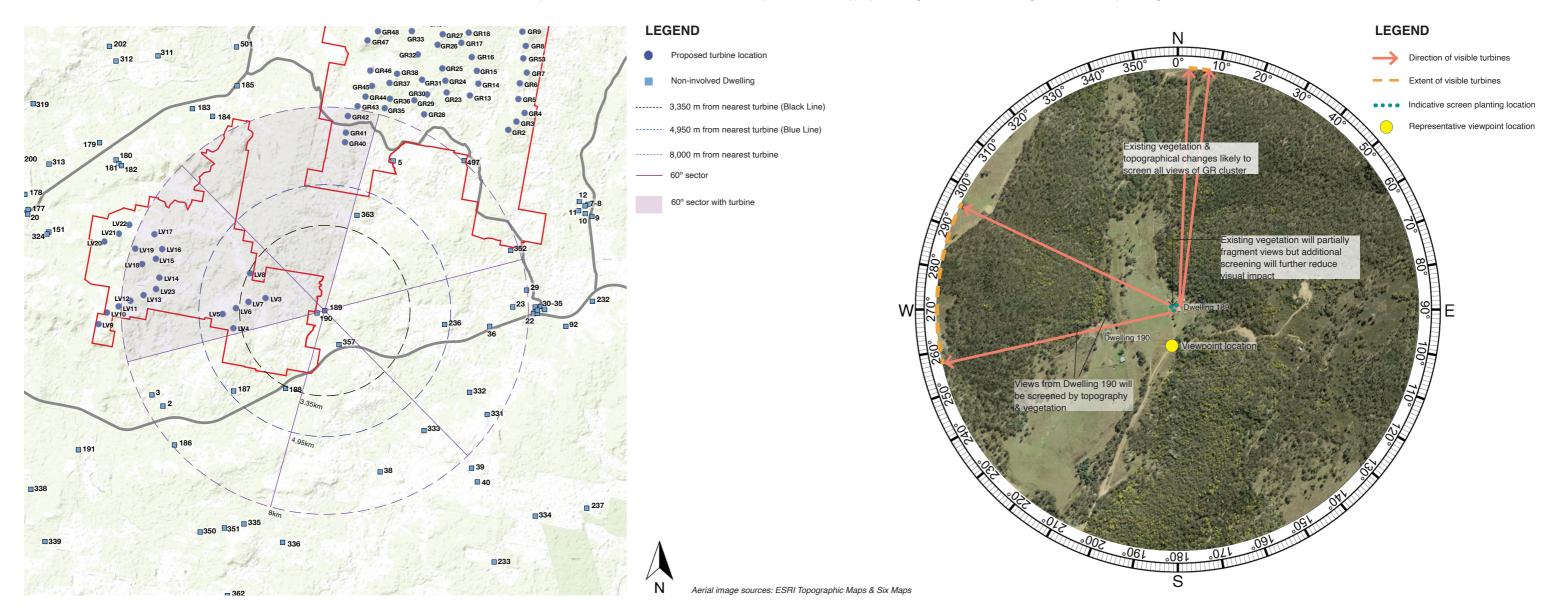
*Multiple Wind Turbine Effect:* Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation and topographical changes are likely to partially screen views towards turbines in the northern and western direction.

Landscape Scenic Integrity: The Project will have a moderate to low impact on scenic integrity at this location. The proposed turbines will be a part of the visual catchment.

Key Feature Disruption: The turbines are likely to be a visible but will not diminish the key landscape features as viewed from this dwelling due to existing vegetation around the house.

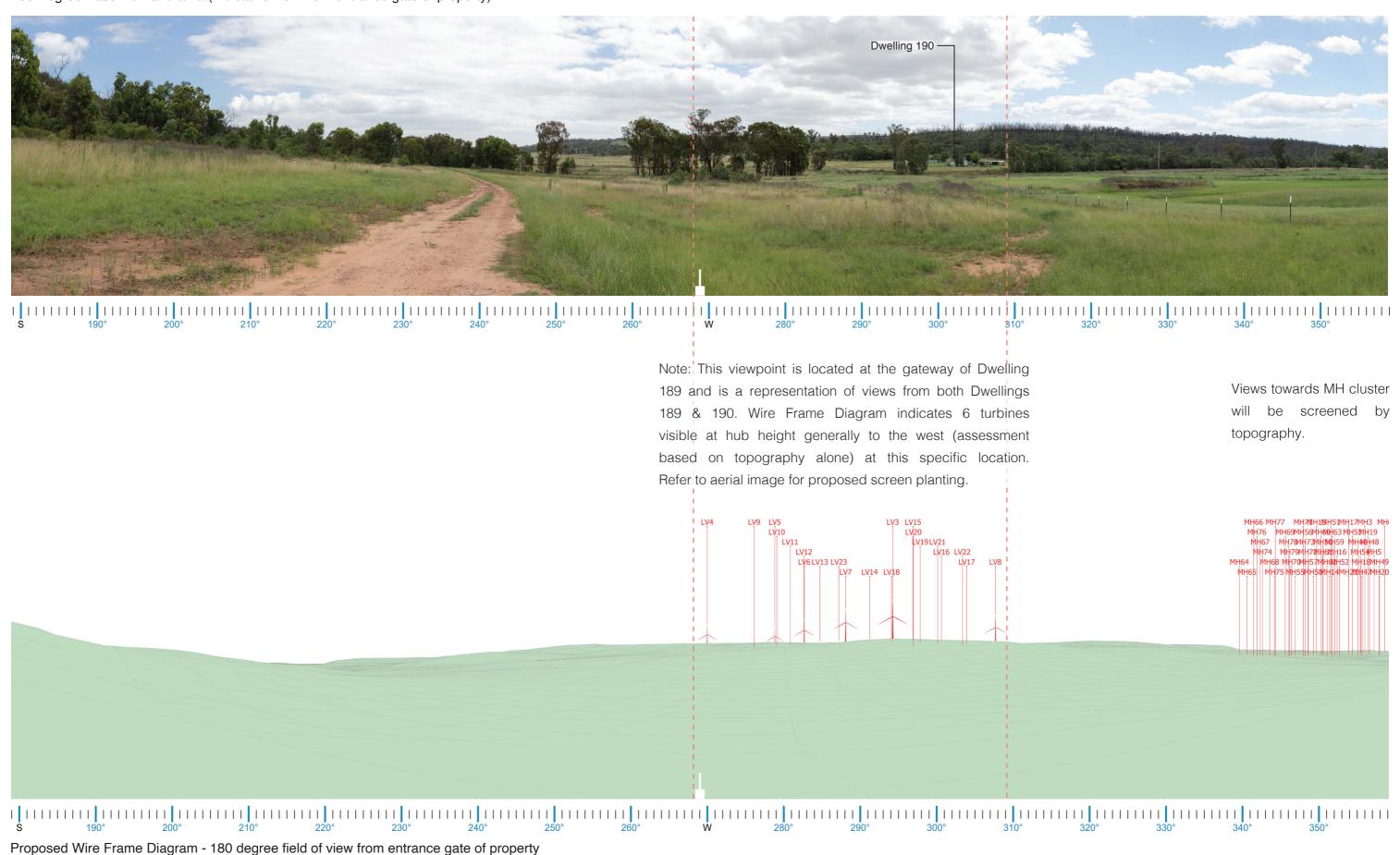
#### Mitigation Measures:

Supplementary screen planting along the western boundary of Dwelling 189 in keeping with the existing vegetation character is recommended in order to further reduce potential visual impact of the turbines if deemed necessary. Consultation with the landowner would be required to discuss appropriate mitigation methods. Dwelling 190 does not require mitigation.



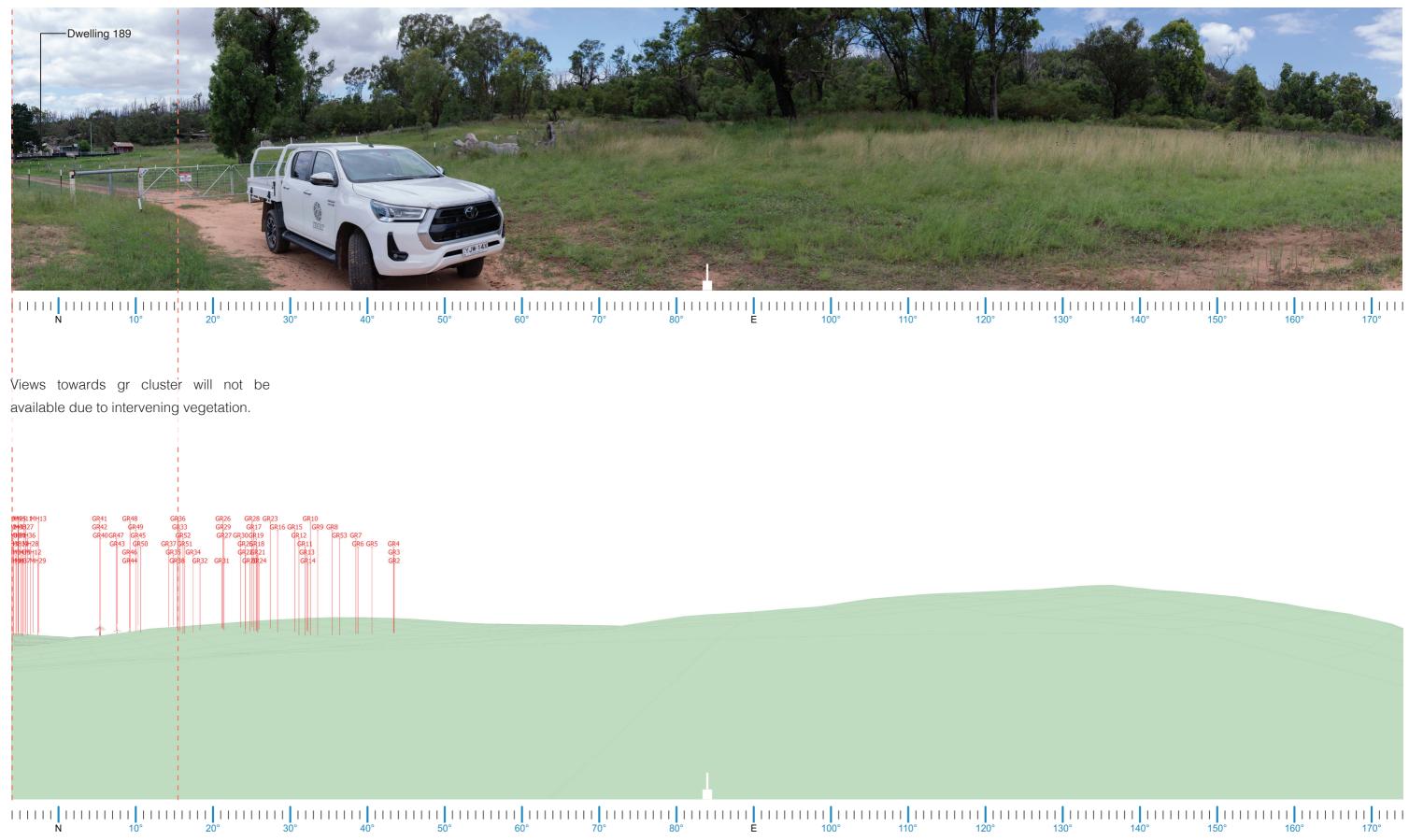
# E.31. Dwelling Assessment Dwelling 189

180 Degree Baseline Panorama (Indicative view from entrance gate of property)



# E.31. Dwelling Assessment Dwelling 189

180 Degree Baseline Panorama (Indicative view from entrance gate of property)



Proposed Wire Frame Diagram - 180 degree field of view from entrance gate of property

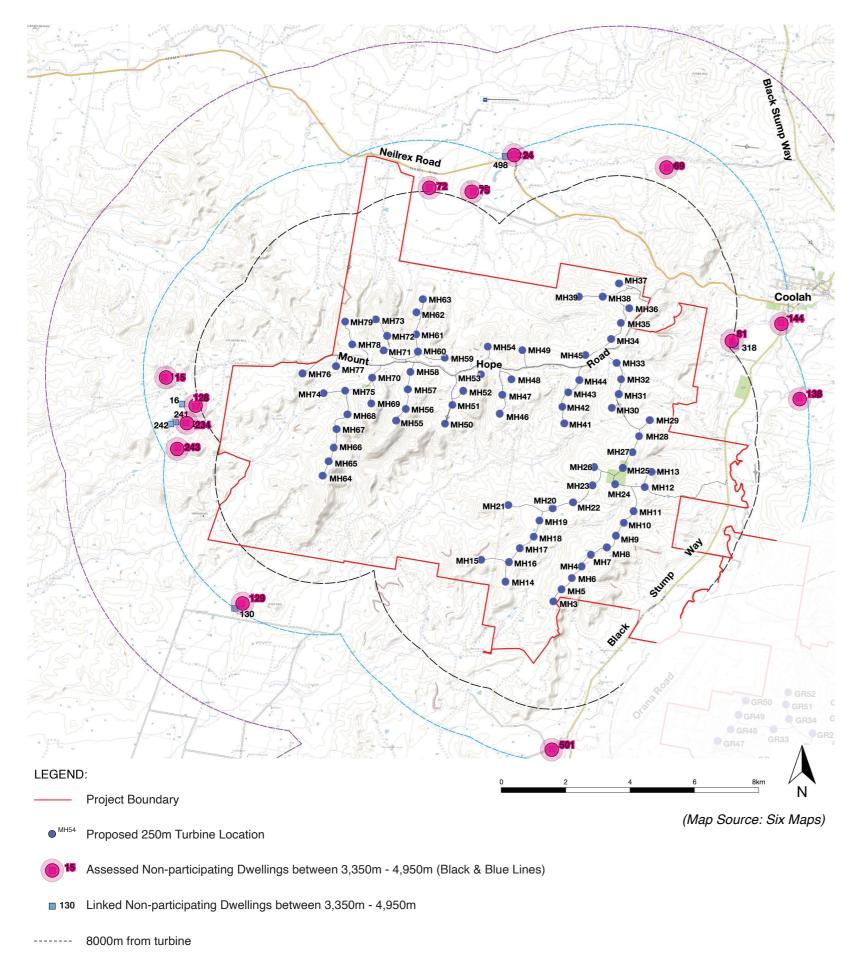


Detailed Dwelling Assessments Dwellings within 3350m - 4950m



Dwellings within 3350m - 4950m associated with Mount Hope Road (MH) cluster

# MH Cluster: Location of Non-Participating Dwellings between 3,350 m - 4,950m (Black & Blue Lines)



Owellings between 3,350r	m - 4,950m	
Representative Dwelling	Linked Dwellings	MLA Comments
Dwelling 15		Refer Appendix E.32.
Dwelling 24	Dwelling 498	Refer Appendix E.33.
Dwelling 69		Refer Appendix E.34.
Dwelling 72		Refer Appendix E.35.
Dwelling 75		Refer Appendix E.36.
Dwelling 81	Dwelling 318	Refer Appendix E.37.
Dwelling 128	Dwelling 16	Refer Appendix E.38.
Dwelling 129	Dwelling 130	Refer Appendix E.39.
Dwelling 138		Refer Appendix E.40.
Dwelling 144		Refer Appendix E.41.
Dwelling 234	Dwellings 241 & 242	Refer Appendix E.42.
Dwelling 243		Refer Appendix E.43.
Dwelling 501		Refer Appendix E.44.

# E.32. Dwelling Assessment Dwelling 15

DWELLING 15			
Nearest proposed turbine (km):	4.31 km	Visibility Distance Zone:	Far Middleground (FM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	1	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU02: Undulating farmlands
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Moderate
Number of potentially visible turbines (Based on topography alone)	60 24 at tip 36 at hub	Visual Influence Zone:	VIZ2

Visual Impact Rating: Nil

#### Assessment Notes:

An assessment based on topography alone identified a total of 60 turbines (24 at tip height and 36 at hub height) would be visible from Dwelling 15. Of these, 22 turbines are located within 8km of the dwelling. The dwelling is located on an undulating terrain in Mount Hope. Aerial imagery indicates that the dwelling is surrounded by dense vegetation in all directions. The turbines identified within the blue line and beyond are located in the eastern direction. Views towards these turbines are likely to be hindered by existing vegetation on the undulating terrain around the residence. The visual impact resulting from the Project has been rated as *Nil* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: One (1) turbine (MH76) are located between the black & blue lines of visual magnitude.

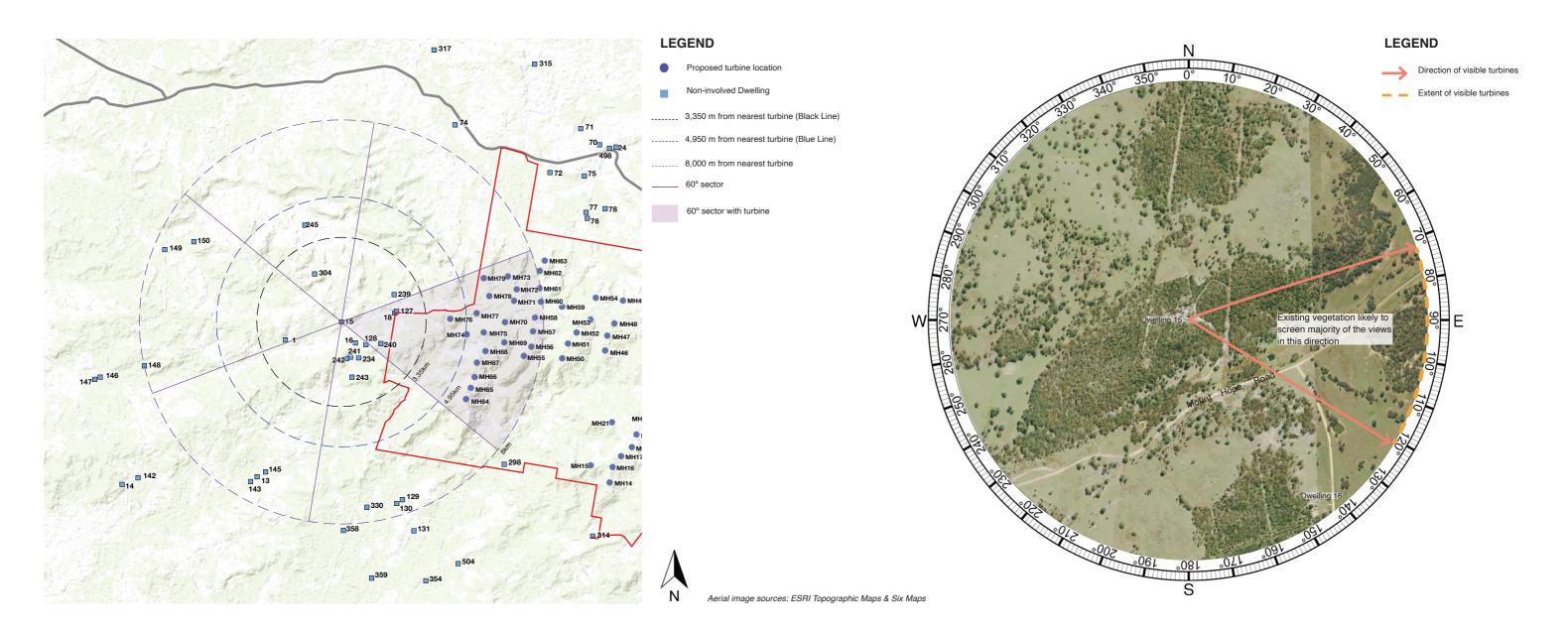
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to one (1) 60 degree sector. Existing vegetation is likely to screen views of the turbines.

Landscape Scenic Integrity: The turbines are not likely to be visible at this location, thus keeping the landscape scenic integrity intact.

Key Feature Disruption: The turbines are not likely to be visible due to existing screening vegetation and undulating landscape character. The Project will not disrupt any views.

#### Mitigation Measures:

No mitigation measures are required.



# E.33. Dwelling Assessment Dwelling 24 (Linked to Dwelling 498)

DWELLING 24			
Nearest proposed turbine (km):	4.86 km	Visibility Distance Zone:	Far Middleground (FM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	1	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU04: Agricultural flats
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	67 18 at tip 49 at hub	Visual Influence Zone:	VIZ3

Visual Impact Rating: Nil

### Assessment Notes:

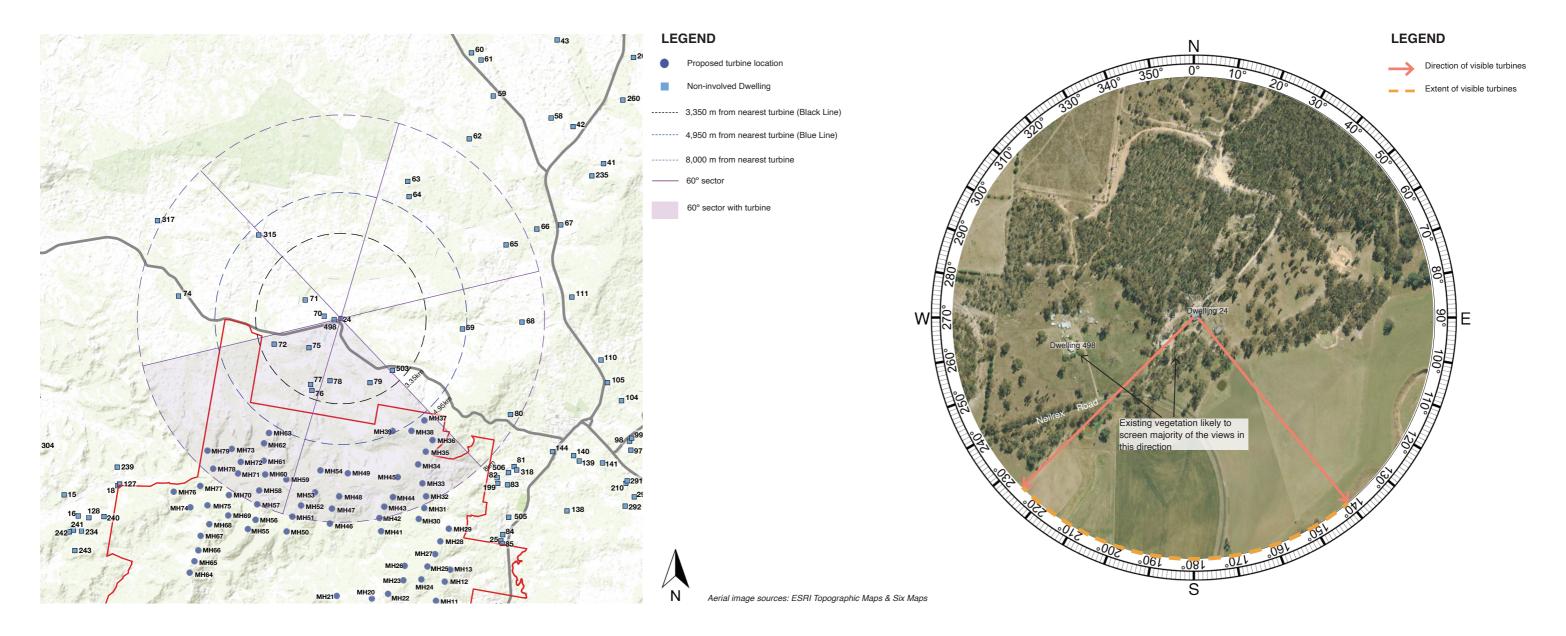
An assessment based on topography alone identified a total of 67 turbines (18 at tip & 49 at hub) would be visible from Dwelling 24. Of these, 30 turbines are located within 8km of this dwelling. This assessment also represents the impact on Dwelling 498 which is located west of Dwelling 24. The dwellings are located on a flat terrain just off Neilrex Road and near the town of Coolah. Aerial imagery indicates that Dwelling 24 is surrounded by dense vegetation on the southern side. This vegetation will play an important role in fragmenting views of the MH cluster. Dwelling 498 is also surrounded by vegetation on the southern side. Views towards turbines beyond 4950m will be fragmented by existing vegetation. It is unlikely that views towards key landscape features will be disrupted by the turbines. The Project has the potential to be visible in up to two (2) 60 degree sectors and existing vegetation will screen these views. The visual impact resulting from the Project has been rated as **Nii** from this dwelling.

### Visual Performance Objectives Evaluation (VIZ3):

No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3).

#### Mitigation Measures:

No mitigation measures are required



# E.34. Dwelling Assessment Dwelling 69

DWELLING 69				
Nearest proposed turbine (km):	3.89 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	4	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU02: Undulating farmlands	
Number of visible 60° Sectors (Based on 3D Assessment):	0	Scenic Quality Rating:	Moderate	
Number of potentially visible turbines (Based on topography alone)	Nil	Visual Influence Zone:	VIZ2	

Visual Impact Rating: Nil

#### Assessment Notes:

An assessment based on topography alone identified that no turbines will be visible from this dwelling. Aerial imagery indicates that the dwelling is surrounded by dense vegetation in the southern direction which is the direction in which any potential turbines would be visible. The house is located on an undulating terrain which is densely wooded. A rise in the topography on the southern side of the dwelling will limit majority of the views in this direction and it is highly unlikely that the Project will not be visible. The visual impact resulting from the Project has been rated as *Nil* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Four (4) turbines (MH36, MH37, MH38 & MH39) are located within the black and blue lines of visual magnitude. These will not be visible due to the existing topographical changes.

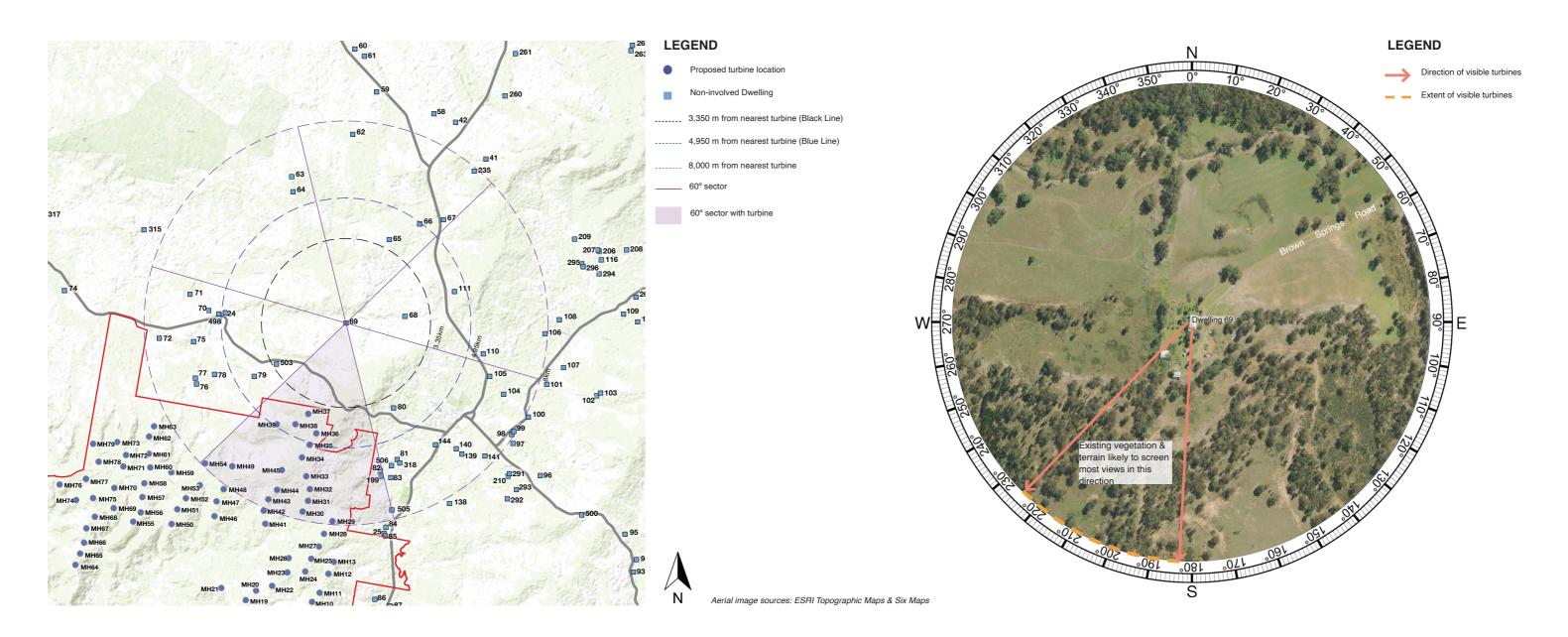
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to one (1) 60 degree sector. Existing topographical changes, however, is likely to screen all views.

Landscape Scenic Integrity: The Project will not have any impact on scenic integrity at this location. The proposed turbines do not have the potential to be visible at this location.

Key Feature Disruption: None of the key visual features will be disrupted at this location.

### Mitigation Measures:

No mitigation measures are required.



# E.35. Dwelling Assessment Dwelling 72

DWELLING 72			
Nearest proposed turbine (km):	3.49 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	6	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU04: Agricultural flats
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	61 10 at tip 51 at hub	Visual Influence Zone:	VIZ2

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 61 turbines would be visible (10 at tip & 51 at hub height) from this dwelling. Of these, 41 turbines are located within 8km of the dwelling. The dwelling is located on a flat terrain just north of Queensborough Creek. A photograph was taken from Neilrex Road near the dwelling's driveway to represent the views from this residence. Aerial imagery indicates that the dwelling is surrounded by vegetation in all directions which will help reduce the potential visual impact to a large extent. Views of turbines will be potentially available in the south/southeast direction which is currently characterized by boundary vegetation as per aerial imagery. Scattered vegetation associated with Queensborough Creek will also help in fragmenting some views, but the existing boundary vegetation is likely to contribute towards screening most views. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Six (6) turbines (MH61, MH62, MH63, MH72, MH73 & MH79) are located within the black and blue lines of visual magnitude but majority of these are likely to be screened by vegetation.

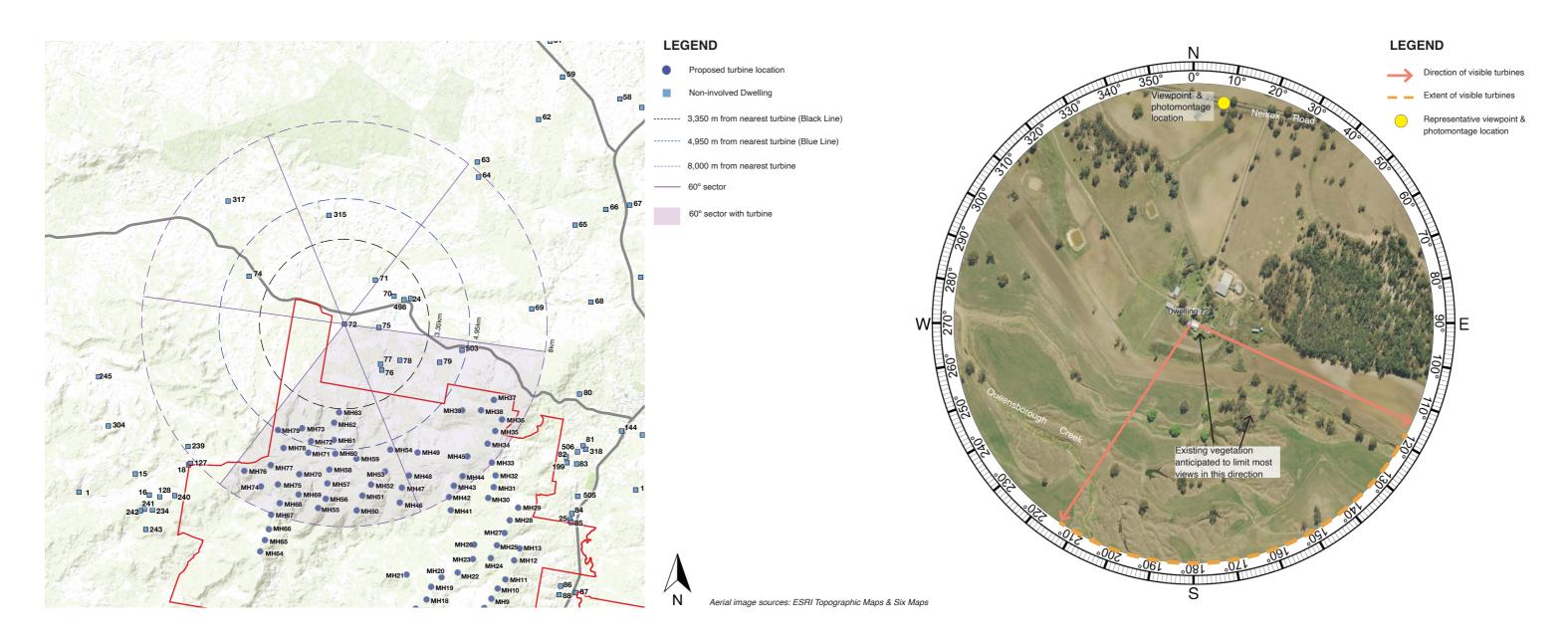
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation is likely to fragment views towards turbines in the southern/southeast..

Landscape Scenic Integrity: The Project will not impact the scenic integrity at this location. The proposed turbines have the potential to be partially visible at this location.

Key Feature Disruption: The tips of some turbines are likely to be a visible element in the landscape, but will not diminish the key landscape features as viewed from this dwelling due to existing screening elements.

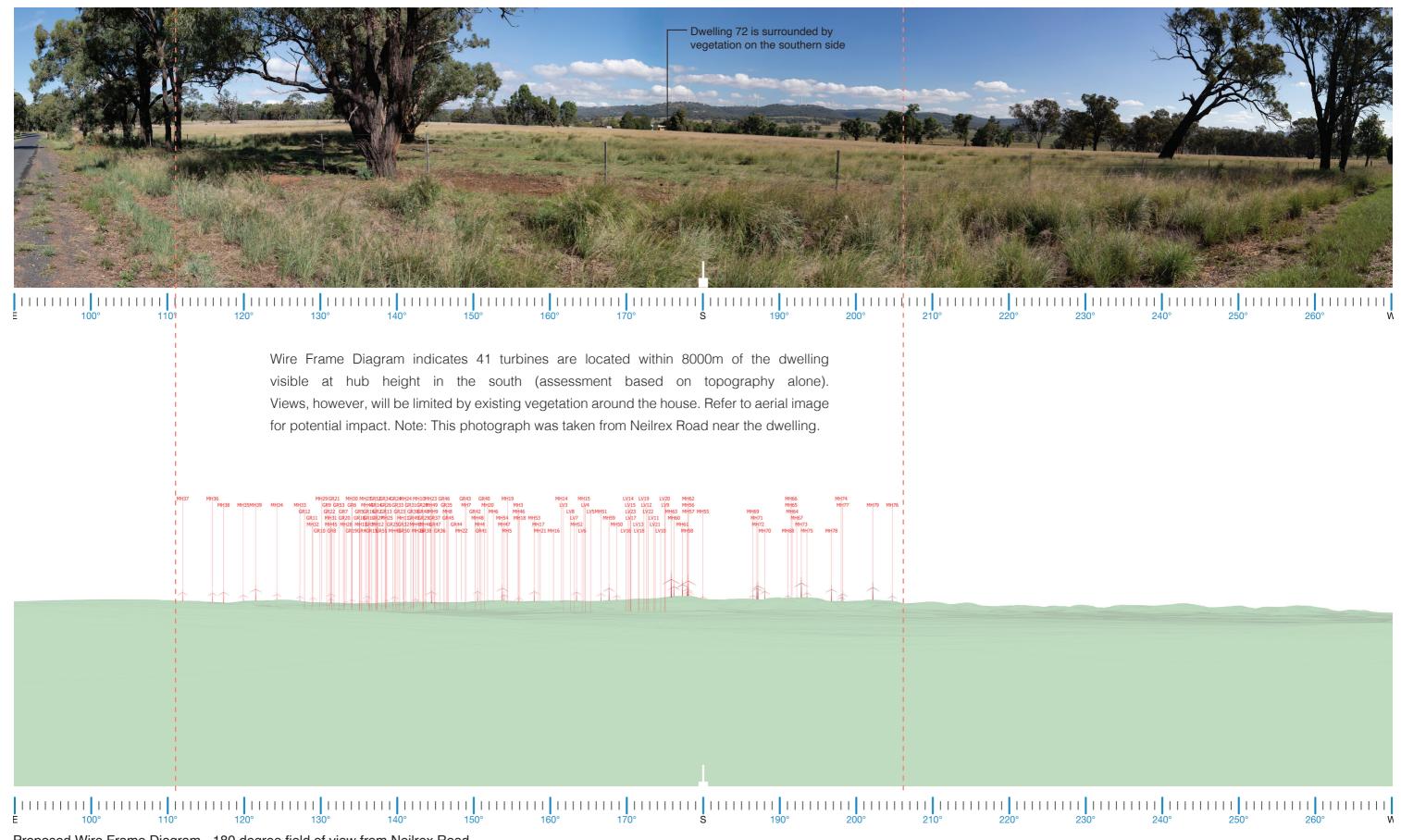
### Mitigation Measures:

No mitigation measures are required.



# E.35. Dwelling Assessment Dwelling 72

180 Degree Photomontage (Proposed view - as viewed from Neilrex Road)



### E.36. Dwelling Assessment Dwelling 75

DWELLING 75				
Nearest proposed turbine (km):	3.70 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	5	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU04: Agricultural flats	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	61 10 at tip 51 at hub	Visual Influence Zone:	VIZ2	

Visual Impact Rating: Negligible

#### Assessment Notes:

An assessment based on topography alone identified a total of 61 turbines (10 at tip height and 51 at hub height) would be visible from Dwelling 75. The dwelling is located on a generally flat terrain with some views looking in the southern direction. Aerial imagery indicates that the residence's entertaining areas are to the north, which means that they will not be impacted. The dwelling is surrounded by moderately dense vegetation to the south which is the direction in which turbines will be potentially visible. It is highly likely that this vegetation in the dwelling's foreground will screen views towards the elevated turbines. The visual impact resulting from the Project has been rated as **Negligible** from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Five (5) turbines (MH39, MH61, MH62, MH63 & MH73) are located between the black & blue lines of visual magnitude but it is highly likely that the views will be screened.

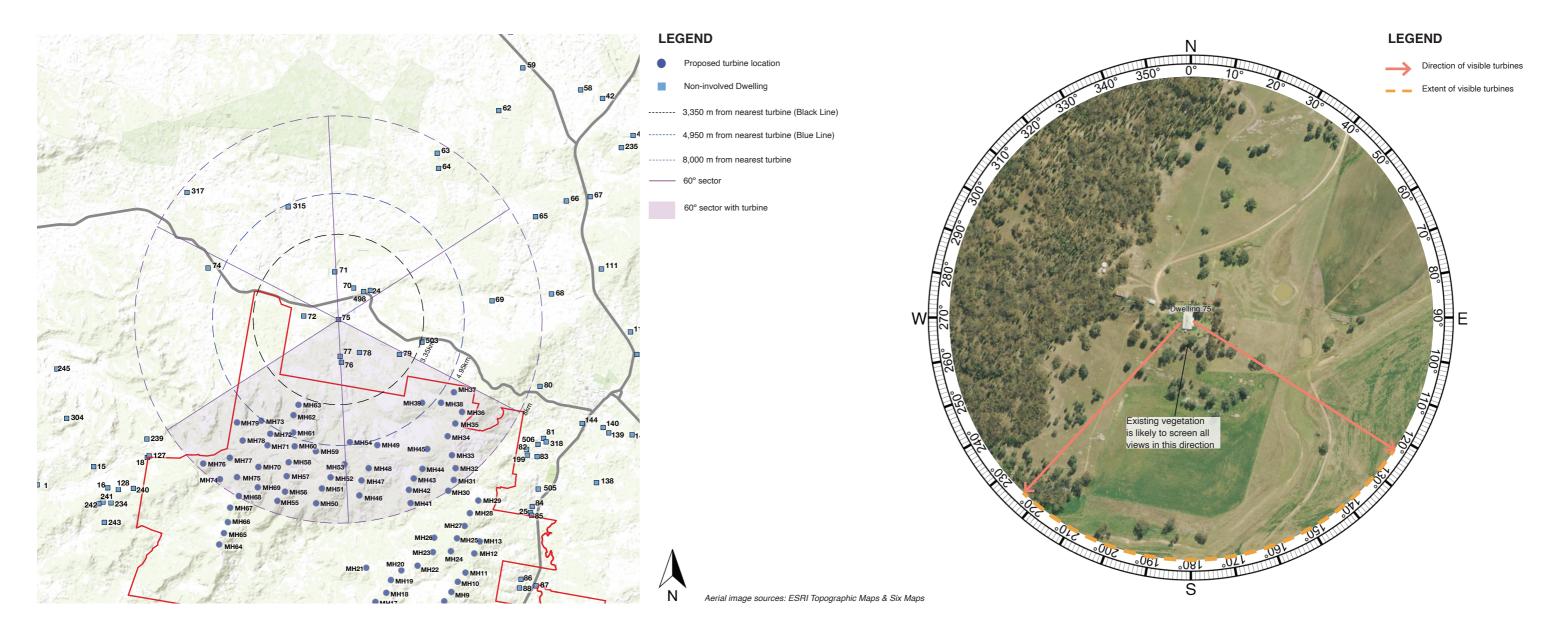
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. Existing vegetation is anticipated to screen the extent of visible turbines.

Landscape Scenic Integrity: The turbines are not likely to be visible at this location. The scenic integrity is likely to remain intact.

Key Feature Disruption: The turbines will not diminish the key landscape features as viewed from this dwelling.

### Mitigation Measures:

No mitigation measures are required.



# E.37. Dwelling Assessment Dwelling 81 (Linked to Dwelling 318)

DWELLING 81			
Nearest proposed turbine (km):	3.37 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	15	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU05: Towns and settlements (Coolah)
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	11 8 at tip 3 at hub	Visual Influence Zone:	VIZ2

Visual Impact Rating: Nil

#### Assessment Notes:

An assessment based on topography alone identified that a total of 11 turbines would be visible (8 at tip and 3 at hub height) from Dwelling 81. This assessment also represents the potential visual impact of the Project on Dwelling 318 which is located southeast of Dwelling 81. The dwellings are located on a moderately undulating terrain just outside of the town of Coolah. Aerial imagery indicates that the dwelling is surrounded by dense vegetation in the west-southwest directions. The terrain on the western side of the residence rises gently, and thus, screens majority of the turbines. In addition to the rising terrain, the dense vegetation on this hillside eliminates all opportunities to view the MH cluster. The visual impact resulting from the Project has been rated as **Nii** from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: 15 turbines are located between the black & blue lines of visual magnitude but it is highly likely that these will be screened by existing vegetation.

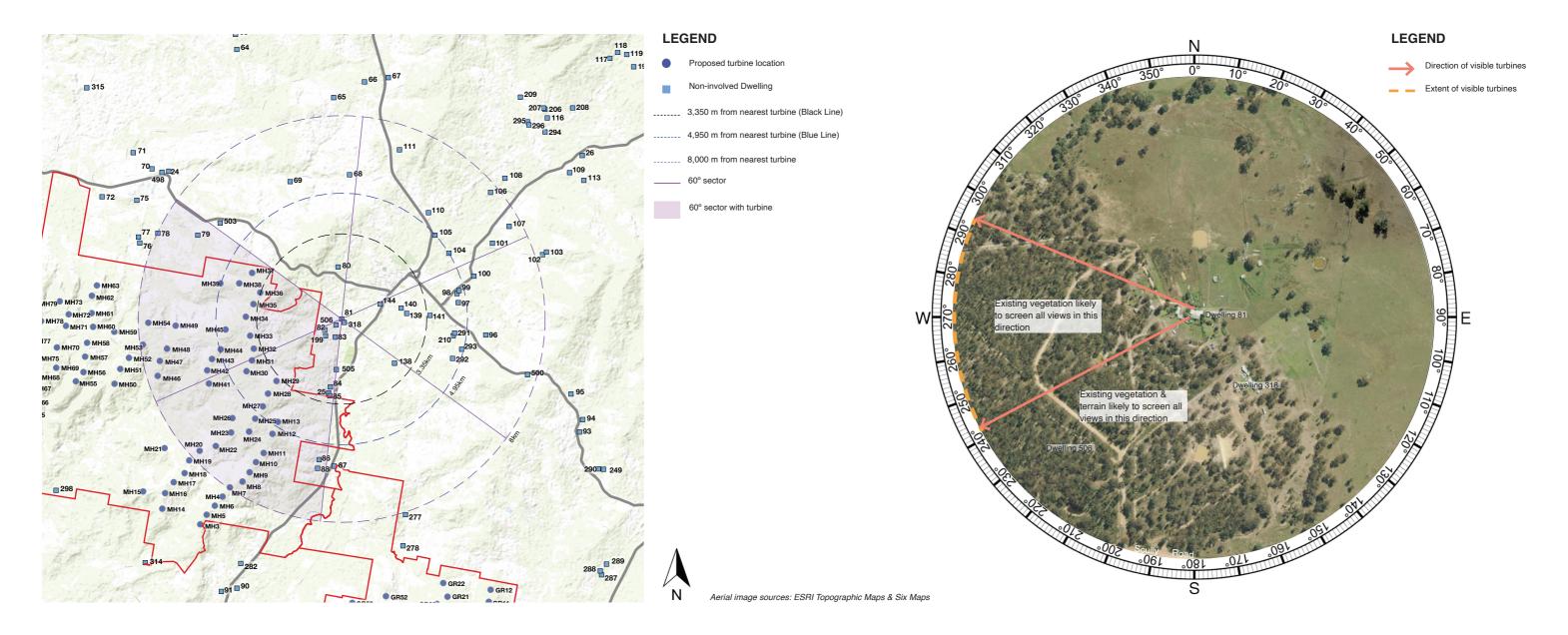
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. Existing vegetation and topographical changes will screen all views of the turbines.

Landscape Scenic Integrity: The turbines will be screened by vegetation and topography. The scenic integrity will not be impacted.

Key Feature Disruption: The turbines are not likely to be visible, thus there will be no disruption to any key landscape features as viewed from this dwelling.

#### Mitigation Measures

No mitigation measures are required



# E.38. Dwelling Assessment Dwelling 128 (Linked to Dwelling 16)

DWELLING 128				
Nearest proposed turbine (km):	3.49 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	9	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU02: Undulating farmlands	
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Moderate	
Number of potentially visible turbines (Based on topography alone)	52 24 at tip 28 at hub	Visual Influence Zone:	VIZ2	

**Visual Impact Rating: Moderate** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 52 turbines (24 at tip height and 28 at hub height) would be visible from Dwelling 128. Of these, 27 turbines are located within 8km of this dwelling. The assessment also represents the potential visual impact on Dwelling 16. Dwelling 128 is located on a gently undulating terrain with a rise in terrain towards the south/southeast. A viewpoint was taken in the frontyard to the northeast of the dwelling to represent views from this property. Aerial imagery indicates scattered vegetation in all directions in the dwelling's foreground and this may help in fragmenting few views. Most views of the Project, however, will be available generally towards the northeast. Views towards the turbines generally to the southeast will be screened by existing vegetation and the change in topography. The visual impact resulting from the Project has been rated as *Moderate* for this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Nine (9) turbines (MH64, MH65, MH66, MH67, MH68, MH74, MH75, MH76 & MH77) are located between the black & blue lines of visual magnitude.

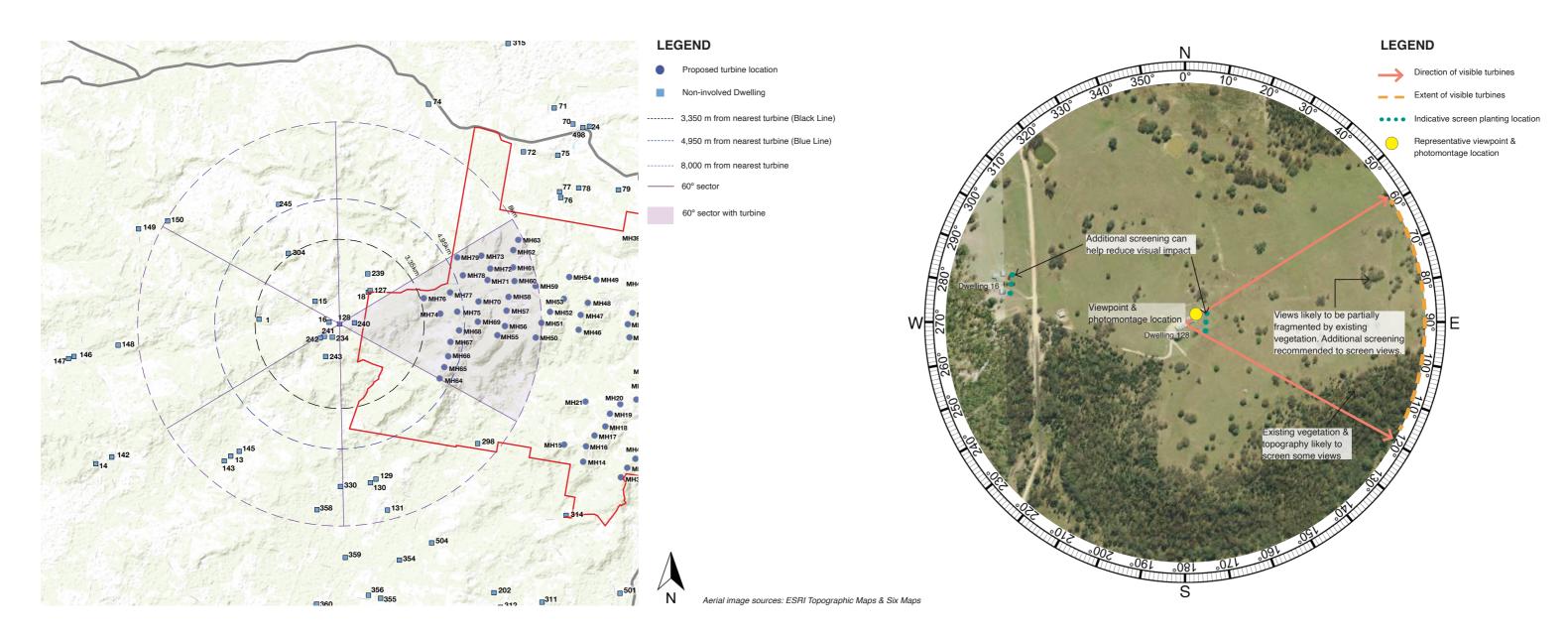
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to one (1) 60 degree sector. Existing vegetation and terrain are likely to reduce the extent of visible turbines.

Landscape Scenic Integrity: The turbines will be a part of the visual catchment at this location. The scenic integrity, however, will not be significantly impacted.

**Key Feature Disruption:** The turbines are likely to be a visible element in the landscape. Key landscape features viewed from the dwelling include vegetated ridges in the northern direction but these not be impacted by the Project when viewed from this dwelling.

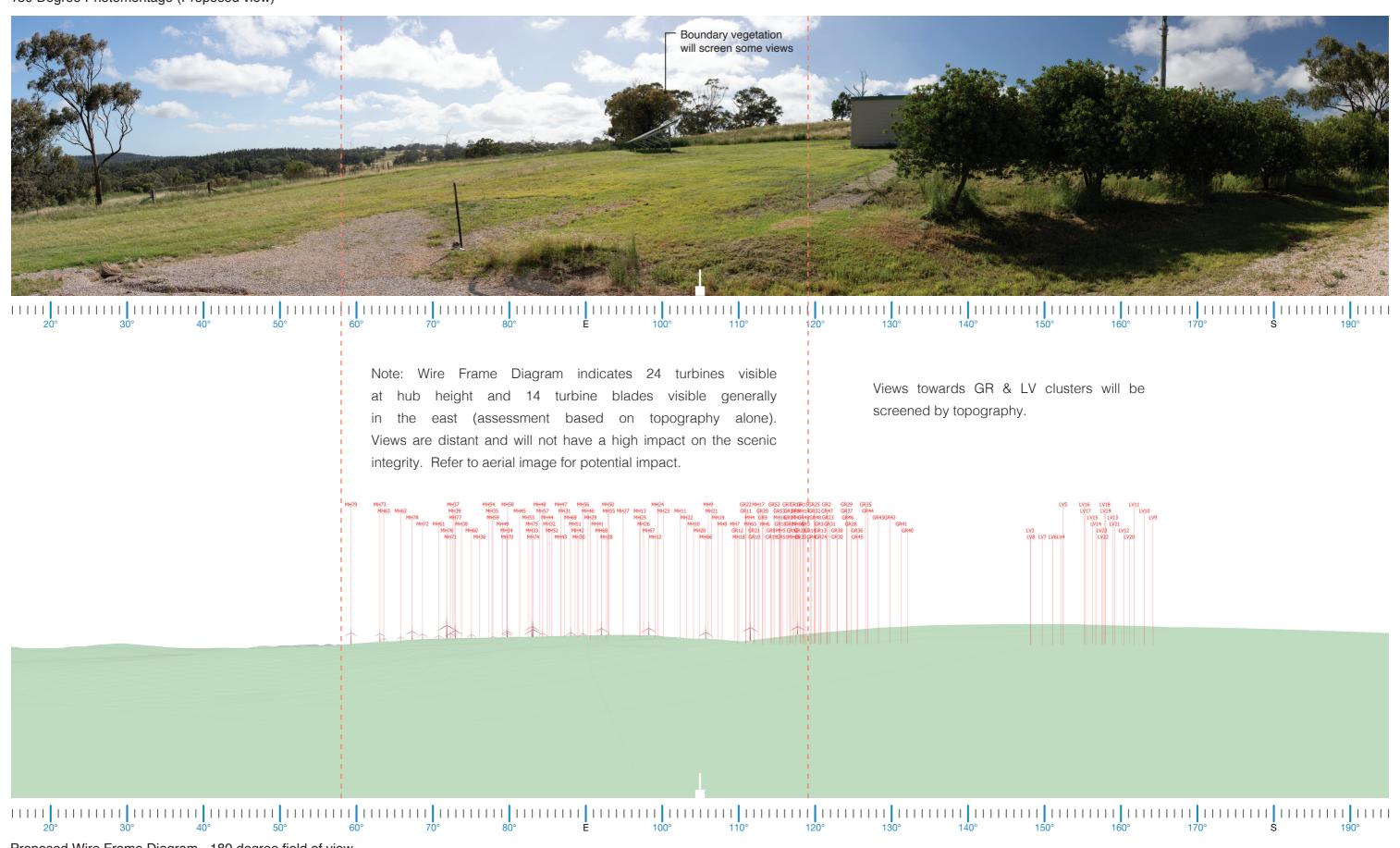
### Mitigation Measures:

Supplementary screen planting to the east for both dwellings can further reduce potential visual impact of the turbines. Consultation with the landowners would be required to discuss appropriate mitigation methods.



# E.38. Dwelling Assessment Dwelling 128

180 Degree Photomontage (Proposed view)



# E.39. Dwelling Assessment Dwelling 129 (Linked to Dwelling 130)

DWELLING 129				
Nearest proposed turbine (km):	4.71 km	Visibility Distance Zone:	Far Middleground (FM)	
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	1	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU04: Agricultural flats	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	45 25 at tip 20 at hub	Visual Influence Zone:	VIZ3	

Visual Impact Rating: Low

#### Assessment Notes:

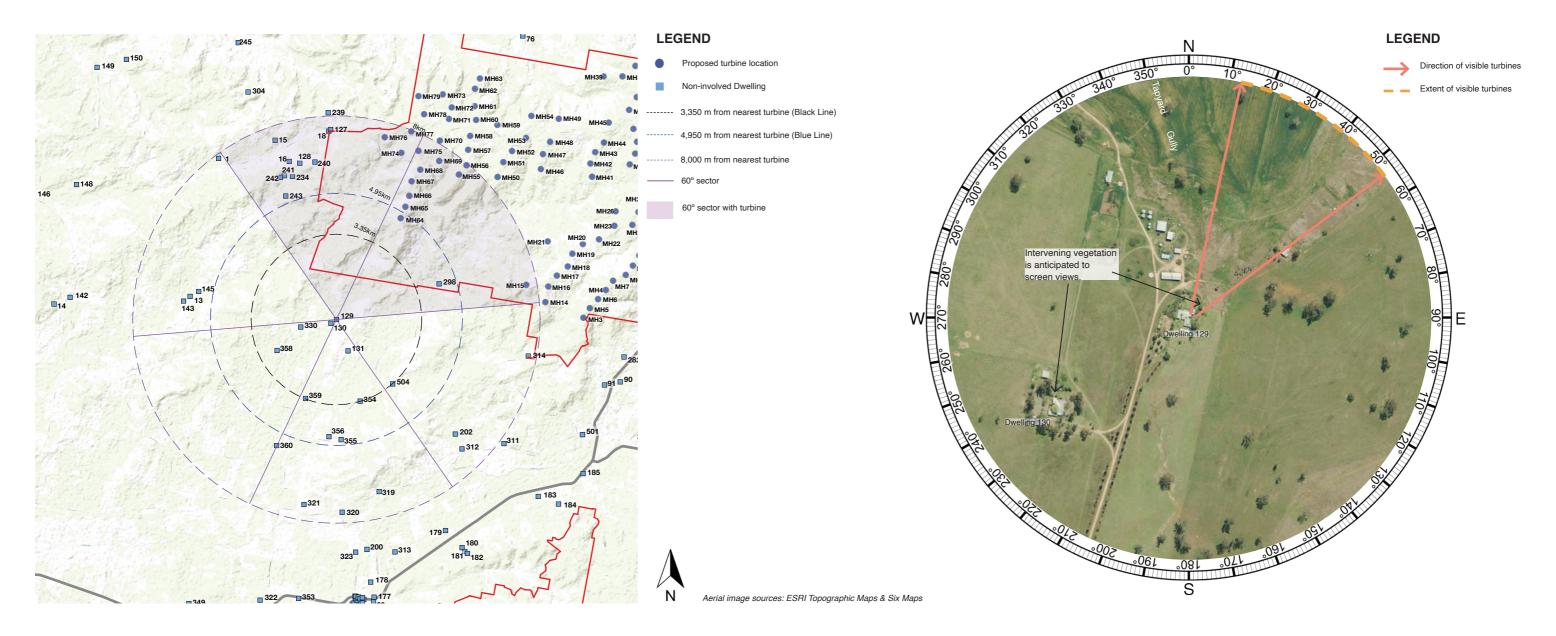
An assessment based on topography alone identified that a total of 45 turbines (25 at tip and 20 at hub height) would be visible from Dwelling 129. Of these, 12 turbines are located within 8km of this dwelling. This assessment also represents visual impacts on Dwelling 130. The dwellings are located on a flat terrain off Berowra Road. Aerial imagery indicates that Dwellings 129 &130 are surrounded by vegetation in all directions. This vegetation will play an important role in fragmenting most views of MH cluster which would be visible in the northeastern direction. One (1) turbine was identified within the black and blue lines of visual magnitude of this dwelling. It is anticipated that views towards the turbines beyond 4950m will be fragmented by topographical changes and existing vegetation. It is possible that up to five (5) turbines will be visible on the Mount Hope ridgelines, but the turbines are not likely to dominate the views due to existing vegetation on these slopes and the trees that are planted along the dwelling's boundary. The Project has the potential to be visible in up to two (2) 60 degree sectors and existing vegetation is likely to screen these views. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ3):

No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3).

### Mitigation Measures:

No mitigation measures are required



# E.40. Dwelling Assessment Dwelling 138

DWELLING 138			
Nearest proposed turbine (km):	4.69 km	Visibility Distance Zone:	Far Middleground (FM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	1	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU05: Towns and Settlements (Coolah)
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	38 11 at tip 27 at hub	Visual Influence Zone:	VIZ3

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified that a total of 38 turbines (11 at tip and 27 at hub height) of the Valley of the Winds (VoW) Project would be visible from this dwelling. Of these, 29 turbines are located within 8 km of this dwelling. The dwelling can be accessed by Oban Road and is located east of Coolaburragundy River. The dwelling is also likely to be visually impacted by the Liverpool Range Wind Farm (LRWF) Project as well due to its close proximity. Refer to **Section 13** of the LVIA for the cumulative visual impacts on this dwelling.

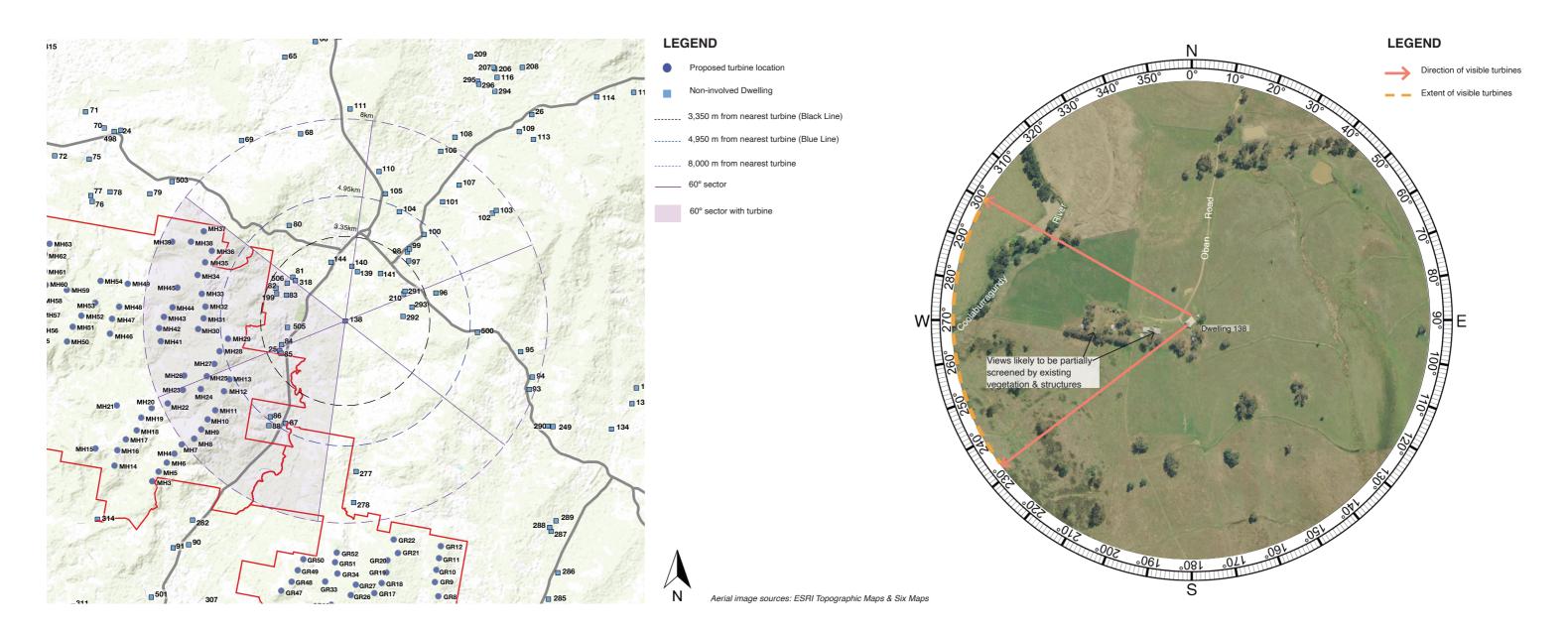
Aerial imagery indicates that the house is orientated to the north and is surrounded by vegetation and some farm buildings in the western direction. Views towards a large part of the VoW Project in the west are anticipated to be limited by existing structures visible on aerial imagery. The tips of some of the turbines that are located beyond 4950m are anticipated to be partially visible due to their elevated position, but they will not impact the scenic integrity of this location. One (1) turbine was identified within the black and blue lines of visual magnitude of this dwelling. The Project has the potential to be visible in up to two (2) 60 degree sectors and this is deemed acceptable. The visual impact resulting from the Project is assessed to be *Low* due to existing intervening vegetation.

### Visual Performance Objectives Evaluation (VIZ3):

No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3).

### Mitigation Measures:

No mitigation measures are required.



# E.41. Dwelling Assessment Dwelling 144

DWELLING 144				
Nearest proposed turbine (km):	4.74 km	Visibility Distance Zone:	Far Middleground (FM)	
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	1	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU05: Towns and Settlements (Coolah)	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	98 25 at tip 73 at hub	Visual Influence Zone:	VIZ3	

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified that a total of 98 turbines (25 at tip and 73 at hub height) of the Valley of the Winds (VoW) Project would be visible from this dwelling. Of these, 26 turbines are located within 8 km of this dwelling. A photograph was taken on Black Stump Way just outside of Coolah and to the west of Dwelling 144 to represent views from this property. The dwelling can be accessed via Black Stump Way and is located at the southern end of the town of Coolah and west of the Coolaburragundy River. The dwelling is also likely to be visually impacted by the Liverpool Range Wind Farm (LRWF) Project as well due to its close proximity. Refer to *Section 13* of the LVIA for the cumulative visual impacts on this dwelling.

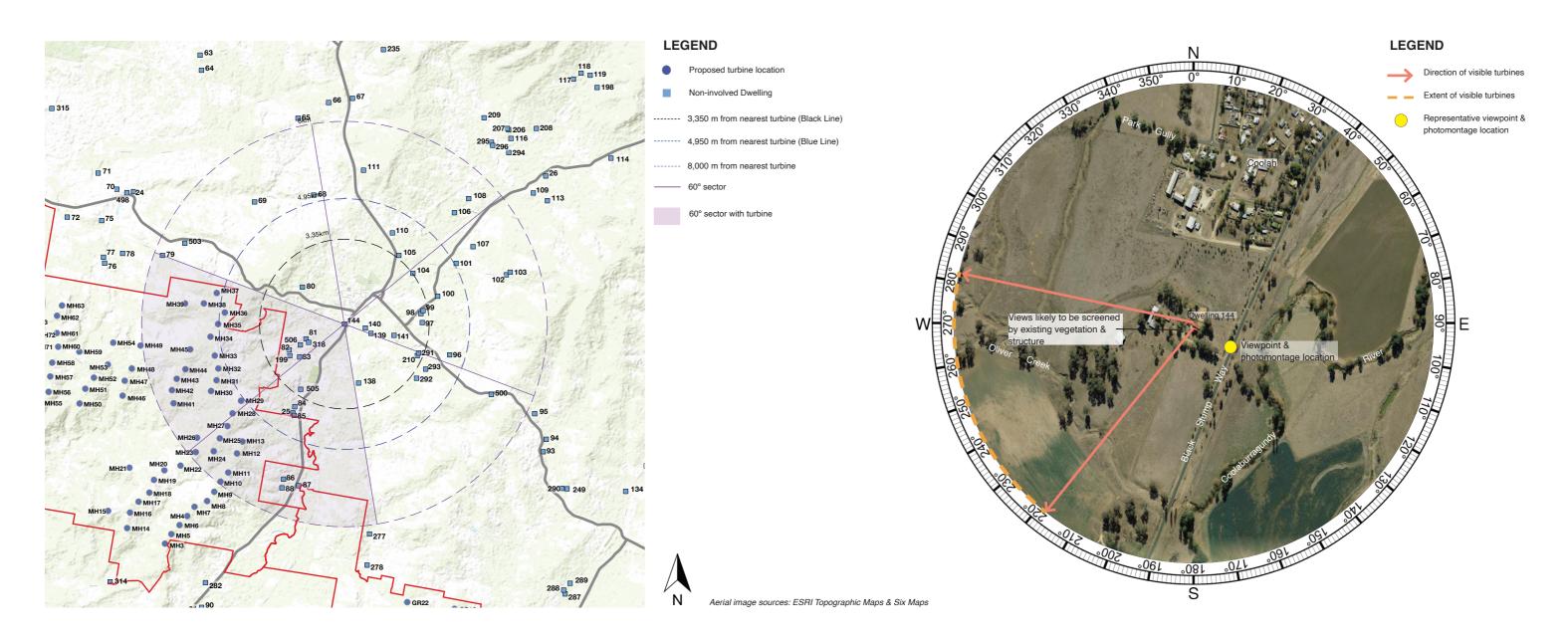
Aerial imagery indicates that the house is surrounded by dense screening vegetation. Views towards VoW Project in the south/southwest are likely to be fragmented by the vegetation that surrounds the house. The tips of some of the turbines that are located beyond 4950m are anticipated to be partially visible due to their elevated position, but they will not impact the scenic integrity of this location. The visual impact resulting from the Project is assessed to be **Low** due to existing intervening vegetation.

### Visual Performance Objectives Evaluation (VIZ3):

No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3).

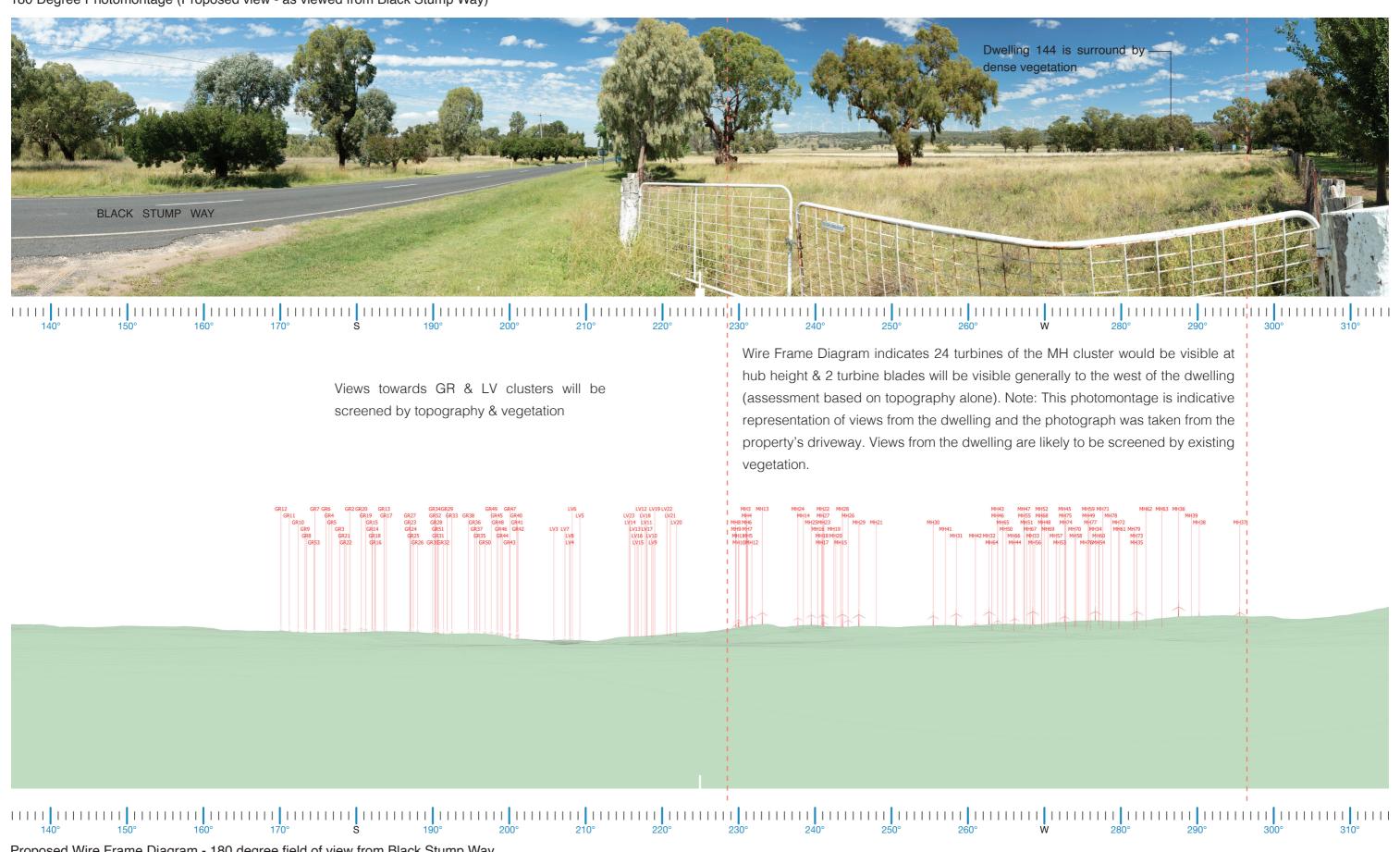
### Mitigation Measures:

No mitigation measures are required



# E.41. Dwelling Assessment Dwelling 144

180 Degree Photomontage (Proposed view - as viewed from Black Stump Way)



Proposed Wire Frame Diagram - 180 degree field of view from Black Stump Way

# E.42. Dwelling Assessment Dwelling 234 (Linked to Dwellings 241 & 242)

DWELLING 234				
Nearest proposed turbine (km):	3.94 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	6	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU01: Vegetated hills	
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Moderate	
Number of potentially visible turbines (Based on topography alone)	2 All at tip	Visual Influence Zone:	VIZ2	

Visual Impact Rating: Nil

#### Assessment Notes:

An assessment based on topography alone identified a total of two (2) turbine blades would be visible from Dwelling 234. This assessment represents the potential visual impact of the Project on Dwellings 241 & 242 as well. The dwelling is located on an undulating terrain with a rise in elevation towards the east/northeast. Aerial imagery indicates that the dwelling is surrounded by dense vegetation in all directions and this will contribute towards reducing the potential visual impact significantly. Views towards the turbines, however, will be screened by existing vegetation in the eastern direction. The visual impact resulting from the Project has been rated as *Nil* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Six (6) turbines (MH64, MH65, MH66, MH67, MH74 & MH76) are located between the black & blue lines of visual magnitude.

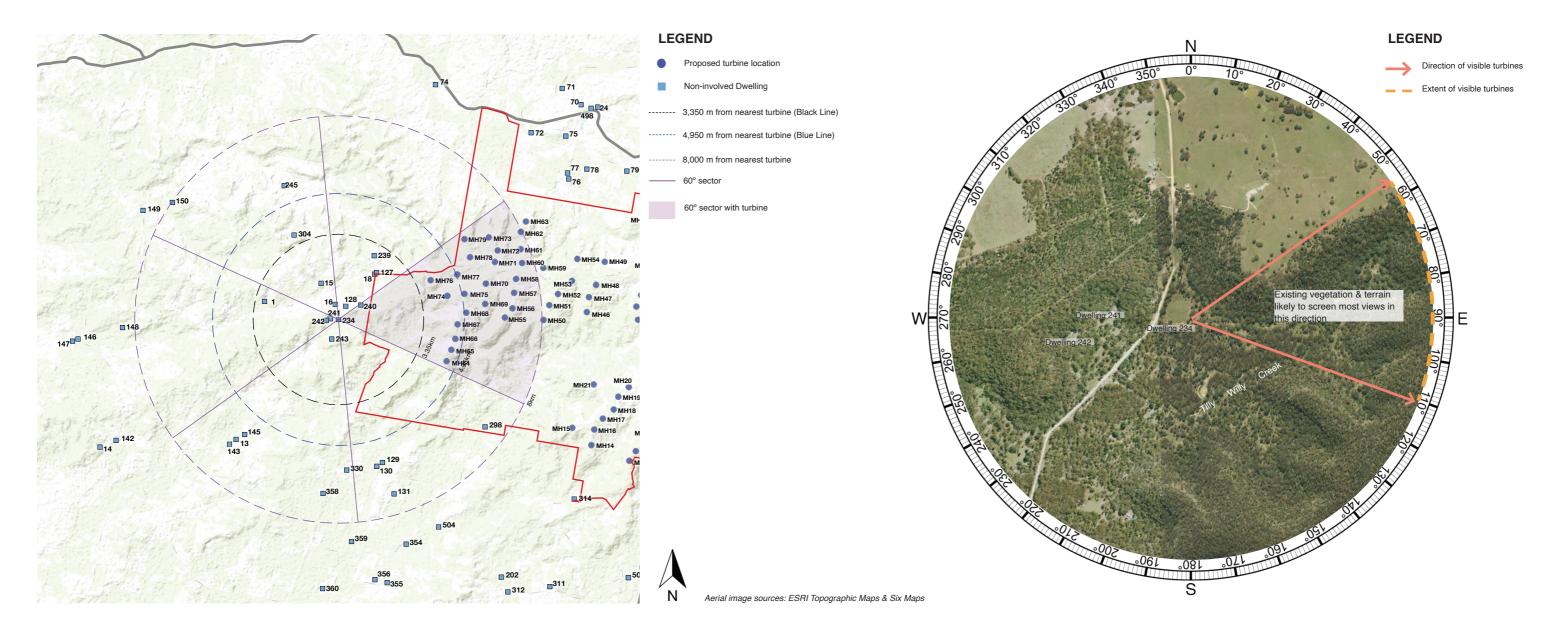
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to one (1) 60 degree sector. Existing vegetation is likely to screen the turbines.

Landscape Scenic Integrity: The turbines are not likely to be visible from this location. The scenic integrity will remain intact.

Key Feature Disruption: The turbines are not likely to be visible due to existing intervening vegetation. The Project will not diminish the key landscape features as viewed from this dwelling.

#### Mitigation Measures:

No mitigation measures are required.



# E.43. Dwelling Assessment Dwelling 243

DWELLING 243				
Nearest proposed turbine (km):	4.52 km	Visibility Distance Zone:	Far Middleground (FM)	
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	5	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU01: Vegetated hills	
Number of visible 60° Sectors (Based on 3D Assessment):	0	Scenic Quality Rating:	Moderate	
Number of potentially visible turbines (Based on topography alone)	Nil	Visual Influence Zone:	VIZ2	

Visual Impact Rating: Nil

#### Assessment Notes:

An assessment based on topography alone identified that no turbines would be visible from Dwelling 243 due to topographical changes. The dwelling is located on an undulating terrain with a rise in elevation all across the eastern side of the property. Aerial imagery indicates that the dwelling is surrounded by dense vegetation in all directions which will reduce any opportunity to view turbines. Views towards the turbines are likely to be completely screened by the hill on the eastern side of the dwelling. The visual impact resulting from the Project has been rated as *NiI* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Five (5) turbines (MH64, MH65, MH66, MH74 & MH76) are located between the black & blue lines of visual magnitude.

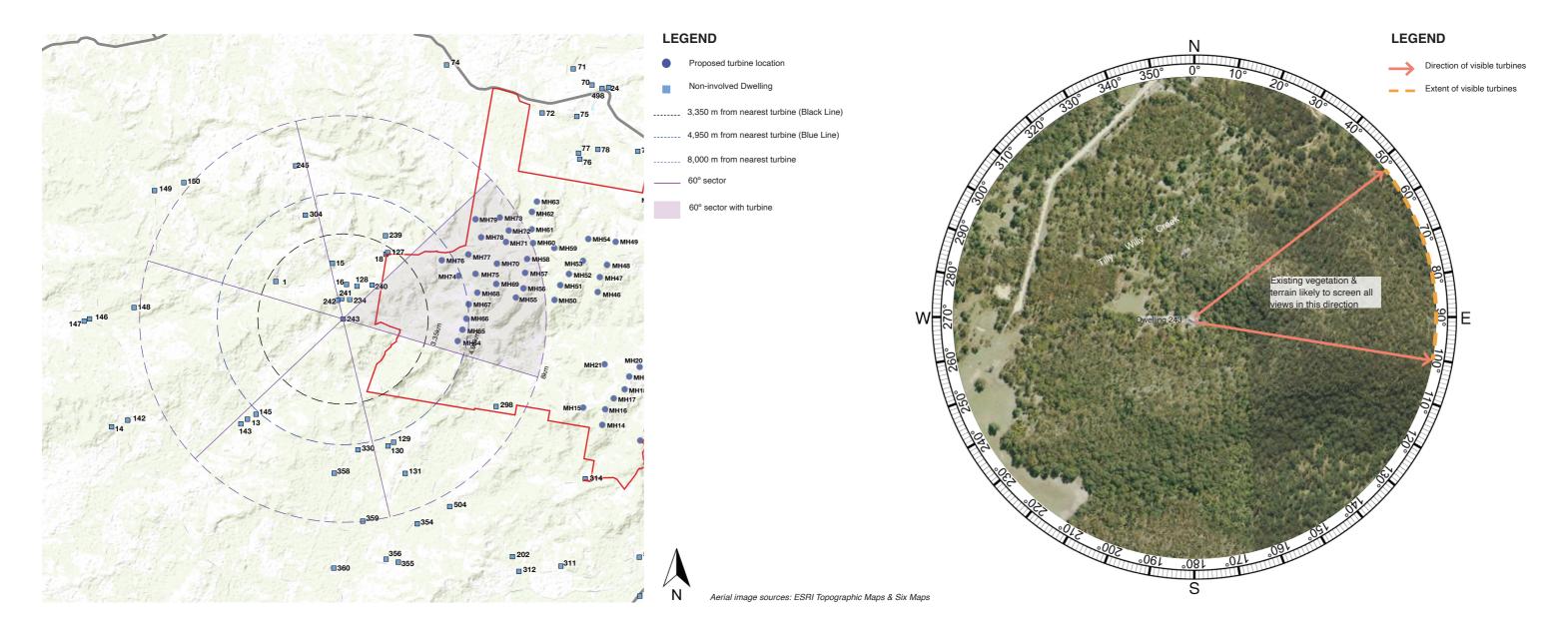
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to one (1) 60 degree sector. Topographical changes will not allow views of any turbine as per 3D assessment.

Landscape Scenic Integrity: The turbines will not be visible and landscape scenic integrity will remain intact.

Key Feature Disruption: The turbines are not likely to be visible. None of the key landscape features will be disrupted.

### Mitigation Measures:

No mitigation measures are required



# E.44. Dwelling Assessment Dwelling 501

DWELLING 501			
Nearest proposed turbine (km):	4.59 km	Visibility Distance Zone:	Far Middleground (FM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	1	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	3	Landscape Character Unit:	LCU04: Agricultural flats
Number of visible 60° Sectors (Based on 3D Assessment):	3	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	92 16 at tip 76 at hub	Visual Influence Zone:	VIZ3

**Visual Impact Rating: Low** 

#### Assessment Notes:

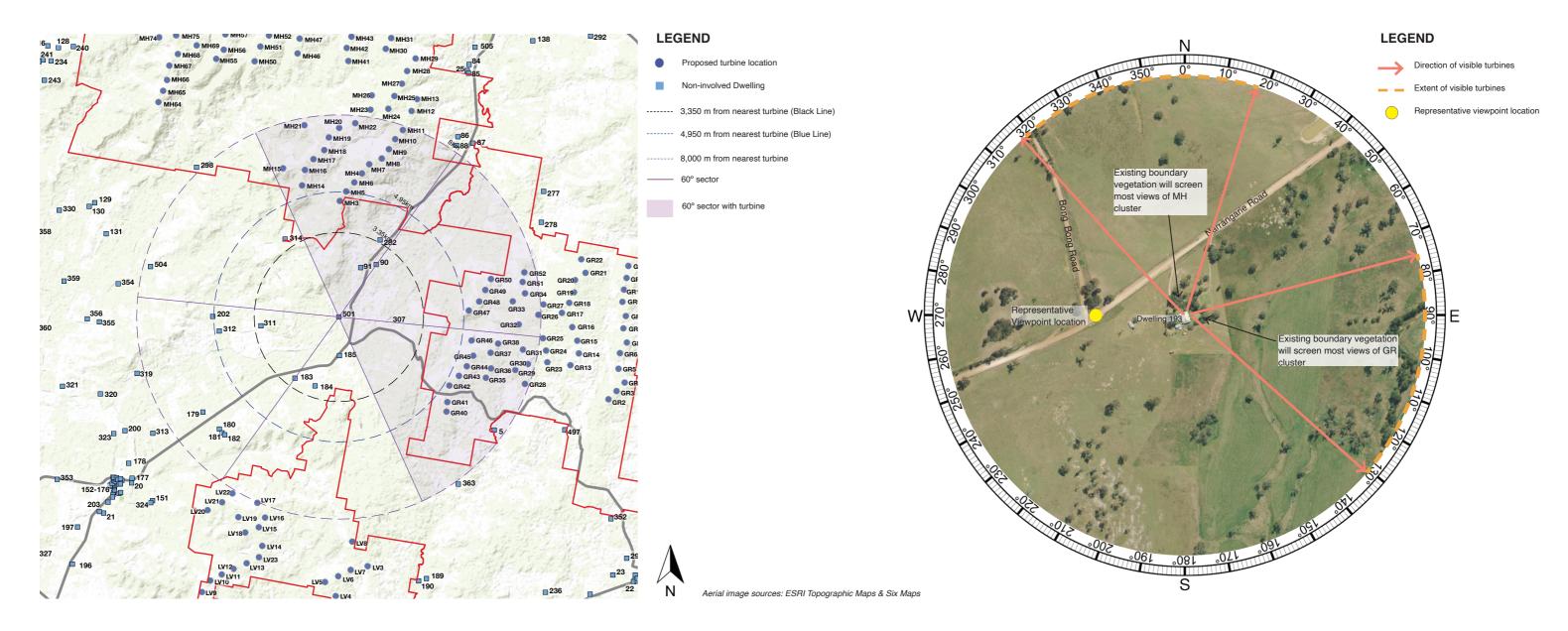
An assessment based on topography alone identified a total of 92 turbines would be visible (16 at tip & 76 at hub height) from Dwelling 501. Of these, 43 turbines are located within 8 km of the dwelling. The dwelling is located on a flat terrain along Narrangarie Road. Aerial imagery indicates that the dwelling is surrounded by dense windbreak vegetation on all sides which will help reduce the potential visual impact of the Project. A representative viewpoint was taken at the intersection of Narangarie and Bong Bong Roads to assess the visual impact on the dwelling. Turbines have the potential to be visible in up to three (3) 60 degree sectors. One (1) turbine was identified between the black and blue lines of visual magnitude of this dwelling. Windbreak plantations around the dwelling will play an important role in limiting all views and it is highly likely that only the tips of some of the turbines would be visible. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ3):

No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3).

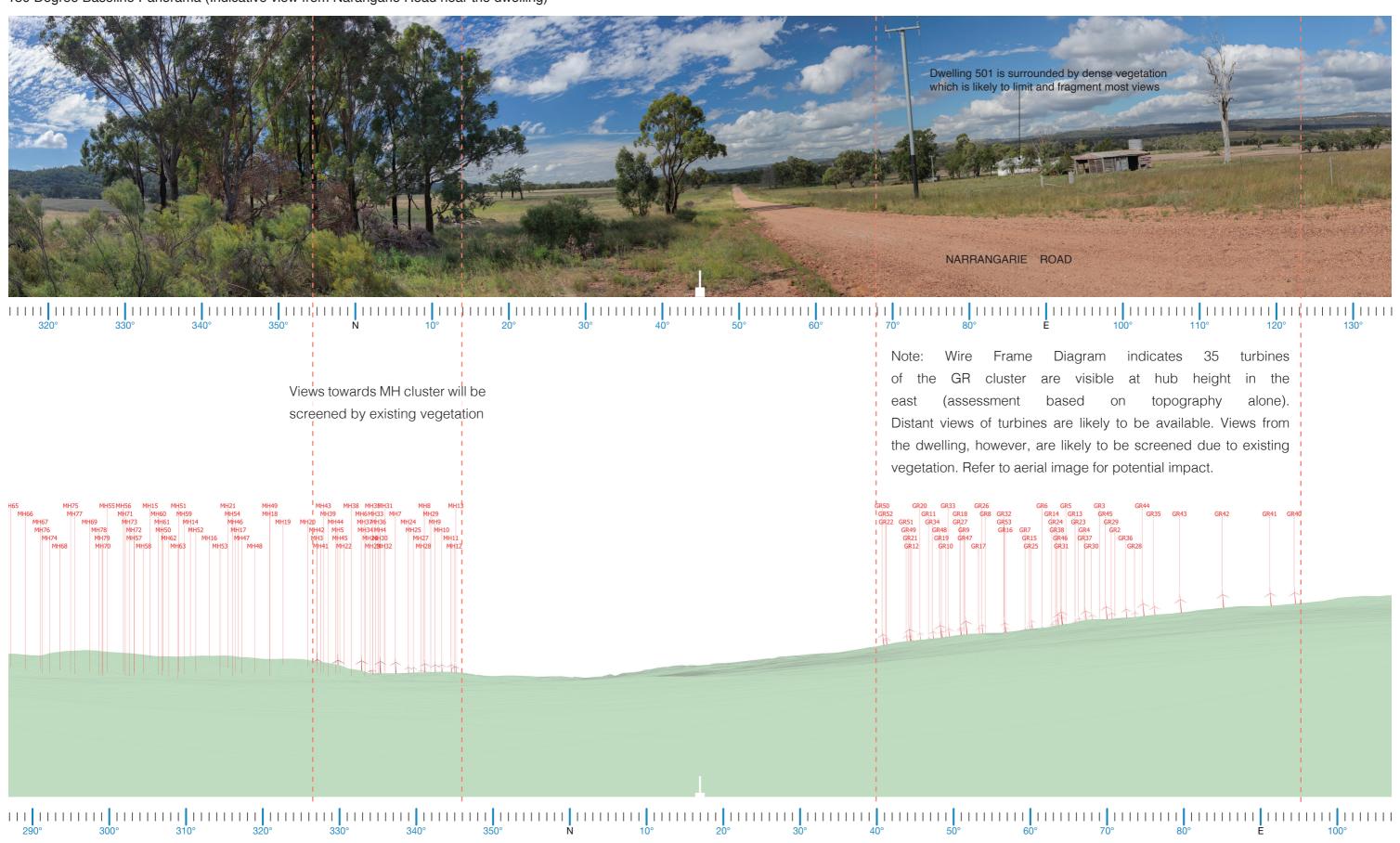
### Mitigation Measures:

No mitigation measures are required.



# E.44. Dwelling Assessment Dwelling 501

180 Degree Baseline Panorama (Indicative view from Narangarie Road near the dwelling)

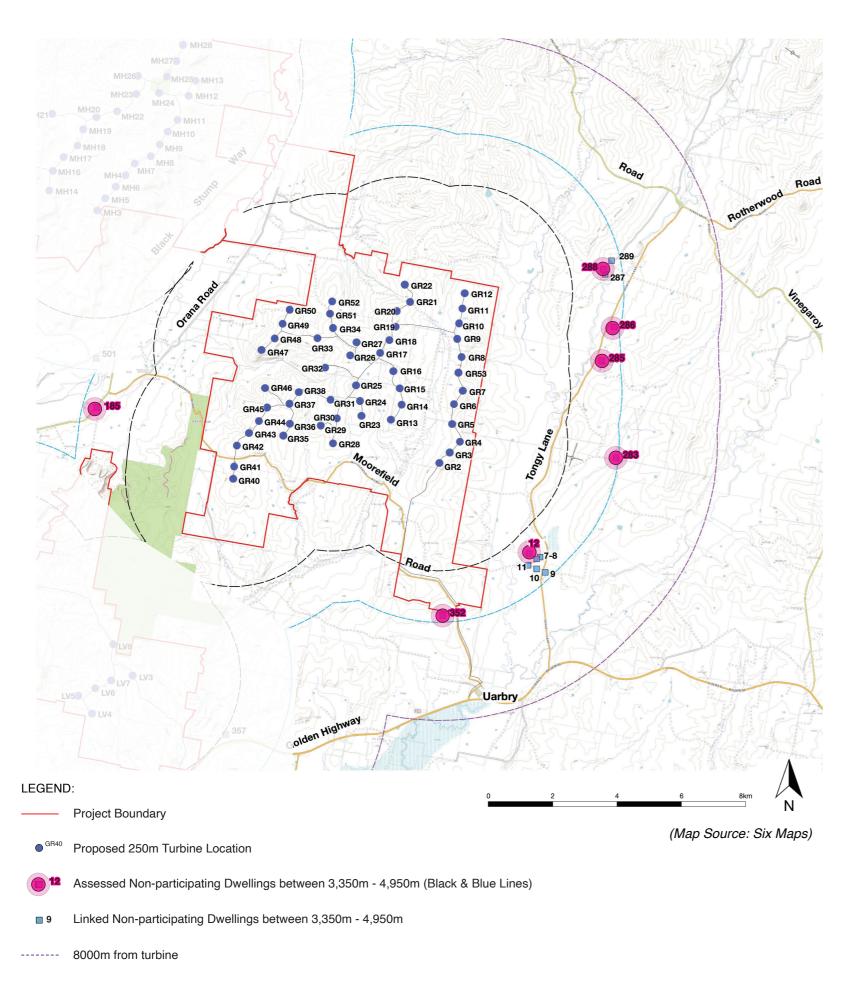


Proposed Wire Frame Diagram - 180 degree field of view from Narangarie Road near the dwelling



Dwellings within 3350m - 4950m associated with Girragulang Road (GR) cluster

# GR Cluster: Location of Non-Participating Dwellings between 3,350 m - 4,950m (Black & Blue Lines)



Dwellings between 3,350r	m - 4,950m	
Representative Dwelling	Linked Dwellings	MLA Comments
Dwelling 12	Dwellings 7-11	Refer Appendix E.45.
Dwelling 185		Refer Appendix E.46.
Dwelling 283		Refer Appendix E.47.
Dwelling 285		Refer Appendix E.48.
Dwelling 286		Refer Appendix E.49.
Dwelling 288	Dwellings 287 & 289	Refer Appendix E.50.
Dwelling 352		Refer Appendix E.51.

### E.45. Dwelling Assessment Dwelling 12 (Linked to Dwellings 7-11)

DWELLING 12			
Nearest proposed turbine (km):	3.97 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	4	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU03: Alluvial Plains
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	48 11 at tip 37 at hub	Visual Influence Zone:	VIZ2

Visual Impact Rating: Moderate

#### Assessment Notes:

An assessment based on topography alone identified a total of 48 turbines that would be visible (11 at tip & 37 at hub height) from Dwelling 12. Of these, 24 turbines are located within 8km from this dwelling. This assessment is also a representation of views from Dwellings 7 -11 which are located generally southeast of Dwelling 12 and are surrounded by moderate to dense vegetation in all directions. Dwelling 12 is situated on a flat terrain. Aerial imagery indicates that Dwellings 12, 7, 8 & 11 are generally surrounded by scattered vegetation in all directions. Dwellings 9 & 10 are surrounded by dense vegetation which is likely to limit most views. This may help in fragmenting some views but most views towards the GR cluster will be available along the ridgeline in the northwestern direction due to lack of existing intervening elements. The visual impact resulting from the Project has been rated as *Moderate* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Four (4) turbines (GR2, GR3, GR4 & GR5) are located between the black & blue lines of visual magnitude.

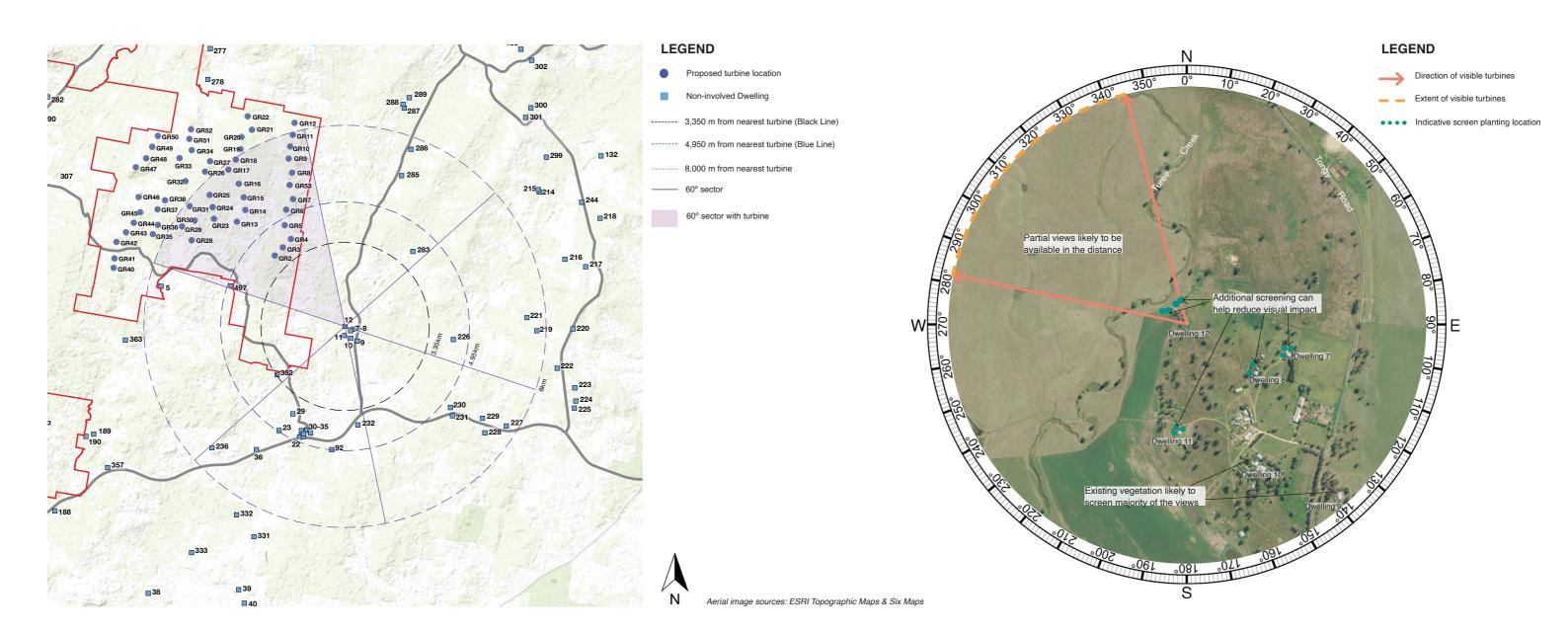
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to one (1) 60 degree sector. Existing vegetation is likely to screen some views.

Landscape Scenic Integrity: The turbines are likely to be visible and will have a moderate to low impact on the landscape setting. The low quality scenic integrity, however, will not be impacted extensively.

Key Feature Disruption: The turbines are likely to be a visible element in the landscape, but will not diminish the key landscape features as viewed from this dwelling

### Mitigation Measures:

Supplementary screen planting to the northwest of Dwellings 7, 8, 11 & 12 can further reduce potential visual impact of the turbines. Consultation with the landowners would be required to discuss appropriate mitigation methods



# E.46. Dwelling Assessment Dwelling 185

DWELLING 185			
Nearest proposed turbine (km):	4.51 km	Visibility Distance Zone:	Far Middleground (FM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	4	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	4	Landscape Character Unit:	LCU03: Alluvial Plains
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	100 23 at tip 77 at hub	Visual Influence Zone:	VIZ3

Visual Impact Rating: Moderate

#### Assessment Notes:

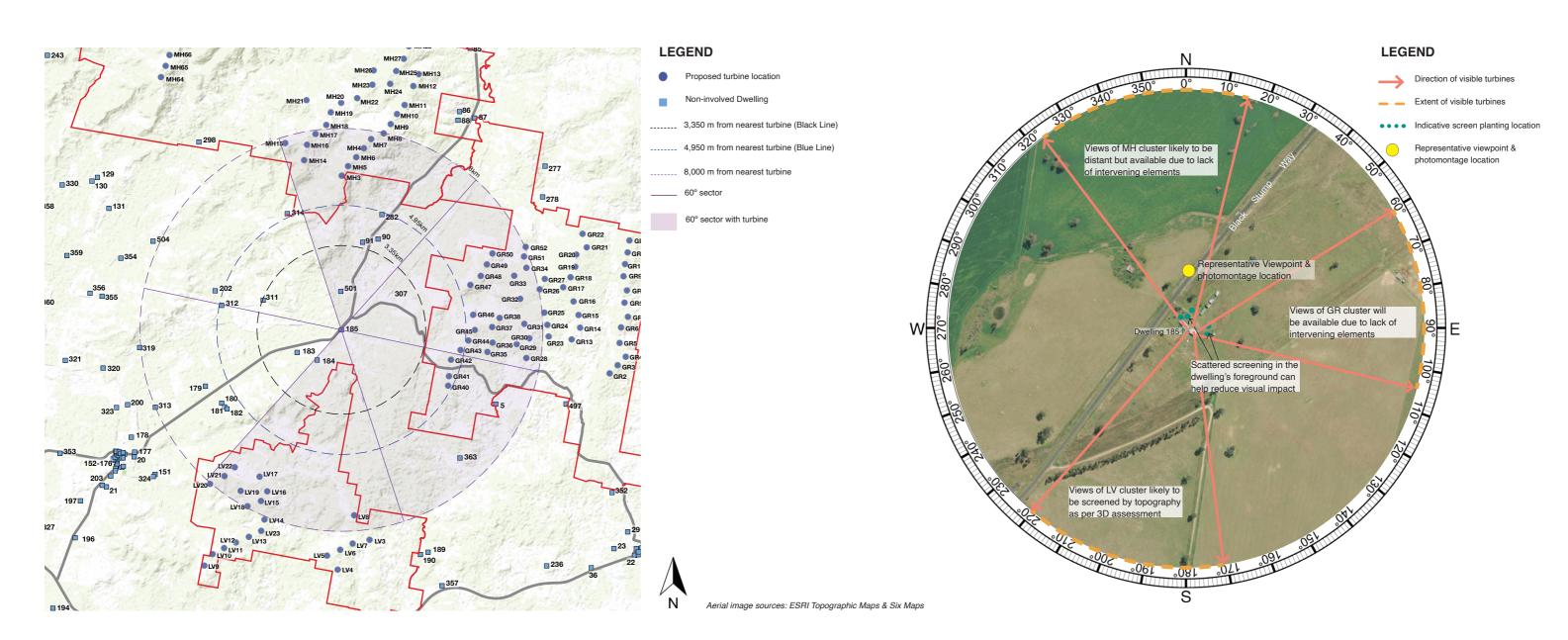
An assessment based on topography alone identified a total of 100 turbines (23 at tip height and 77 at hub height) would be visible from Dwelling 185. Of these, 41 turbines are located within 8km of the dwelling. The dwelling is located on the alluvial plains associated with the Coolaburragundry River. A viewpoint was taken on Black Stump Way north of the dwelling to represent views from the property. Aerial imagery indicates that the dwelling is generally surrounded by scattered vegetation and cleared lands. 3D assessment suggests that a row of windbreak plantations and existing topographical changes to the south/southwest will help in screening views of the LV cluster which is located beyond the rocky outcrops along Black Stump Way. Views towards GR and MH clusters, however, will be open and available in the eastern and northern directions respectively. Four (4) turbines were identified within the black & blue lines of visual magnitude of this dwelling. It is likely that views of the turbines beyond 8 km will be unclear due to their distance from the dwelling. The visual catchment will be potentially dominated by turbines as they are associated with the key landscape features around this dwelling. Based on 3D assessment, turbines have the potential to be visible in up to two (2) 60 degree sectors which is deemed acceptable in accordance with the Bulletin. The visual impact resulting from the Project has been rated as *Moderate* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ3):

No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3).

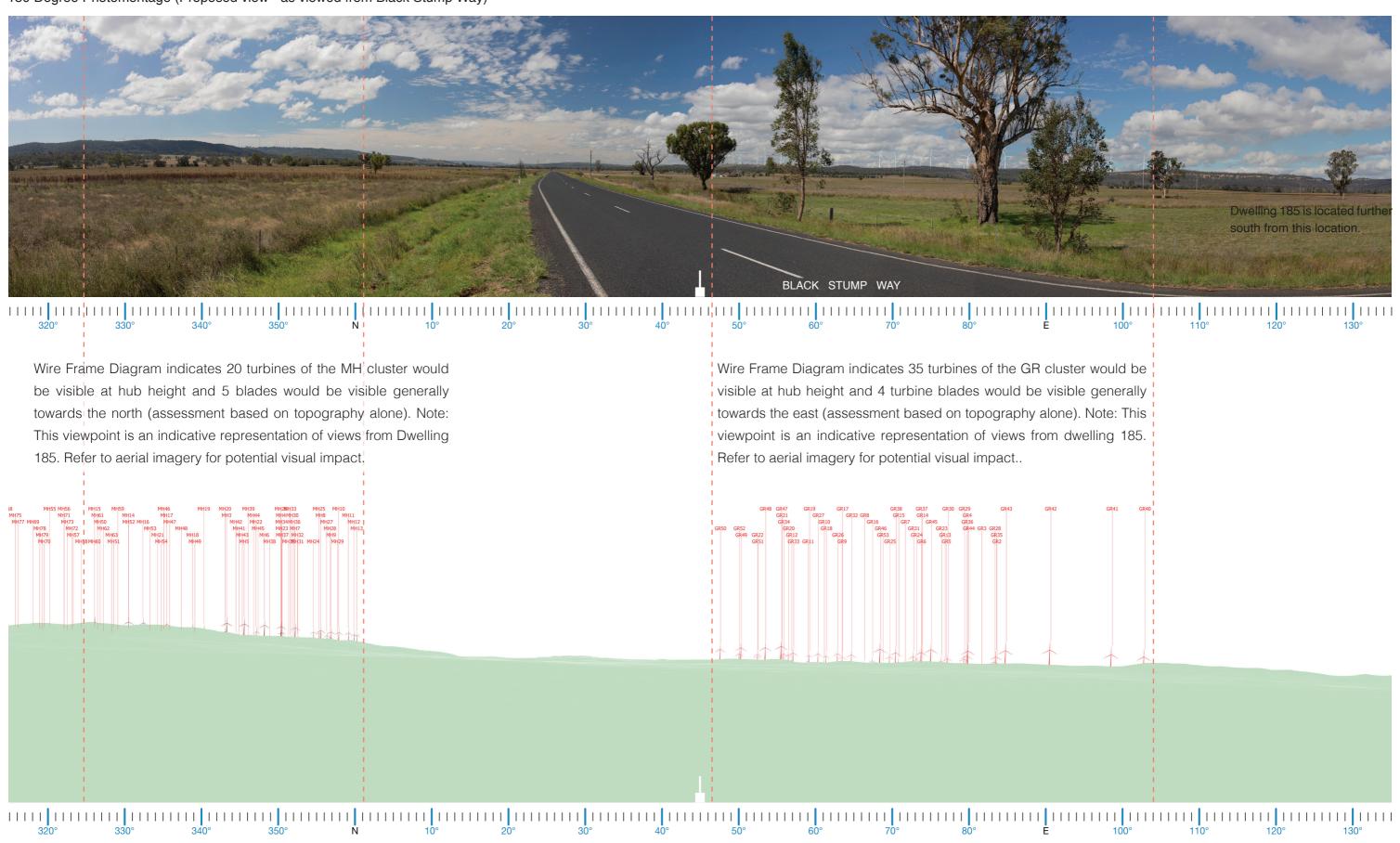
### Mitigation Measures:

Screen planting to the north and east of the dwelling's foreground will help screen views to the Project and reduce the potential visual impact. This will, however, screen views of the ridgeline in these directions. Consultation with the landowner would be required to discuss appropriate mitigation methods.



# E.46. Dwelling Assessment Dwelling 185

180 Degree Photomontage (Proposed view - as viewed from Black Stump Way)



Proposed Wire Frame Diagram - 180 degree field of view from Black Stump Way

# E.47. Dwelling Assessment Dwelling 283

DWELLING 283				
Nearest proposed turbine (km):	4.88 km	Visibility Distance Zone:	Far Middleground (FM)	
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	1	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU04: Agricultural flats	
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	57 22 at tip 35 at hub	Visual Influence Zone:	VIZ3	

**Visual Impact Rating: Moderate** 

#### Assessment Notes:

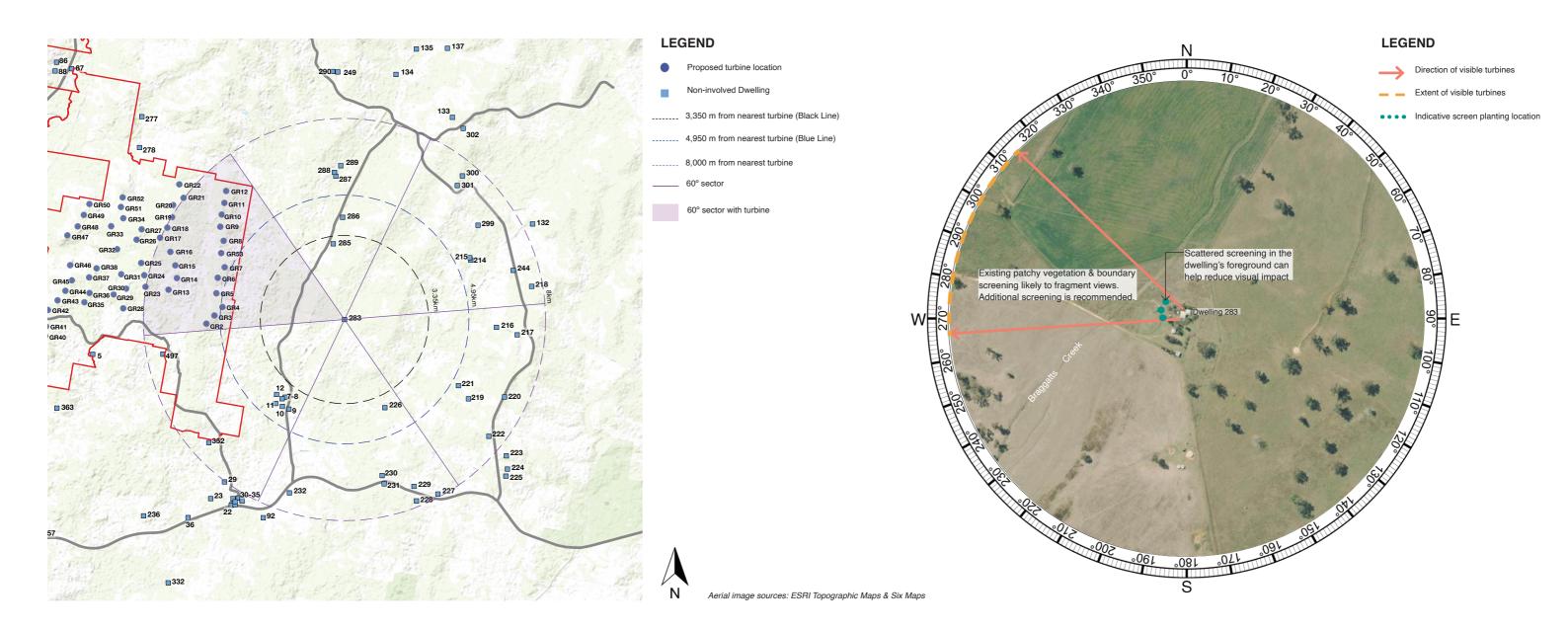
An assessment based on topography alone identified a total of 57 turbines would be visible (22 at tip & 35 at hub height) from Dwelling 283. Of these, 21 turbines are located with 8km of the dwelling. The dwelling is located on a flat terrain. Aerial imagery indicates that the western boundary of the dwelling consists of patchy windbreak vegetation which may help reduce potential visual impact of the GR turbine cluster. Turbines have the potential to be visible in up to one (1) 60 degree sector. Stands of vegetation on the western side of the dwelling will help fragment few views but most turbines will be visible due to their elevated position. One (1) turbine was identified between the black and blue lines of visual magnitude of this dwelling. The turbines will be a key feature in the visual catchment at this location, however, they will not impact the scenic integrity of this landscape. The distance of the turbines from the dwelling will also not allow clear views of the Project. The visual impact resulting from the Project has been rated as *Moderate* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ3):

No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3).

#### Mitigation Measures

Supplementary screen planting to the northwest can further reduce potential visual impact of the turbines. Consultation with the landowner would be required to discuss appropriate mitigation methods.



# E.48. Dwelling Assessment Dwelling 285

DWELLING 285			
Nearest proposed turbine (km):	4.36 km	Visibility Distance Zone:	Far Middleground (FM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	8	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU03: Alluvial plains
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	69 26 at tip 43 at hub	Visual Influence Zone:	VIZ3

**Visual Impact Rating: Low** 

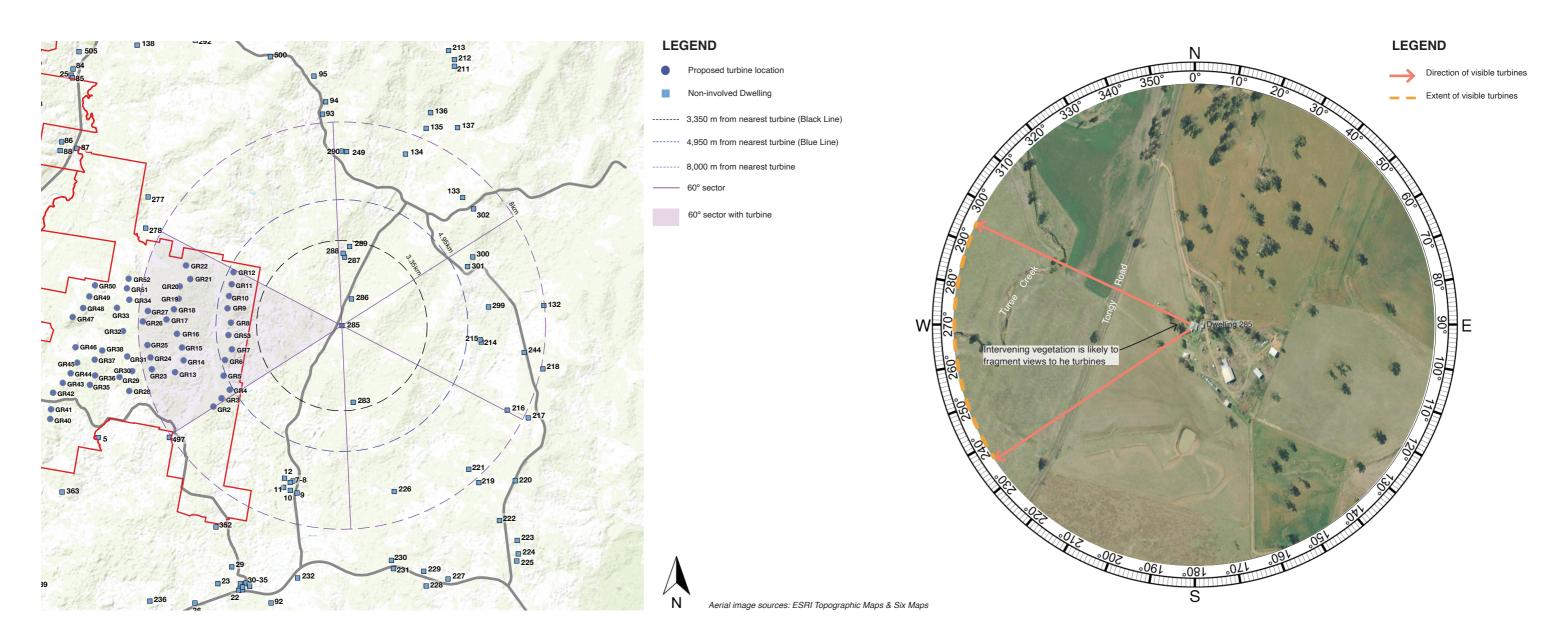
#### Assessment Notes:

An assessment based on topography alone identified that a total of 69 turbines would be visible (26 at tip & 43 at hub height) from this dwelling. The dwelling can be accessed via Tongy Road. Aerial imagery indicates that the house is surrounded by vegetation on all sides. The dwelling is located on a generally flat terrain. The GR cluster would be partially visible due to the difference in elevation between this viewpoint and the land associated with the cluster. Views towards the west are generally fragmented and screened by existing vegetation that surrounds the house in this direction but it is likely that the tips of some turbines will be visible. Eight (8) turbines were identified within the black and blue lines of visual magnitude of this dwelling. The Project will not impact the scenic integrity of this location because of its distance from the dwelling and the low scenic quality of this landscape. The Project has the potential to be visible in up to one (1) 60 degree sector. The visual impact resulting from the Project has been rated as **Low** from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ3):

No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3).

### Mitigation Measures:



# E.49. Dwelling Assessment Dwelling 286

DWELLING 286			
Nearest proposed turbine (km):	4.74 km	Visibility Distance Zone:	Far Middleground (FM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	5	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU03: Alluvial plains
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	67 18 at tip 49 at hub	Visual Influence Zone:	VIZ3

**Visual Impact Rating: Low** 

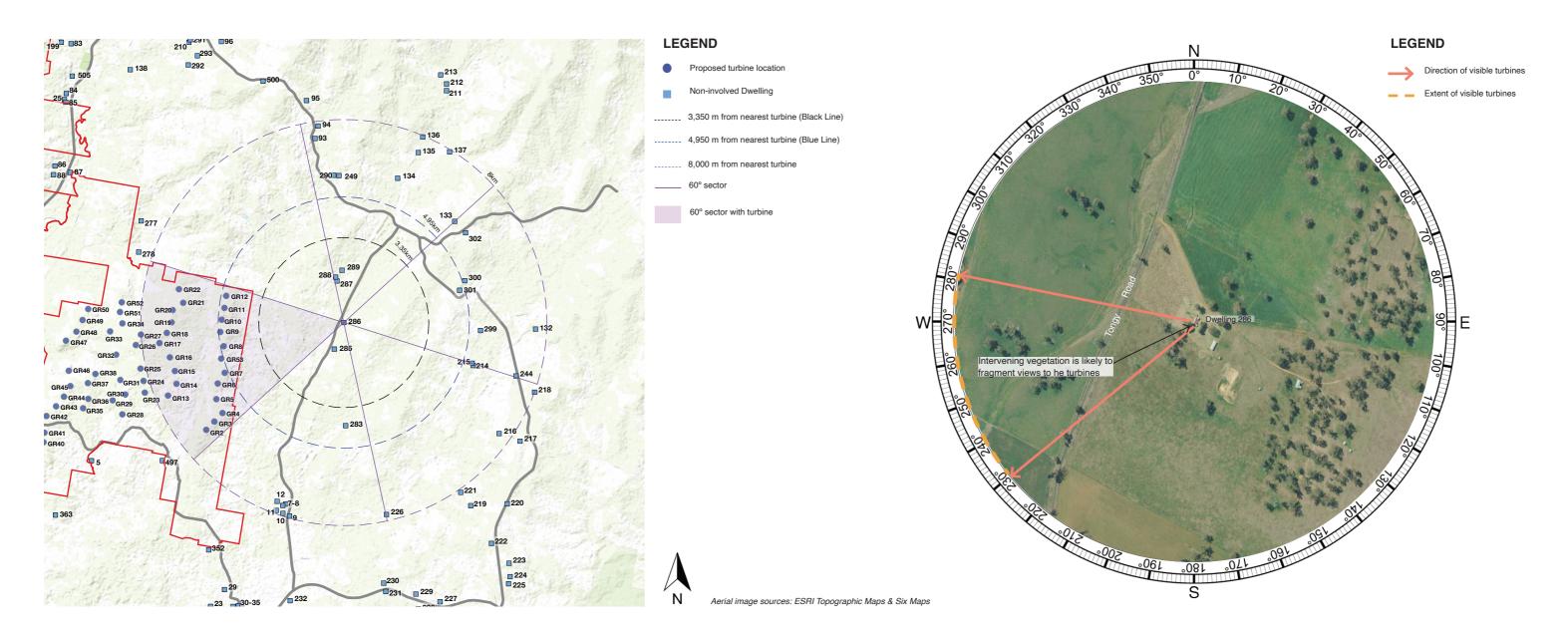
#### Assessment Notes:

An assessment based on topography alone identified a total of 67 turbines would be visible (18 at tip & 49 at hub height) from Dwelling 286. Of these, 23 turbines are located within the 8km radius of this dwelling. The dwelling is located on a flat terrain in the floodplains of Turee Creek. Aerial imagery indicates that the western/southwestern boundary of the dwelling comprises of windbreak vegetation which will reduce potential visual impact of the GR cluster. Turbines have the potential to be visible in up to one (1) 60 degree sector. Stands of vegetation on the western side of the dwelling will help fragment few views but it is likely that the tips of some turbines will be visible due to their elevated position. Five (5) turbines were identified between the black and blue lines of visual magnitude of this dwelling. Scattered vegetation in the dwellings surrounds will play an important role in fragmenting other views. The turbines are not likely to be a key feature in the visual catchment at this location. The visual impact resulting from the Project has been rated as **Low** from this dwelling.

### Visual Performance Objectives Evaluation (VIZ3):

No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3).

### Mitigation Measures:



# E.50. Dwelling Assessment Dwelling 288 (Linked to Dwellings 287 & 289)

DWELLING 288			
Nearest proposed turbine (km):	4.37 km	Visibility Distance Zone:	Far Middleground (FM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	3	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU03: Alluvial plains
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	22 8 at tip 14 at hub	Visual Influence Zone:	VIZ3

**Visual Impact Rating: Low** 

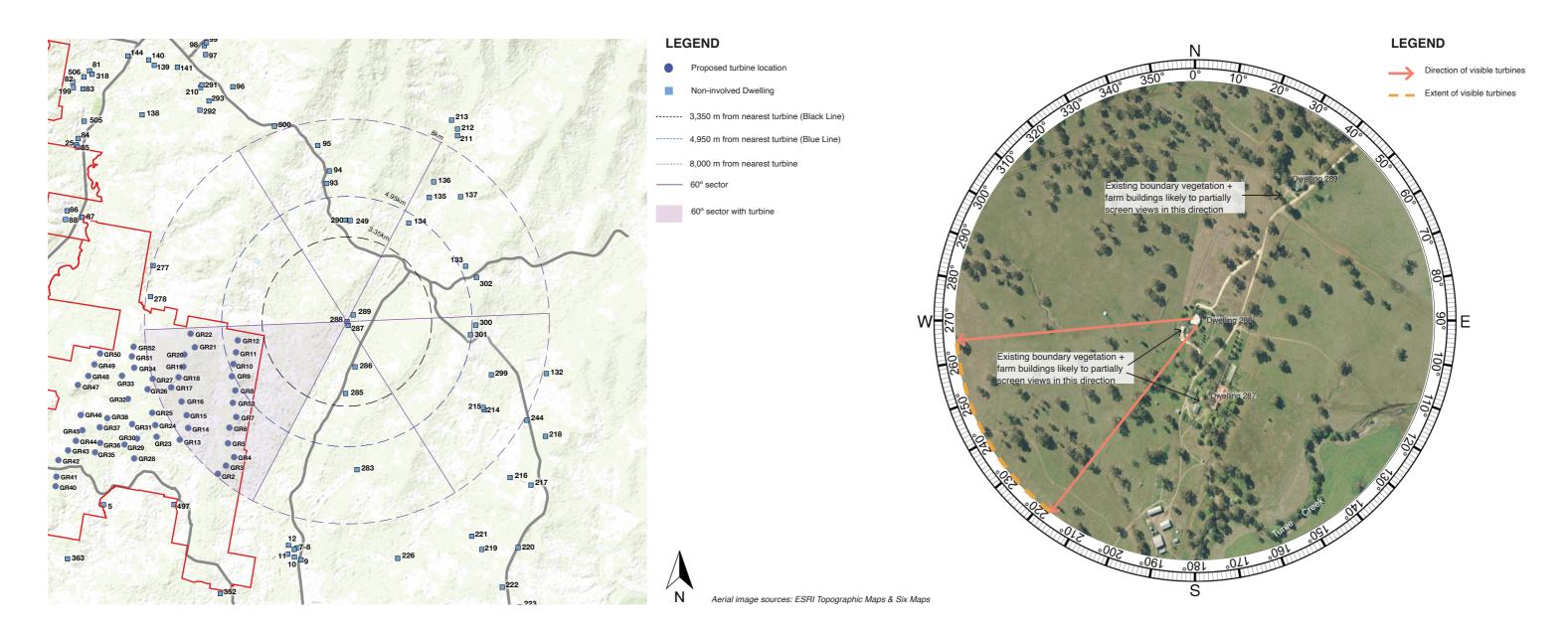
#### Assessment Notes:

An assessment based on topography alone identified that a total of 22 turbines (8 at tip & 14 at hub) would be visible from Dwelling 288. This assessment also represents potential visual impacts on Dwellings 287 and 289. The dwellings are located within the alluvial plains of Turee Creek on a gently undulating to flat terrain. The GR cluster would be potentially visible in the southwest. Aerial imagery indicates that the houses are surrounded by screening trees on all sides, especially in the southwest. Views from Dwellings 289 and 287 are likely to be fragmented by existing vegetation. An existing structure to the southwest of Dwelling 288 helps in screening views to the cluster. A rise in the terrain on the western side of the dwelling helps in limiting most views in this direction. It is highly likely that existing structures and vegetation will fragment all other views to the Project in the southwest. Three (3) turbines were identified within the black and blue lines of visual magnitude of this dwelling. Tips of some turbines may be partially visible due to the elevated position of cluster, but they will not have a major impact the scenic integrity of this location because of their distance from the dwelling and the low scenic quality of this landscape. The Project has the potential to be visible in up to one (1) 60 degree sector. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ3):

No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3).

### Mitigation Measures:



# E.51. Dwelling Assessment Dwelling 352

DWELLING 352			
Nearest proposed turbine (km):	4.73 km	Visibility Distance Zone:	Far Middleground (FM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	1	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU01: Vegetated Hills
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Moderate
Number of potentially visible turbines (Based on topography alone)	21 10 at tip 11 at hub	Visual Influence Zone:	VIZ2

Visual Impact Rating: Low

#### Assessment Notes:

An assessment based on topography alone identified a total of 21 turbines (10 at tip & 11 at hub height) which belong to the LV cluster would be visible from this dwelling. The Leadville cluster is located approximately 9.5 km west of the dwelling. The residence is located in an undulating setting and appears to be orientated north-south. Aerial imagery indicates that the dwelling is surrounded by dense vegetation in the east, west and south but the nearest turbines which belong to the Girragulang cluster are likely to be visible in the north/northwestern direction. 3D assessment suggests that the terrain rises in the north where the land has been partially cleared for grazing activities. Views towards the Girragulang cluster will, therefore, be screened by topography and views towards Leadville cluster will be distant. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

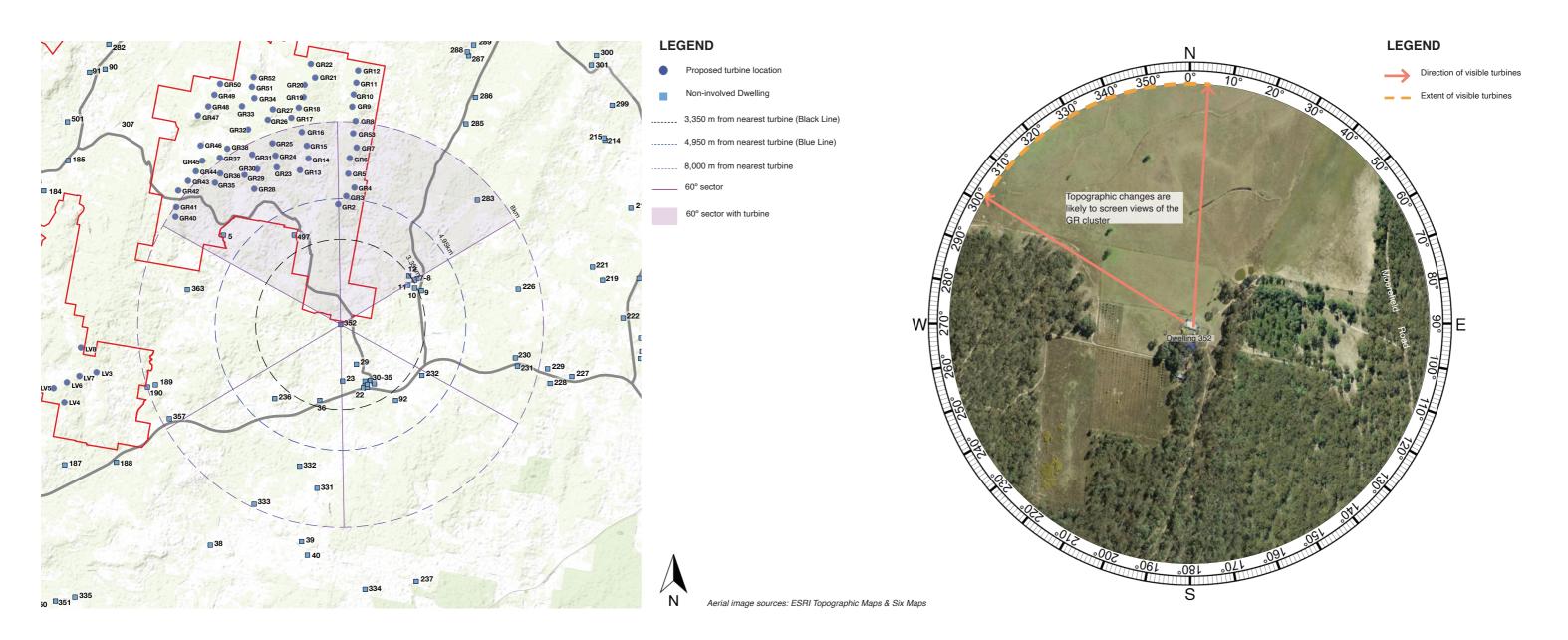
Visual Magnitude: One (1) turbine (GR2) is located between the black and blue lines of visual magnitude. Views, however, are anticipated to be screened by topography.

Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing topographical changes are likely to screen views towards turbines in the northwest.

Landscape Scenic Integrity: The Project will not impact the scenic integrity at this location because the nearest turbines are not likely to be visible.

Key Feature Disruption: Key features around the dwelling include the undulating and vegetated landform. These views will not be disrupted by the Project.

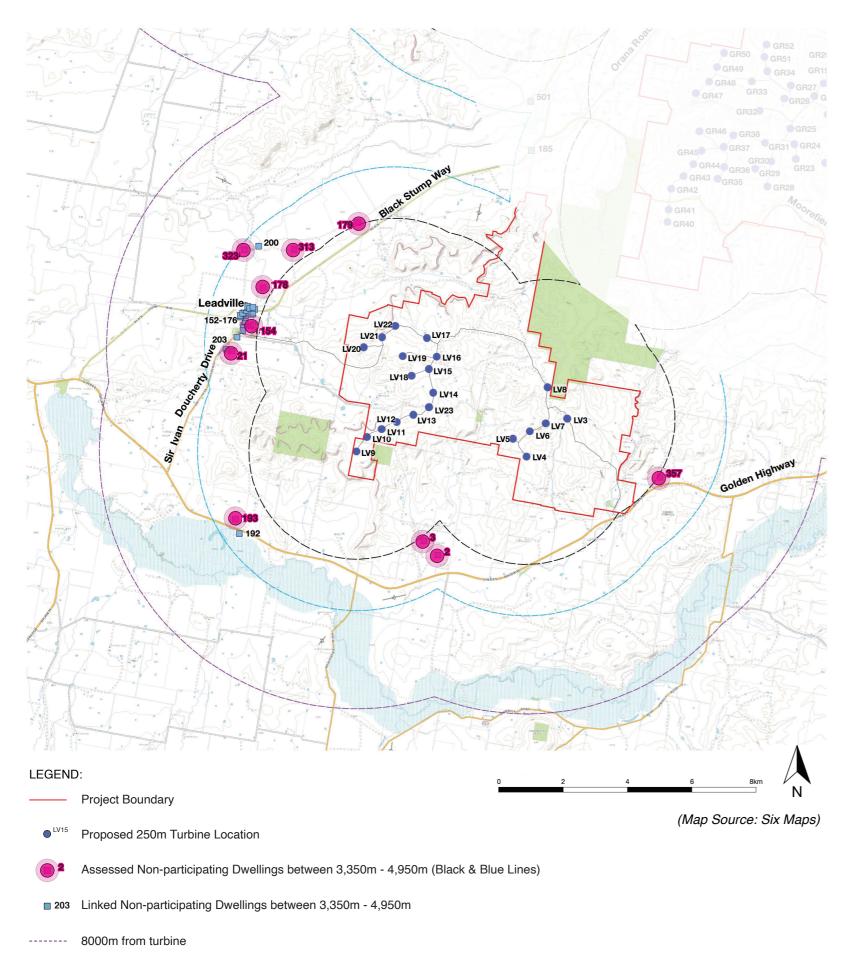
### Mitigation Measures:





Dwellings within 3350m - 4950m associated with Leadville Road (LV) cluster

# LV Cluster: Location of Non-Participating Dwellings between 3,350 m - 4,950m (Black & Blue Lines)



Dwellings between 3,350n	m - 4,950m	
Representative Dwelling	Linked Dwellings	MLA Comments
Dwelling 2		Refer Appendix E.52.
Dwelling 3		Refer Appendix E.53.
Dwelling 21	Dwelling 203	Refer Appendix E.54.
Dwelling 154	Dwellings 152, 153 & 155-176	Refer Appendix E.55.
Dwelling 178		Refer Appendix E.56.
Dwelling 179		Refer Appendix E.57.
Dwelling 193	Dwelling 192	Refer Appendix E.58.
Dwelling 313		Refer Appendix E.59.
Dwelling 323	Dwelling 200	Refer Appendix E.60.
Dwelling 357		Refer Appendix E.61.

# E.52. Dwelling Assessment Dwelling 2

DWELLING 2			
Nearest proposed turbine (km):	4.09 km	Visibility Distance Zone:	Far Middleground (FM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	9	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU02: Undulating farmlands
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Moderate
Number of potentially visible turbines (Based on topography alone)	17 8 at tip 9 at hub	Visual Influence Zone:	VIZ2

Visual Impact Rating: Nil

#### Assessment Notes:

An assessment based on topography alone identified a total of 17 turbines (8 at tip height and 9 at hub height) would be visible from Dwelling 2. The dwelling is located on the flatter side of an undulation south of the LV cluster. It appears to be surrounded by dense vegetation in the northern direction as per aerial imagery. Turbines would be potentially visible in the same direction. The topography generally rises in the north which helps to screen potential views of the Project. Views towards most turbines are, therefore, likely to be screened by topography and vegetation. A 3D assessment suggests that the rise in topography in this direction will screen most views of the Project. The visual impact resulting from the Project has been rated as *Nil* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

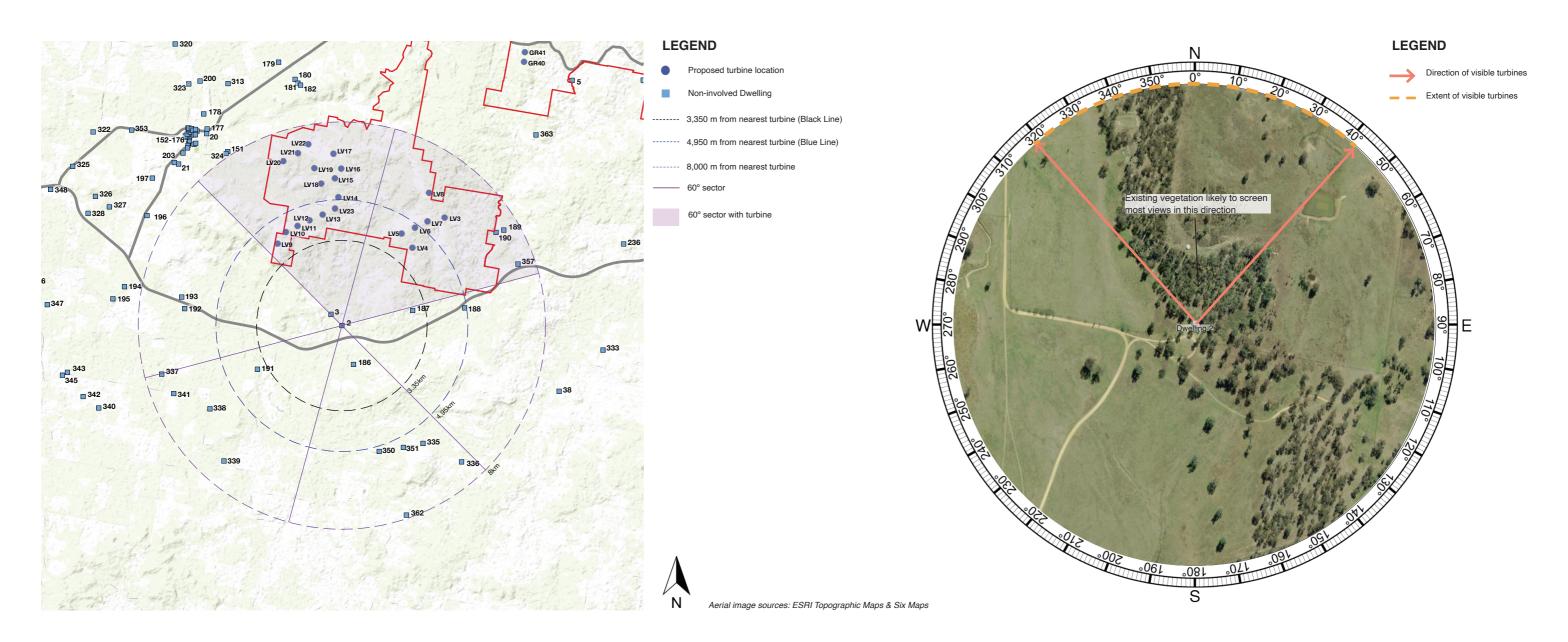
Visual Magnitude: Nine (9) turbines (LV4, LV5, LV6, LV9, LV10, LV11, LV12, LV13 & LV23) are located within the blue line of visual magnitude. These will not be visible due to intervening vegetation.

Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation and topography will screen views towards turbines.

Landscape Scenic Integrity: The turbines are not likely to be visible. The scenic integrity will remain intact.

Key Feature Disruption: The turbines are not likely to be a visible element and will not diminish the key landscape features as viewed from this dwelling.

### Mitigation Measures:



# E.53. Dwelling Assessment Dwelling 3

DWELLING 3			
Nearest proposed turbine (km):	3.48 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	10	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU02: Undulating farmlands
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Moderate
Number of potentially visible turbines (Based on topography alone)	31 10 at tip 21 at hub	Visual Influence Zone:	VIZ2

Visual Impact Rating: Moderate

### Assessment Notes:

An assessment based on topography alone identified a total of 31 turbines would be visible (10 at tip and 21 at hub height) from this dwelling. Of these, 21 turbines are located within 8km of Dwelling 3. The dwelling is located in a gently undulating setting and appears to have openings orientated north-south. Aerial imagery indicates that the dwelling is surrounded by scattered vegetation in all directions. Views of turbines will be available along the ridgeline generally towards the northwest and northeast. Views to the northeast will be screened by existing vegetation & farm buildings in the far foreground. It is likely that views will be available in the northwest due to the elevated position of the turbines but they will not dominate the views from the dwelling. The visual impact resulting from the Project has been rated as *Moderate* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: 10 turbines (LV4, LV5, LV6, LV9, LV10, LV11, LV12, LV13, LV23 & LV14) are located between the black and blue lines of visual magnitude. Few turbines are likely to be screened by intervening elements.

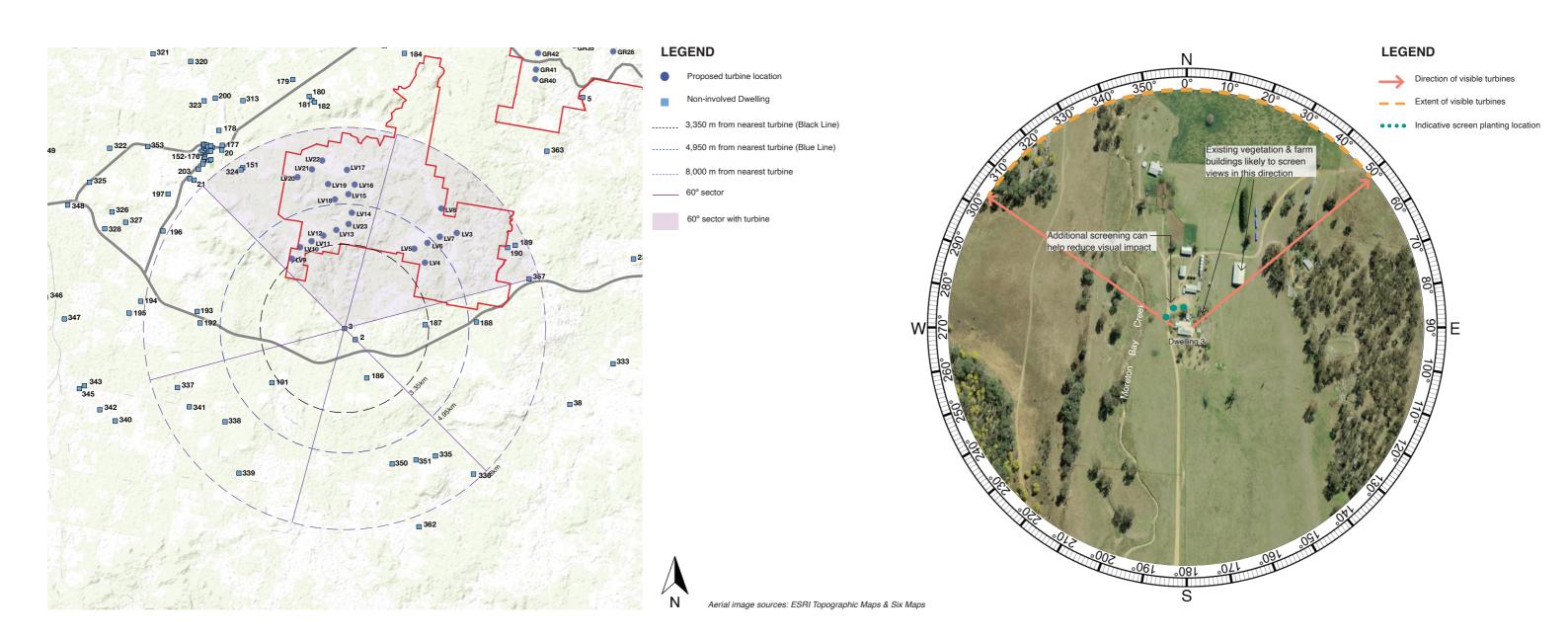
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation is likely to screen some views towards turbines.

Landscape Scenic Integrity: The Project will have a moderate to low impact on scenic integrity at this location. The turbines will be visible from this location but do not have the potential to dominate the visual catchment

Key Feature Disruption: Key visual features for this dwelling include the gentle and vegetated undulations in the northern direction. Turbines are likely to be a visible element on these undulations.

### Mitigation Measures:

Supplementary screen planting to the northwest can further reduce potential visual impact of the turbines. Consultation with the landowner would be required to discuss appropriate mitigation methods.



# E.54. Dwelling Assessment Dwelling 21 (Linked to Dwelling 203)

DWELLING 21			
Nearest proposed turbine (km):	4.11 km	Visibility Distance Zone:	Far Middleground (FM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	2	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU05: Towns and Settlements (Leadville)
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	145 15 at tip 130 at hub	Visual Influence Zone:	VIZ3

Visual Impact Rating: Moderate

#### Assessment Notes:

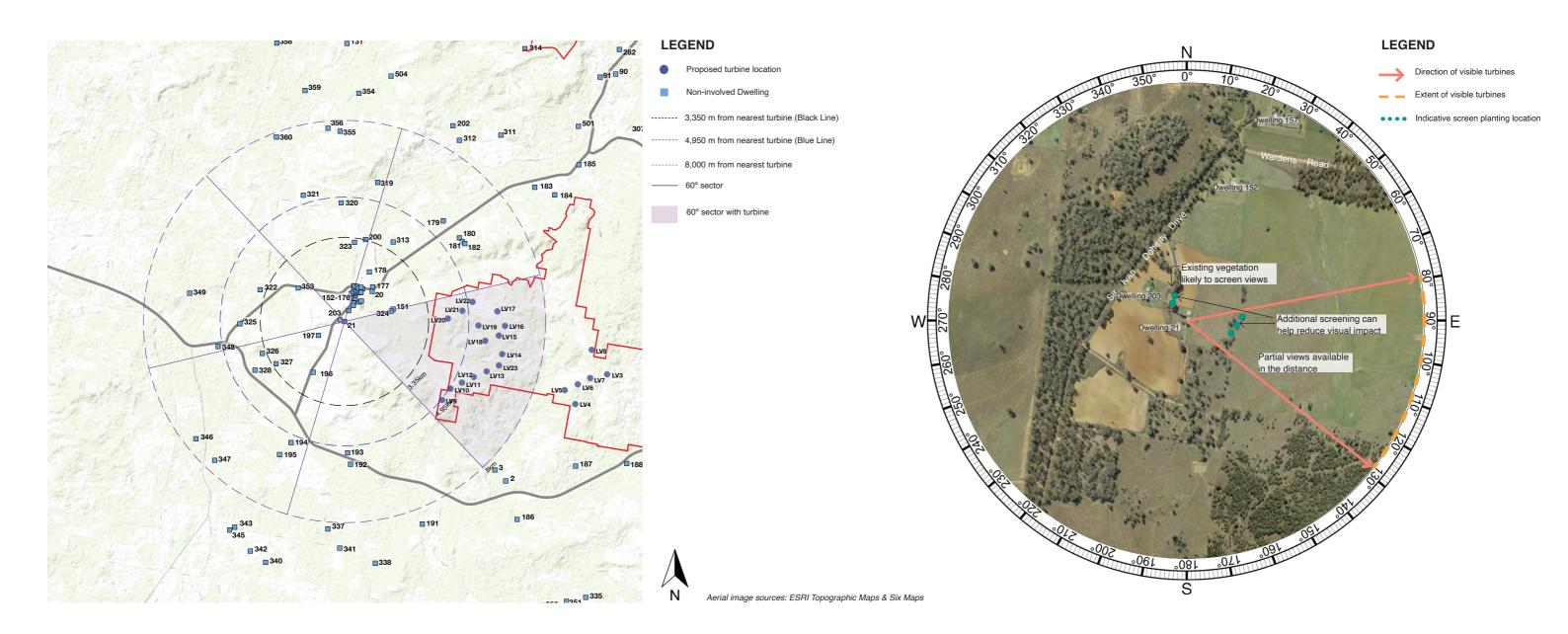
An assessment based on topography alone identified a total of 145 turbines would be visible (15 at tip & 130 at hub height) from Dwelling 21. Of these, 15 turbines that belong to the LV cluster are located within 8km of this dwelling. This assessment also represents the impact of the Project on Dwelling 203. Dwellings 21 & 203 are located on a gently undulating terrain in the town of Leadville. Aerial imagery indicates that the houses are surrounded by rows of patchy windbreak plantations on the east-southeast sides of the dwellings. This is also the direction in which the LV cluster will be potentially visible. A gentle rise in topography towards the southeast and associated vegetation will potentially screen some views. Two (2) turbines were identified within the black and blue lines of visual magnitude of this dwelling. Views towards the turbines beyond 4950m are likely to be fragmented by existing vegetation and will not be distinct. It is unlikely that views towards key landscape features will be disrupted by the LV turbines. The Project has the potential to be visible in up to one (1) 60 degree sector, however existing vegetation is likely to screen most of these views. The visual impact resulting from the Project has been rated as *Moderate* from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ3):

No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3).

### Mitigation Measures:

Most views will be limited by existing vegetation. Supplementary screen planting to the east for both dwellings can further reduce potential visual impact of the turbines. Consultation with the landowners would be required to discuss appropriate mitigation methods.



# E.55. Dwelling Assessment Dwelling 154 (Linked to Dwellings 152-176)

DWELLING 154				
Nearest proposed turbine (km):	3.51 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	4	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU05: Towns and Settlements (Leadville)	
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	143 29 at tip 114 at hub	Visual Influence Zone:	VIZ2	

**Visual Impact Rating: Moderate** 

#### Assessment Notes:

This dwelling is located at the southeastern corner of the town of Leadville and an assessment of Dwelling 154 is a representation of assessments for the residences in Leadville. An assessment based on topography alone identified a total of 143 turbines would be visible (29 at tip & 114 at hub height) from this dwelling. Of these, 15 turbines which belong to the Leadville cluster are located within 8 km of the dwelling and it is likely that only these 15 turbines will be visible from Leadville. Views to GR & MH turbines will be distant and unclear. Topographic character around Dwelling 154 and the town of Leadville is generally flat with very minor undulations. Aerial imagery indicates that Dwelling 154 is surrounded by patchy vegetation in all directions. Dwellings 152, 153, and 155-176 on the other hand, are surrounded by moderate to dense vegetation which will help screen most views. A patch of trees can be seen further southeast in the mid foreground. Due to the elevated position of turbines, views will be potentially available in the southeast for Dwelling 154. The visual impact resulting from the Project has been rated as *Moderate* for these dwellings.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Four (4) turbines (LV19, LV20, LV21 & LV22) are located within the black and blue lines of visual magnitude. Majority of these will be visible due to their elevated position.

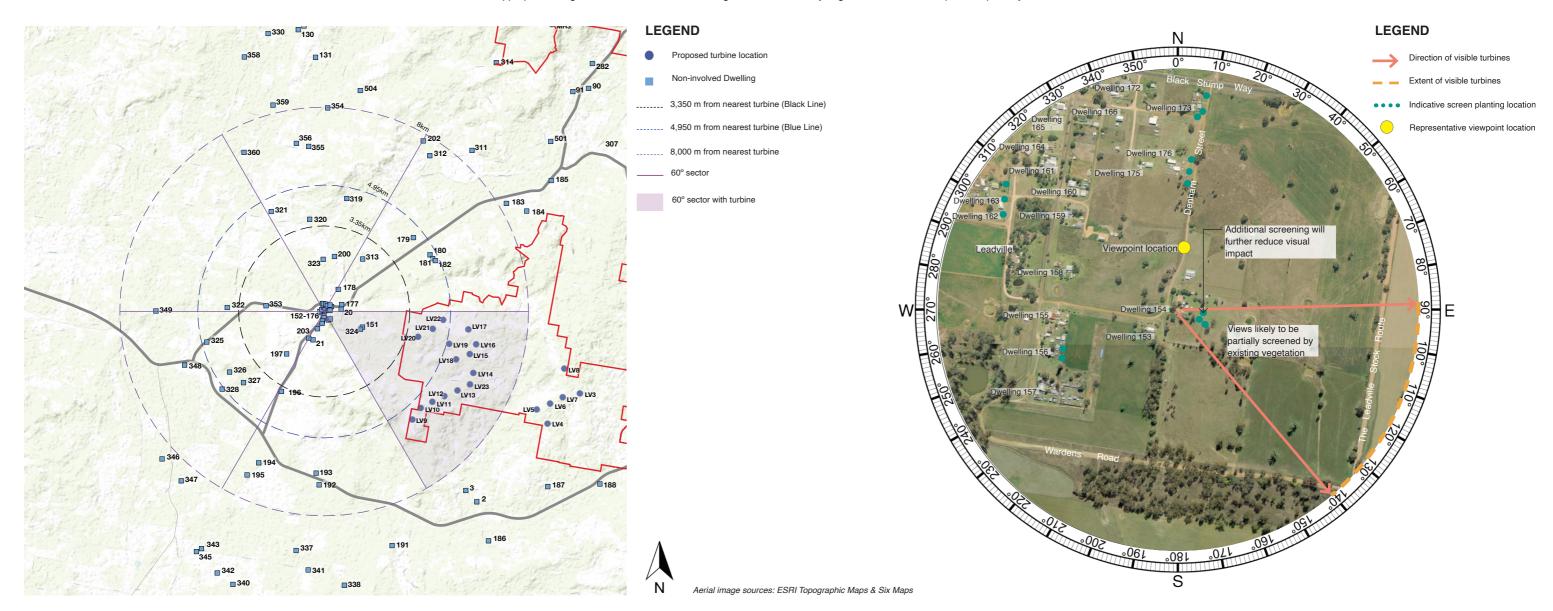
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to one (1) 60 degree sector. However, existing vegetation is likely to fragment some views towards turbines in the southeast direction.

Landscape Scenic Integrity: The Project will have a moderate to low impact on scenic integrity at this location. The proposed turbines will form a part of the visual catchment due to their elevated position.

Key Feature Disruption: All 15 turbines of the Leadville cluster will be visible at hub height on the undulations located east of the town of Leadville. Key features from this location include ridgelines to the north which will not be impacted. The turbines will be a dominant element towards the southeast but these undulations are generally utilized for grazing and have a moderate to low scenic value.

#### Mitigation Measures:

Supplementary screen planting to the east of Dwellings 154, 156, 162-163, 173 and 175-176 can further reduce potential visual impact of the turbines. Consultation with the landowners would be required to discuss appropriate mitigation methods. All other dwellings are surrounded by vegetation which is anticipated to partially screen views.



# E.56. Dwelling Assessment Dwelling 178

DWELLING 178				
Nearest proposed turbine (km):	3.63 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	4	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU03: Alluvial plains	
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	148 27 at tip 121 at hub	Visual Influence Zone:	VIZ2	

**Visual Impact Rating: Low** 

#### Assessment Notes:

An assessment based on topography alone identified a total of 148 turbines would be visible (27 at tip & 121 at hub height) from Dwelling 178. Of these, 15 turbines are located within 8 km that are likely to be visible. The remaining turbines are distant and are not likely to be distinctly visible. Dwelling 178's openings generally face north. It is located on a flat terrain north of the town of Leadville. The dwellings appear to be surrounded by trees on the southern sides as per the aerial imagery. Turbines would be potentially visible in the southeastern direction on the cleared undulations that are used for grazing and cropping. A 3D assessment suggests that the blades of LV cluster turbines would be partially visible because there are existing opportunities for the views to be screened. The visual impact resulting from the Project has been rated as *Low* for this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

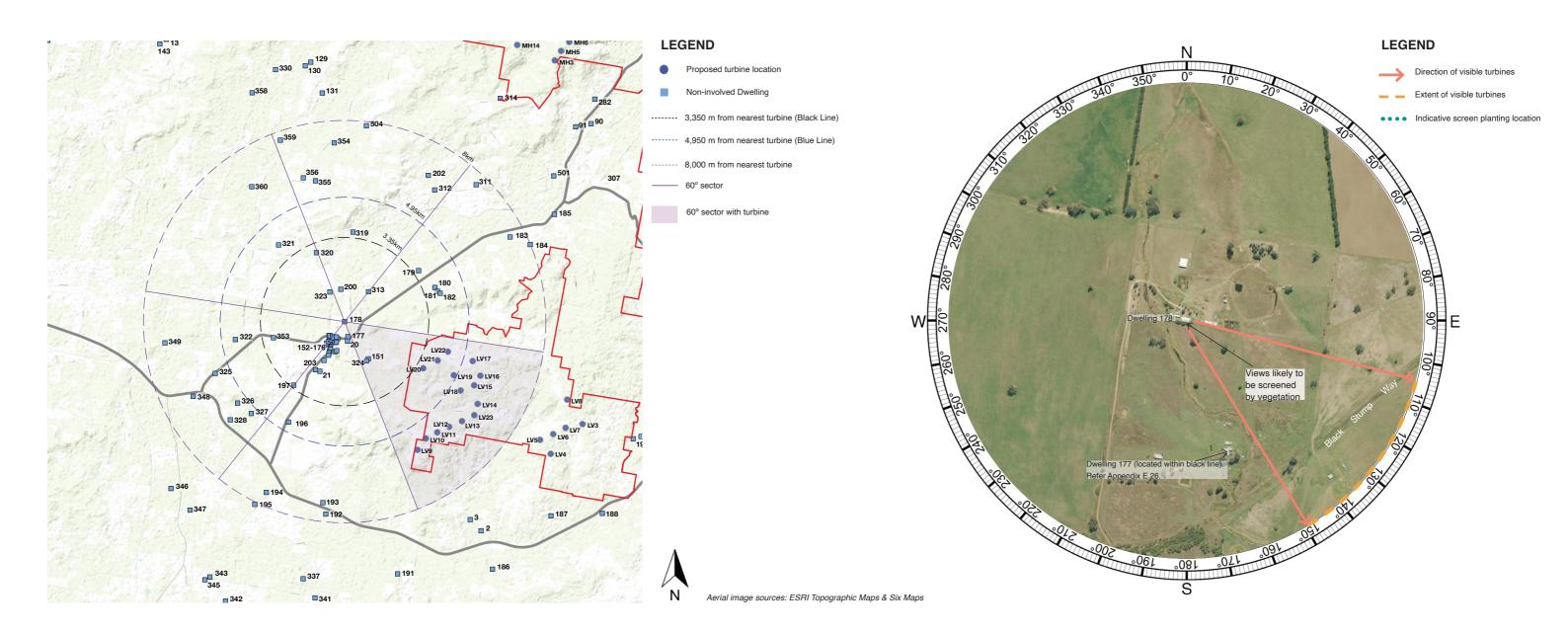
Visual Magnitude: Four (4) turbines (LV19, LV20, LV21 & LV22) are located within the black & blue lines of visual magnitude.

Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to one (1) 60 degree sector. Existing vegetation may partially screen some views.

Landscape Scenic Integrity: The Leadville turbines are likely to be partially visible in the southeast. Most views are likely to be screened by existing vegetation.

Key Feature Disruption: Key features from this location include ridgelines to the north/northwest which will not be impacted when viewed from this location. The turbines will be visible in the southeast but the undulations are generally utilized for grazing and have a low scenic value.

### Mitigation Measures:



# E.57. Dwelling Assessment Dwelling 179

DWELLING 179			
Nearest proposed turbine (km):	3.43 km	Visibility Distance Zone:	Near Middleground (NM)
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	6	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU03: Alluvial plains
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low
Number of potentially visible turbines (Based on topography alone)	141 15 at tip 126 at hub	Visual Influence Zone:	VIZ2

Visual Impact Rating: Nil

#### Assessment Notes:

An assessment based on topography alone identified a total of 141 turbines (15 at tip height and 126 at hub height) would be visible from this dwelling. Of these, 15 turbines of the LV cluster are located within the 8km radius from this dwelling. The dwelling is located on a flat terrain and appears to be surrounded by dense row of windbreak plantations along the dwelling's southwestern/southern boundary and patchy vegetation in the east as per aerial imagery. This will help reduce the potential visual impact to a large extent. Views of turbines will be potentially available in the south/southeast. The dwelling's foreground is characterized by dense windbreak plantations and a 3D assessment suggests that the LV turbine cluster will be screened by existing vegetation. The visual impact resulting from the Project has been rated as **Nii** from this dwelling.

#### Visual Performance Objectives Evaluation (VIZ2):

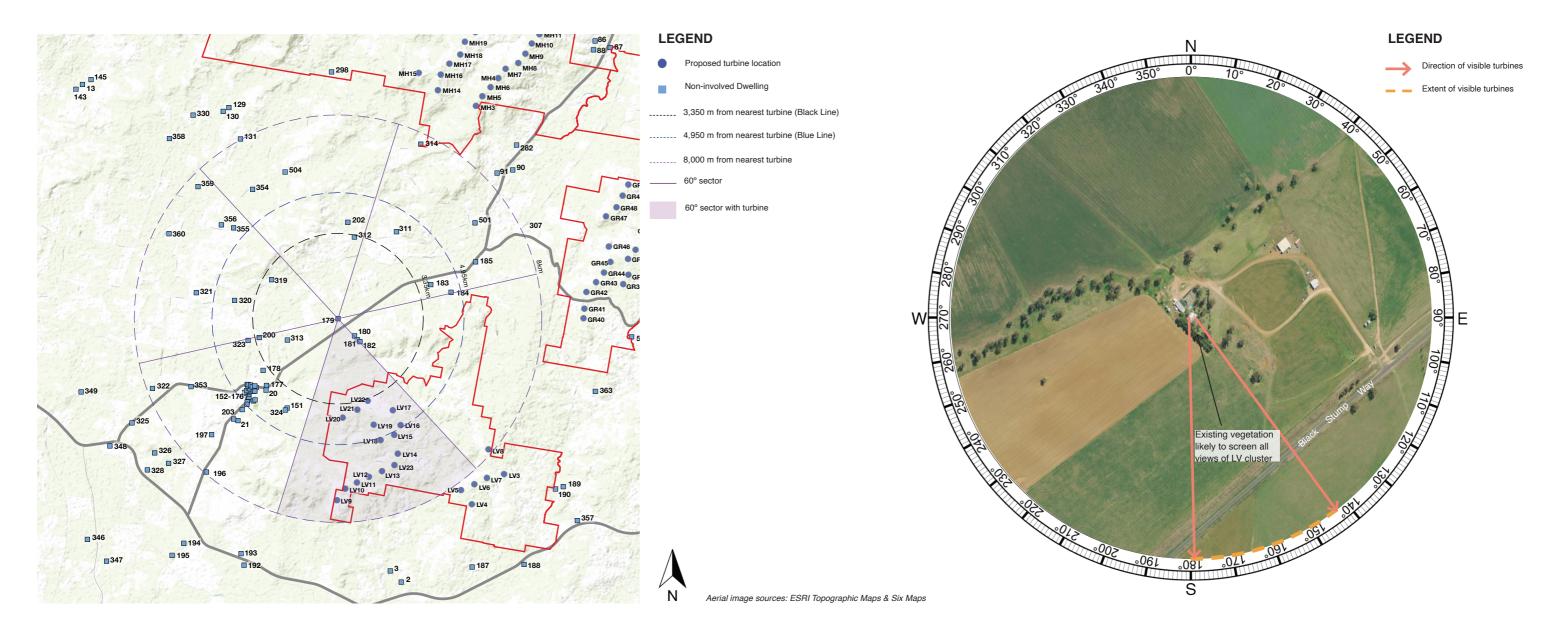
Visual Magnitude: Six (6) turbines (LV16, LV17, LV19, LV20, LV21 & LV22) are located between the black and blue lines of visual magnitude.

Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to one (1) 60 degree sector. However, existing vegetation is likely to screen views towards the Leadville cluster.

Landscape Scenic Integrity: The Project will have a low impact on scenic integrity at this location. The proposed turbines do not have the potential to be visible at this location.

Key Feature Disruption: None of the key landscape features viewed from this dwelling will be disrupted due to existing screening vegetation.

#### Mitigation Measures:



# E.58. Dwelling Assessment Dwelling 193 (Linked to Dwelling 192)

DWELLING 193				
Nearest proposed turbine (km):	4.31 km	Visibility Distance Zone:	Far Middleground (FM)	
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	2	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU04: Agricultural flats	
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	21 4 at tip 17 at hub	Visual Influence Zone:	VIZ3	

Visual Impact Rating: Nil

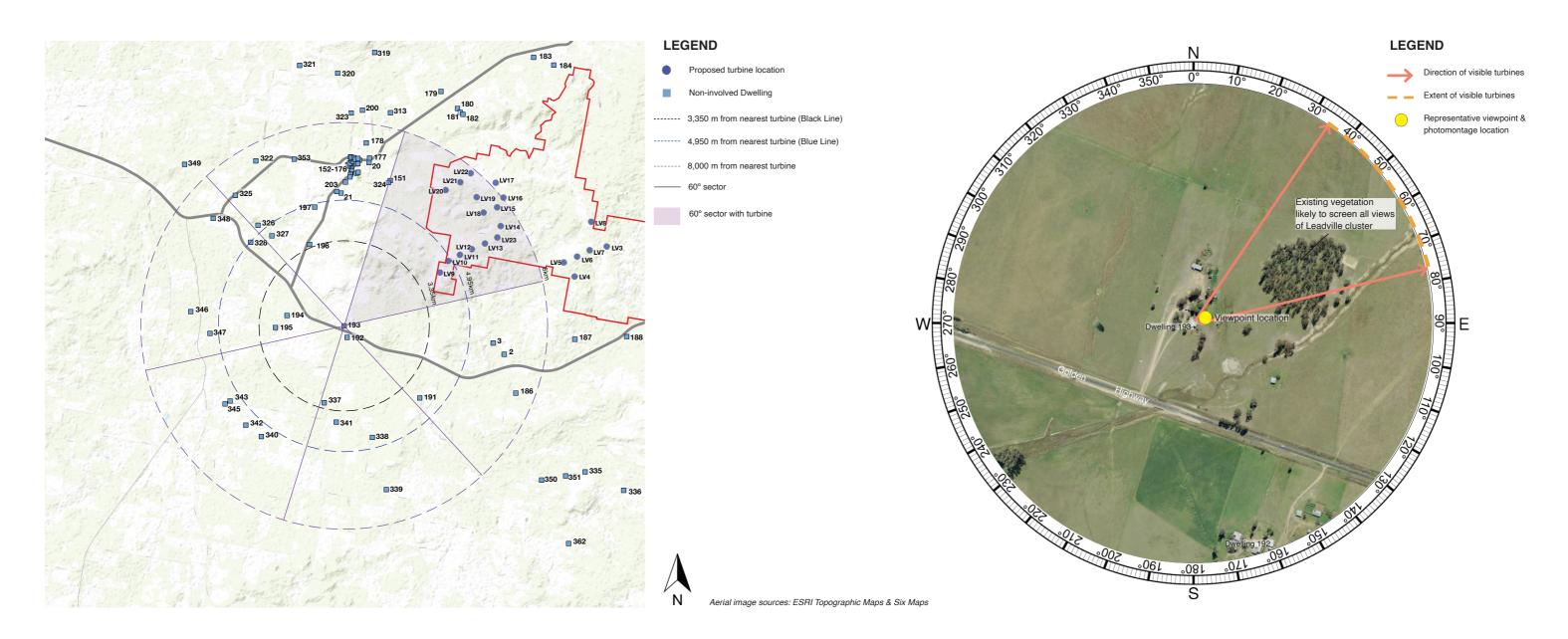
#### Assessment Notes:

An assessment based on topography alone identified a total of 21 turbines (4 at tip height and 17 at hub height) would be visible from Dwelling 193. This assessment is a representation of the impact of the Project on Dwellings 193 & 192. The dwellings are located on a flat terrain. Aerial imagery indicates that all boundaries of the dwellings are characterized by moderate to dense windbreak vegetation in the foreground. A photograph was taken in the northeastern corner of the dwelling to represent views from this property. A patch of dense woodlands is located further to the northeast of Dwelling 193 in the far foreground and this will help to limit views of the Project. Turbines have the potential to be visible in up to one (1) 60 degree sector. No turbines were identified within the black line and two (2) turbines were identified between the black and blue lines of visual magnitude of this dwelling. It is not likely that views towards key landscape features will be disrupted by the turbines because the turbines will be screened by existing vegetation. The visual impact resulting from the Project has been rated as *Nil* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ3):

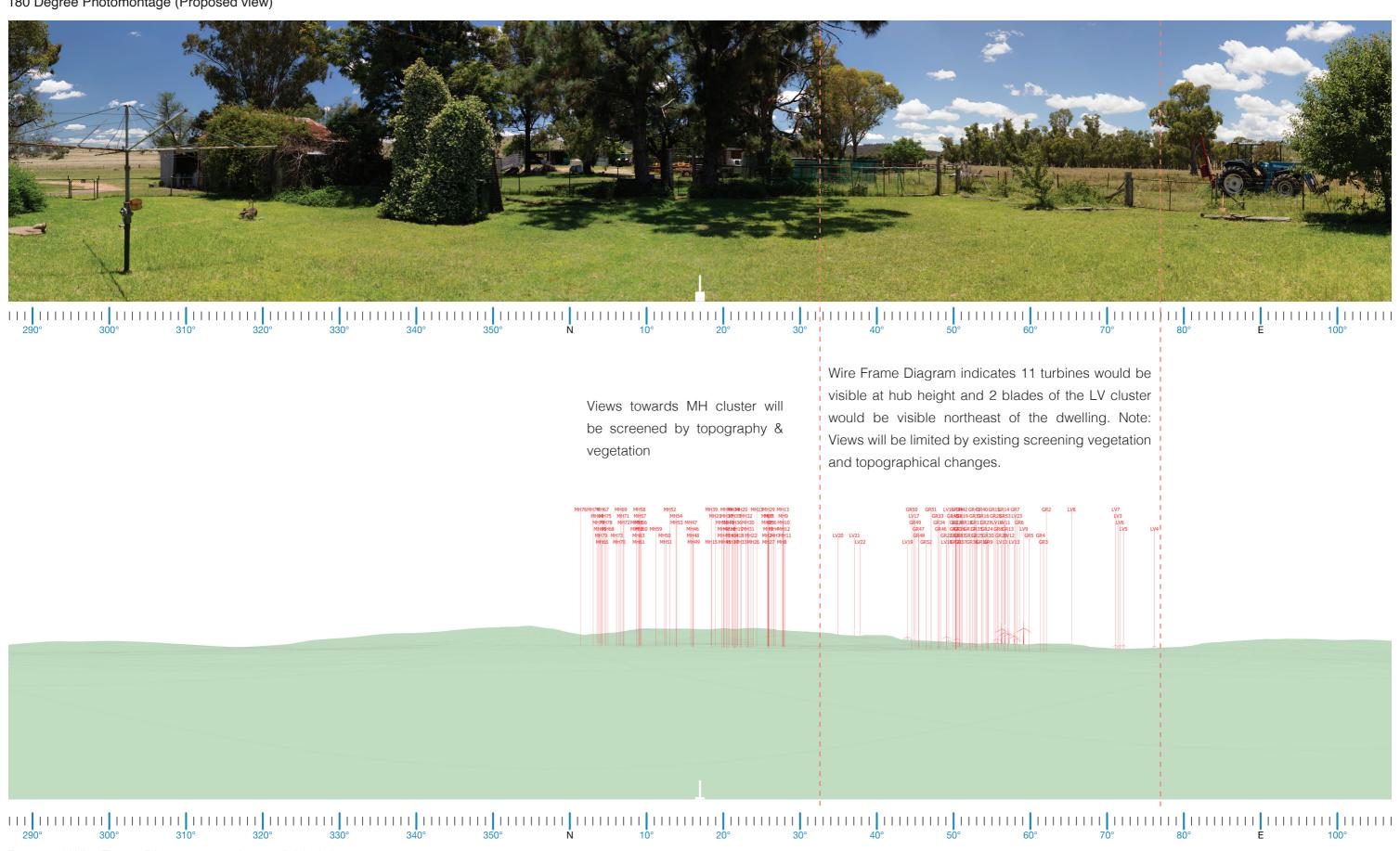
No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3)

### Mitigation Measures:



# E.58. Dwelling Assessment Dwelling 193

180 Degree Photomontage (Proposed view)



Proposed Wire Frame Diagram - 180 degree field of view

# E.59. Dwelling Assessment Dwelling 313

DWELLING 313				
Nearest proposed turbine (km):	3.74 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	4	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU03: Alluvial Plains	
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	131 20 at tip 111 at hub	Visual Influence Zone:	VIZ2	

Visual Impact Rating: Moderate

#### Assessment Notes:

An assessment based on topography alone identified a total of 131 turbines (20 at tip & 111 at hub height) would be visible from Dwelling 313. Of these, 15 turbines of the LV cluster will be visible in the southeastern direction within 8km of the dwelling. The dwelling is located on a flat terrain and can be accessed via Black Stump Way. Aerial imagery indicates that the dwelling's northern boundary has windbreak plantations but all other directions lack intervening vegetation elements. The LV cluster will, therefore, be visible along the undulations due to their elevated position. It is highly likely that the turbines will be distinctly visible. The visual impact resulting from the Project has been rated as *Moderate* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Four (4) turbines (LV19, LV20, LV21 & LV22) are located between the black & blue lines of visual magnitude.

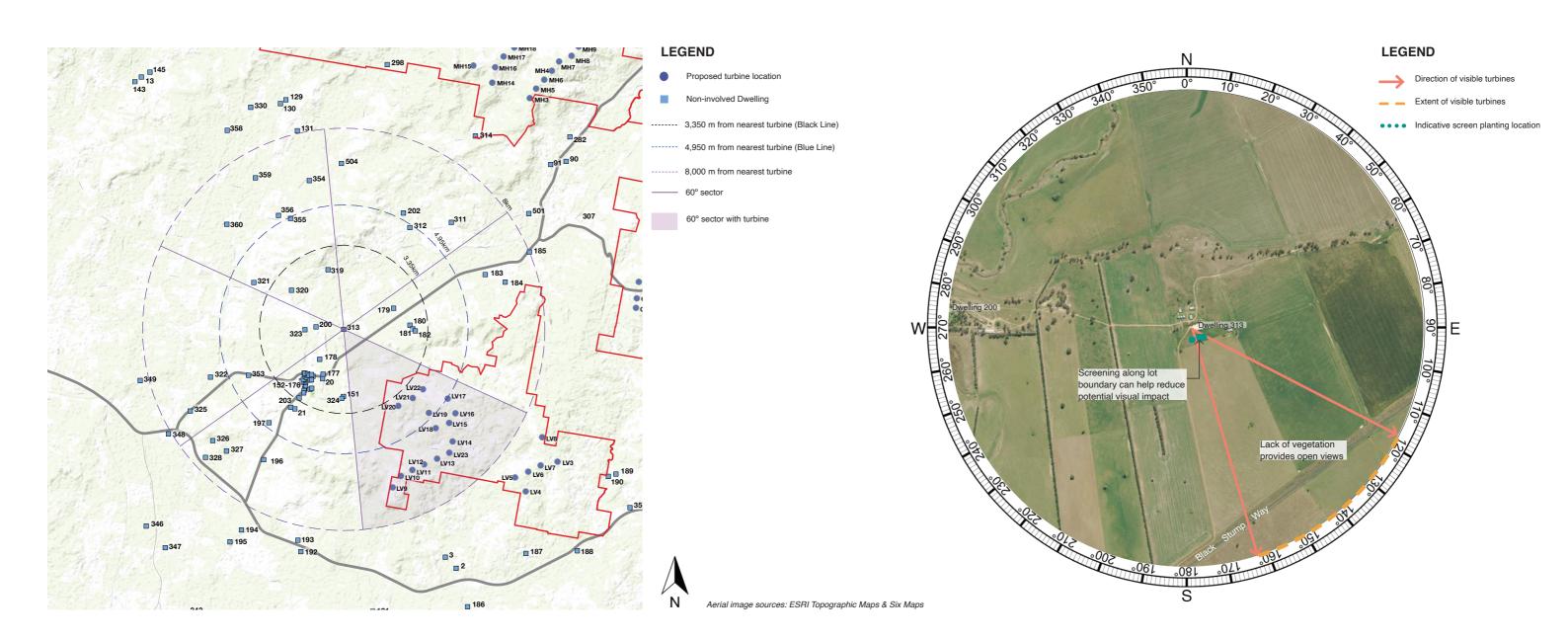
Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to one (1) 60 degree sector due to lack of intervening elements.

Landscape Scenic Integrity: The Leadville turbines are likely to be visible at this location. The cluster, however, will have minimal impact on the landscape scenic integrity of this low quality landscape.

Key Feature Disruption: Key features viewed from this dwelling are ridgelines in the northern direction, and the Project will not impact these ridges.

#### Mitigation Measures:

Supplementary screen planting along the lot's southeastern boundary can further reduce potential visual impact of the turbines. Consultation with the landowner would be required to discuss appropriate mitigation methods.



# E.60. Dwelling Assessment Dwelling 323 (Linked to Dwelling 200)

DWELLING 323				
Nearest proposed turbine (km):	4.79 km	Visibility Distance Zone:	Far Middleground (FM)	
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	1	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	1	Landscape Character Unit:	LCU03: Alluvial plains	
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	108 16 at tip 92 at hub	Visual Influence Zone:	VIZ3	

Visual Impact Rating: Nil

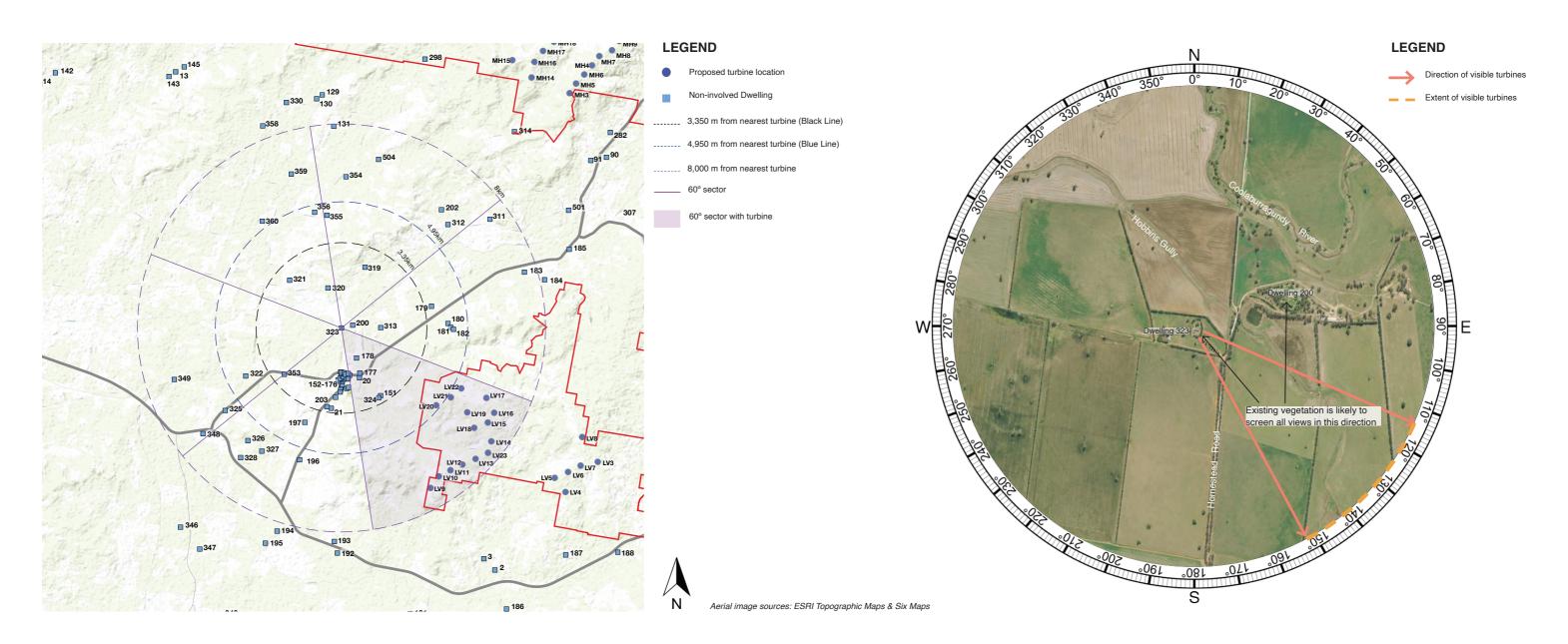
#### Assessment Notes:

An assessment based on topography alone identified that a total of 108 turbines would be visible (16 at tip & 92 at hub height) from this dwelling. Of these, 15 turbines of the LV cluster are visible within 8km of this dwelling. This assessment also applies to Dwelling 200. Dwelling 323 can be accessed via Homestead Road and is located in the floodplains of Coolaburragundy River. Aerial imagery indicates that the house is surrounded by dense windbreak vegetation on all sides. The dwelling is located on a generally flat terrain. The LV cluster has the potential be visible in the southwest due to the difference in elevation between this viewpoint and the land associated with the cluster. Views towards the southeast are screened by existing vegetation that surrounds the house. One (1) turbine was identified within the black and blue lines of visual magnitude of this dwelling. The Project will not have a major impact the scenic integrity of this location because of existing intervening vegetation. The Project has the potential to be visible in up to one (1) 60 degree sector. The visual impact resulting from the Project has been rated as *NiI* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ3):

No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3)

### Mitigation Measures:



# E.61. Dwelling Assessment Dwelling 357

DWELLING 357				
Nearest proposed turbine (km):	3.41 km	Visibility Distance Zone:	Near Middleground (NM)	
Number of proposed turbines within Black & Blue Lines (3350 - 4950 m):	6	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	2	Landscape Character Unit:	LCU04: Agricultural flats	
Number of visible 60° Sectors (Based on 3D Assessment):	1	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	62 29 at tip 33 at hub	Visual Influence Zone:	VIZ2	

Visual Impact Rating: Nil

#### Assessment Notes:

An assessment based on topography alone identified a total of 62 turbines would be visible (29 at tip & 33 at hub height) from Dwelling 357. Of these, 12 turbines are located with 8km of the dwelling. The dwelling is located on a flat terrain south of the undulations around Leadville. The dwelling appears to be surrounded by dense vegetation in the northwest/west which is the direction of potentially visible turbines. A 3D assessment suggests that the rise in topography in the northwest and associated vegetation will potentially screen most views of the LV cluster. Views of all other clusters are distant and likely to be unclear. The visual impact resulting from the Project has been rated as *Nil* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ2):

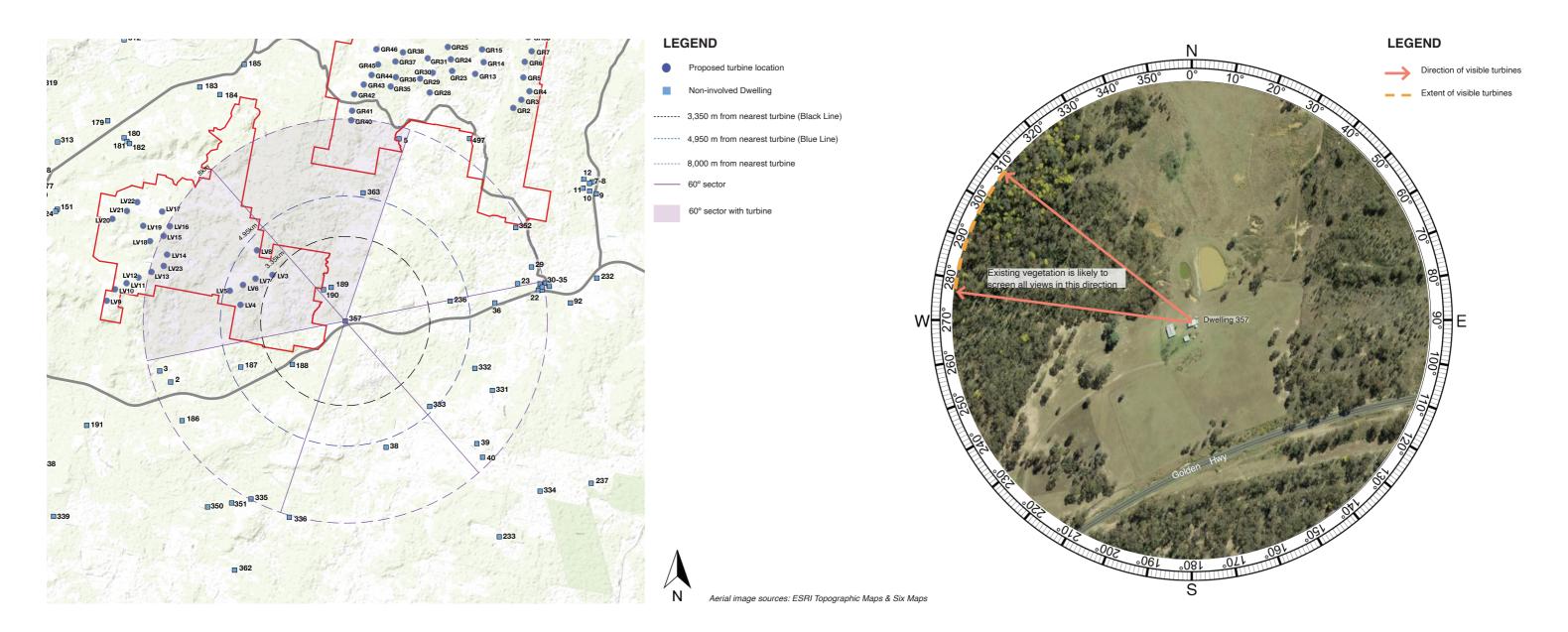
Visual Magnitude: Six (6) turbines (LV3, LV4, LV5, LV6, LV7 & LV8) are located within the black & blue lines of visual magnitude.

Multiple Wind Turbine Effect: Turbines have the potential to be visible in up to two (2) 60 degree sectors. However, existing vegetation and topography will potentially screen most views.

Landscape Scenic Integrity: The turbines are not likely to be visible from this dwelling. The scenic integrity will remain intact.

Key Feature Disruption: The turbines are not likely to be a visible element in the landscape and will not diminish the key landscape features as viewed from this dwelling.

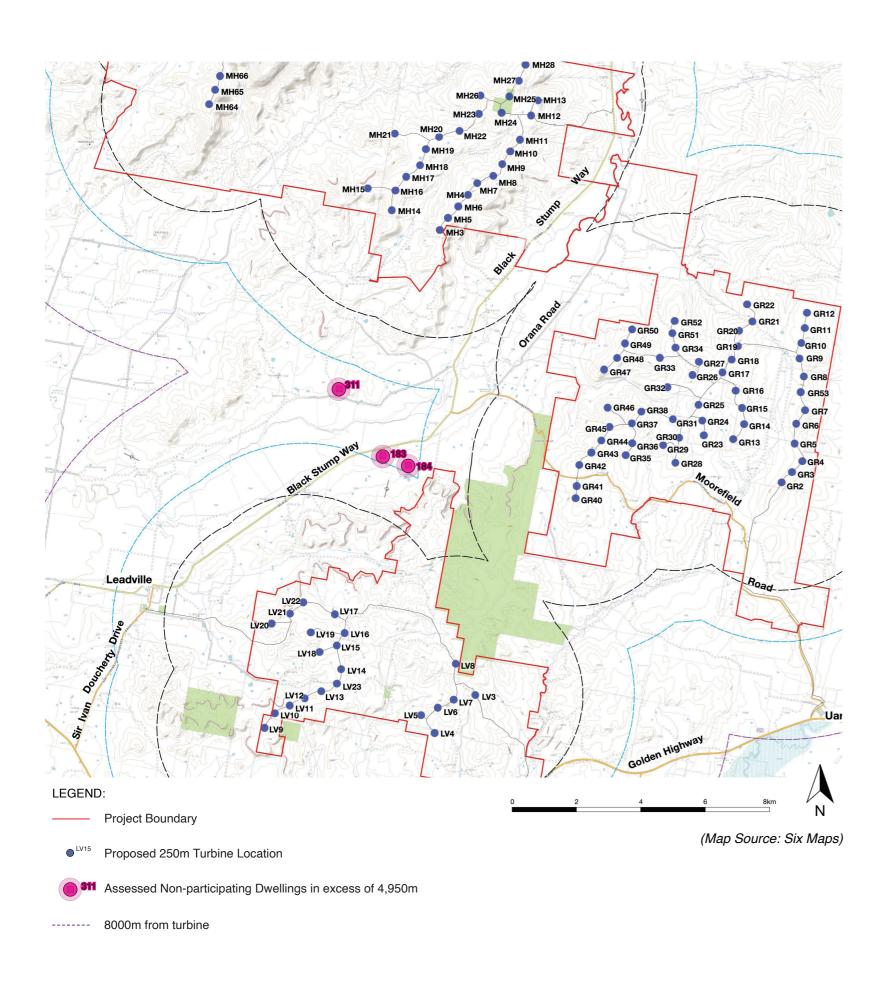
### Mitigation Measures:





Detailed Dwelling Assessments
Dwellings in excess of 4950m

# Location of Non-Participating Dwellings outside 4,950m (Blue Line) with multiple visible sectors



Overview of Non-participating Dwellings with multiple visible sectors				
Dwellings outside 4,950m				
Representative Dwelling	Linked Dwellings	MLA Comments		
Dwelling 183		Refer Appendix E.62.		
Dwelling 184		Refer Appendix E.63.		
Dwelling 311		Refer Appendix E.64.		

# E.62. Dwelling Assessment Dwelling 183

DWELLING 183				
Nearest proposed turbine (km):	5.15 km	Visibility Distance Zone:	Far Middleground (FM)	
Number of proposed turbines within 8000 m:	30	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	4	Landscape Character Unit:	LCU03: Alluvial plains	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	130 30 at tip 100 at hub	Visual Influence Zone:	VIZ3	

**Visual Impact Rating: Low** 

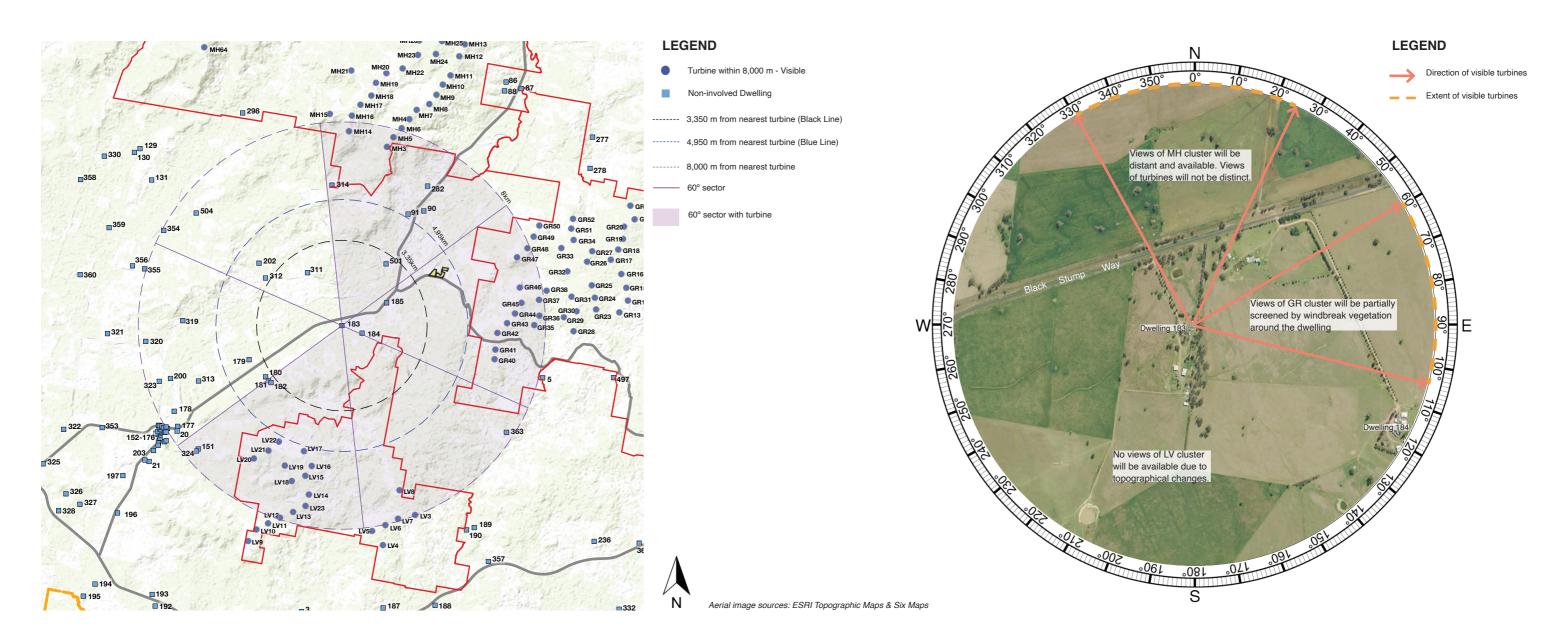
#### Assessment Notes:

An assessment based on topography alone identified that a total of 130 turbines (30 at tip and 100 at hub height) would be visible from this dwelling. Of these, 30 turbines are located within 8km of the dwelling. The dwelling can be accessed via Black Stump Way. Aerial imagery indicates that the house is surrounded by patchy to dense windbreak plantations on all sides. Topographical changes in the southwest obliterate views towards the LV cluster. Views to the GR cluster will be obliterated by the existing windbreak vegetation on the eastern side of the dwelling. MH cluster would be partially visible due to the difference in elevation between this dwelling and the ridges associated with the cluster. Views towards the north are partially screened and directed towards the Mount Hope ridgeline which is one of the key landscape features viewed from this location. The Mount Hope cluster will not be clearly visible because most turbines are located beyond the 8km radius from the dwelling. No turbines were identified within the black and blue lines of visual magnitude of this dwelling. The Project will be visible and views will be distant. The Project theoretically has the potential to be visible in up to four (4) 60 degree sectors but is visible in two (2) 60 degree sectors which is deemed acceptable in accordance with the Bulletin. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

### Visual Performance Objectives Evaluation (VIZ3):

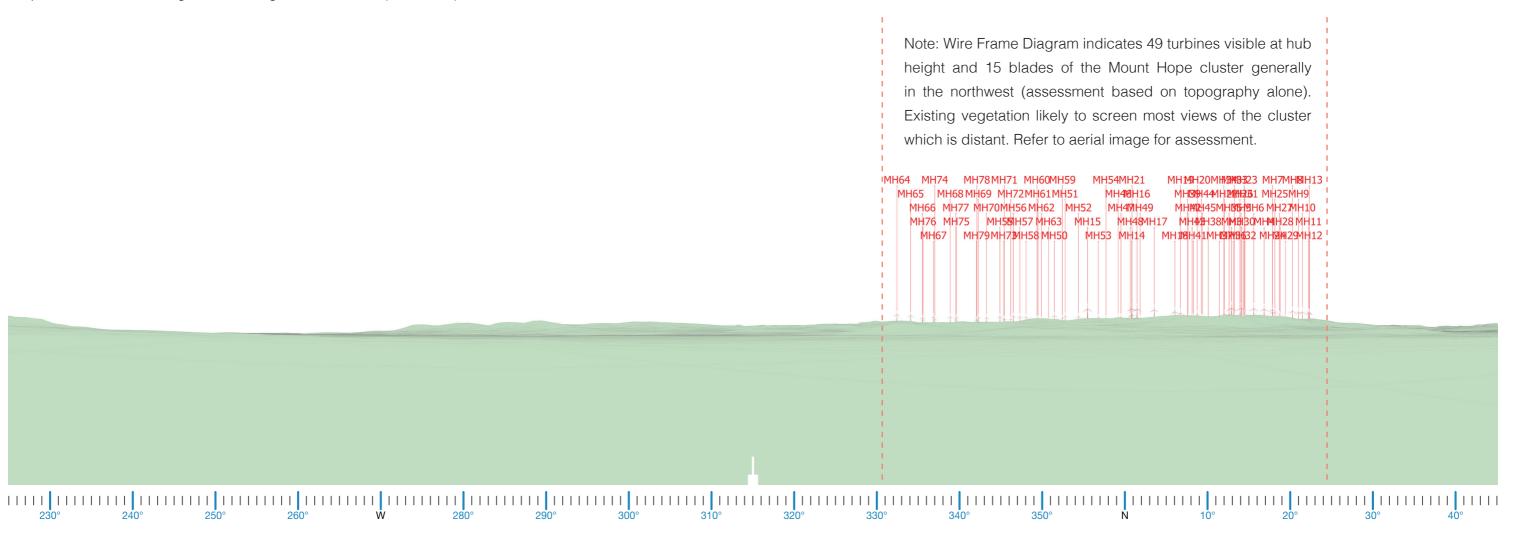
No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3).

#### Mitigation Measures:



# E.62. Dwelling Assessment Dwelling 183





### Note:

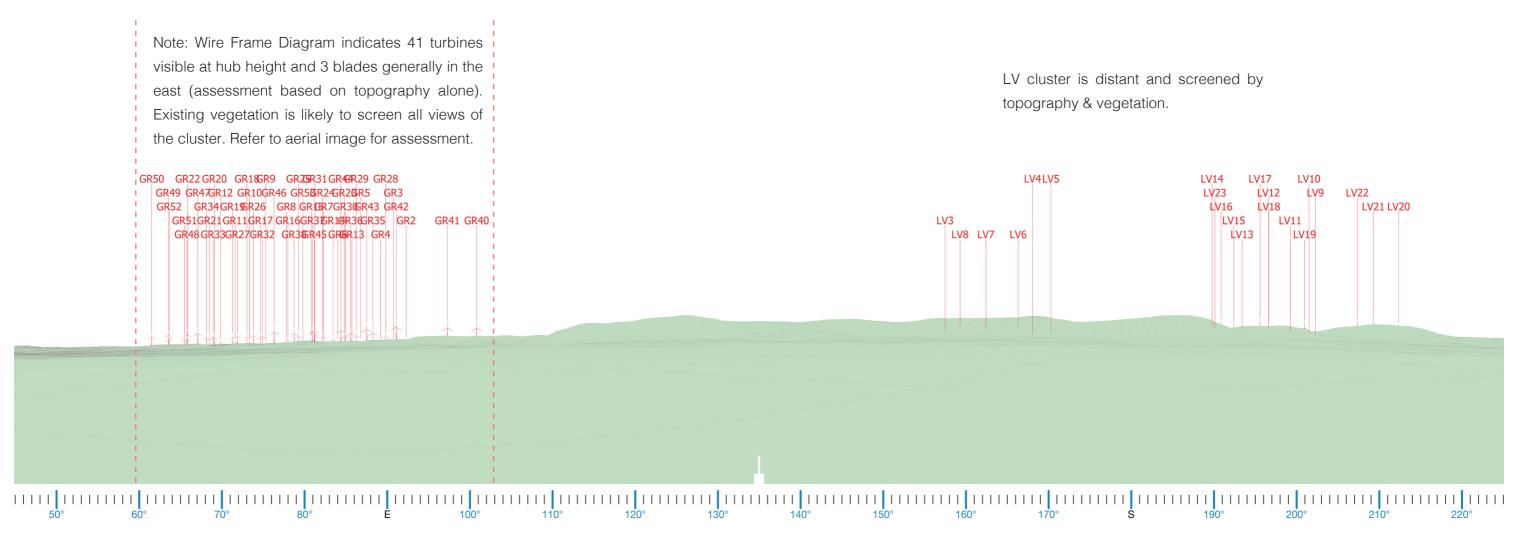
No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.

# E.62. Dwelling Assessment Dwelling 183





### Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.

# E.63. Dwelling Assessment Dwelling 184

DWELLING 184				
Nearest proposed turbine (km):	5.17 km	Visibility Distance Zone:	Far Middleground (FM)	
Number of proposed turbines within 8000 m:	35	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	4	Landscape Character Unit:	LCU03: Alluvial plains	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	127 20 at tip 107 at hub	Visual Influence Zone:	VIZ3	

**Visual Impact Rating: Low** 

#### Assessment Notes:

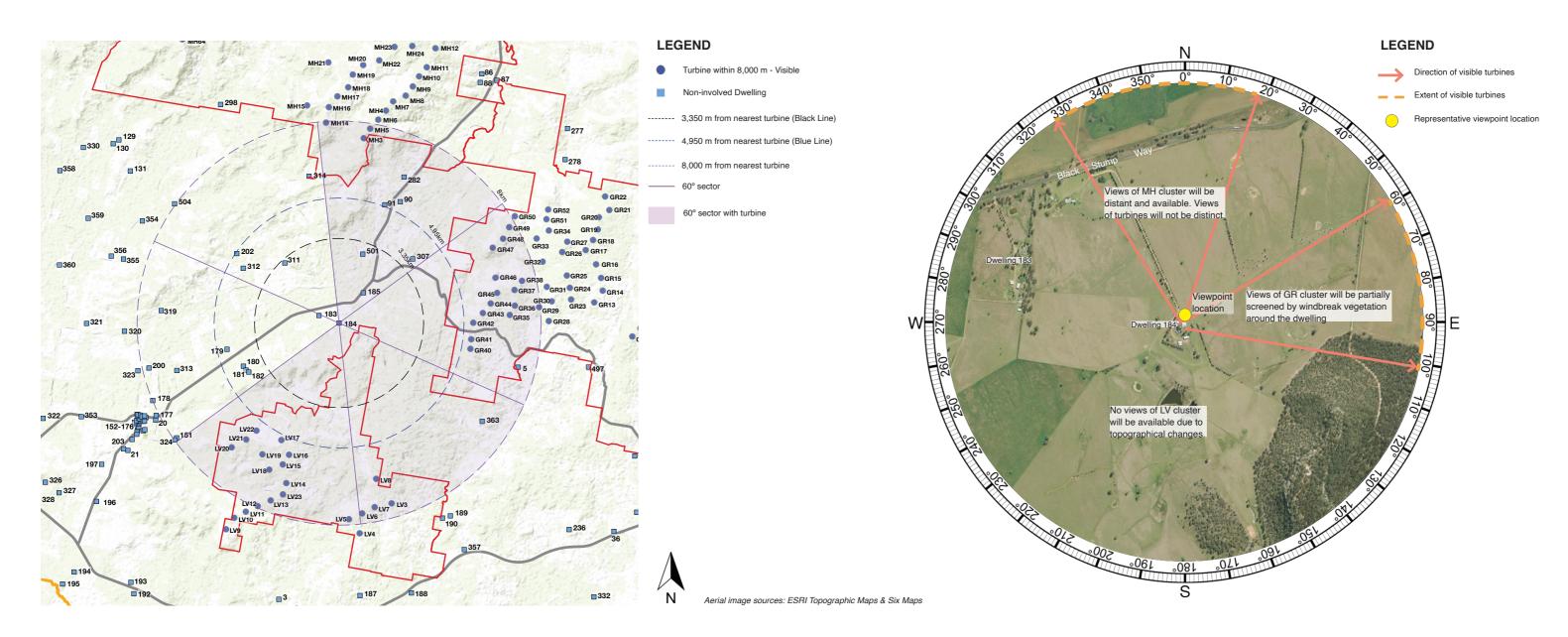
An assessment based on topography alone identified that a total of 127 turbines (20 at tip and 107 at hub height) would be visible from this dwelling. Of these, 35 turbines are located within 8km of the dwelling. The dwelling can be accessed via Black Stump Way. A viewpoint was taken on the dwelling's front patio in the north to represent views from this residence. Aerial imagery indicates that the house is surrounded by windbreak plantations on the western, southern and eastern sides. Topographical changes in the southwest obliterate views towards the Leadville cluster. The Girragulang and Mount Hope clusters would be visible due to the difference in elevation between this dwelling and the ridges associated with the WTG clusters. Views towards the east are partially fragmented by existing vegetation that surrounds the house. Views towards the north, however, are open and directed towards the Mount Hope ridgeline which is one of the key landscape features viewed from this location. Existing vegetation will not screen views of the Mount Hope cluster because of their elevated position. However, because they are distant and most turbines are situated beyond 8000m from the dwelling, they will not be clearly visible. No turbines were identified within the black and blue lines of visual magnitude of this dwelling. The Project will be a part of the visual catchment at this location but views will be distant. The Project theoretically has the potential to be visible in up to four (4) 60 degree sectors but is visible in two (2) 60 degree sectors which is deemed acceptable in accordance with the Bulletin. The visual impact resulting from the Project has been rated as **Low** from this dwelling.

### Visual Performance Objectives Evaluation (VIZ3):

No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3).

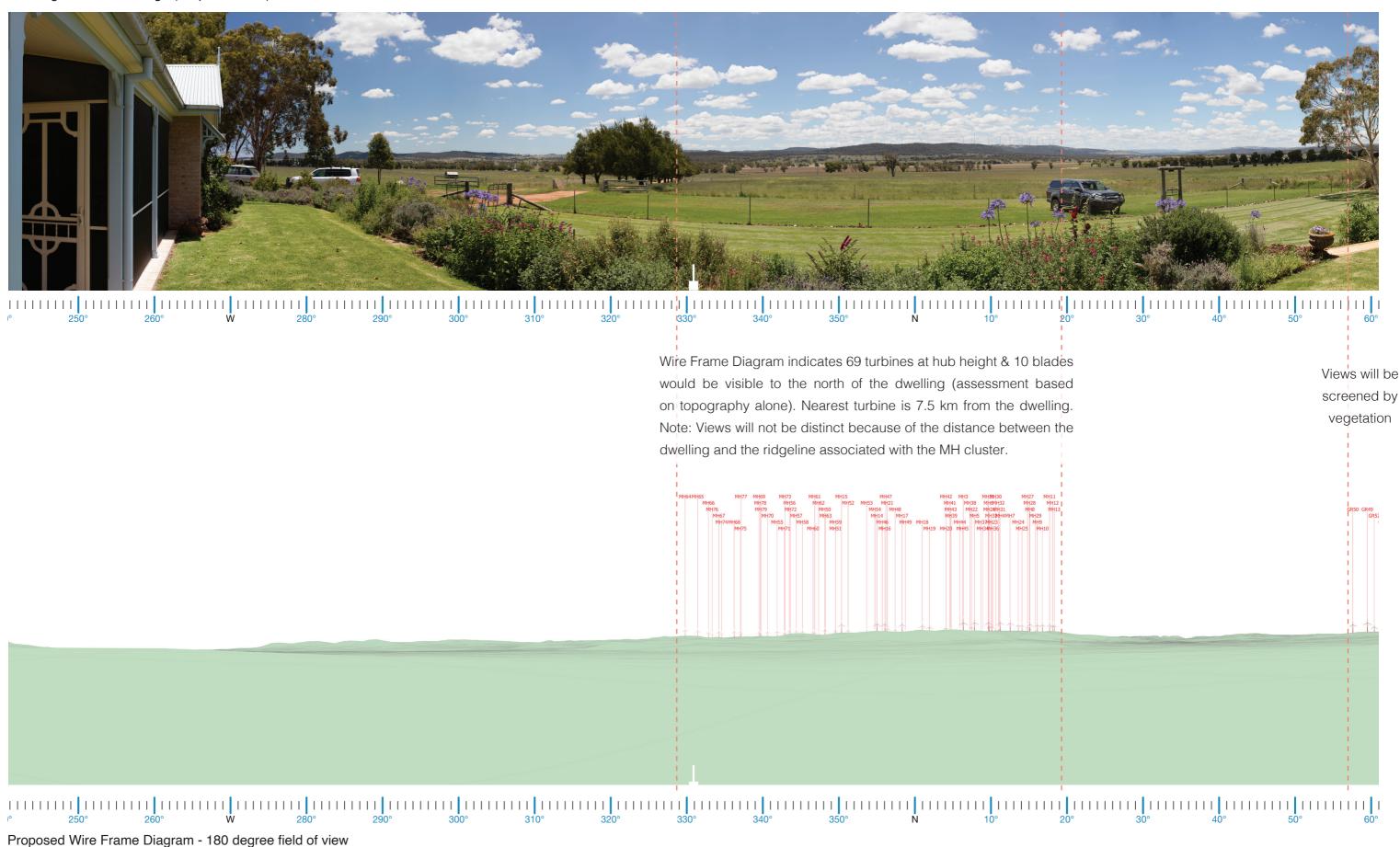
### Mitigation Measures:

No mitigation measures were noted. If deemed necessary, screen planting along the northern and eastern boundaries of the dwelling may be required to reduce the potential visual impact. This will, however, screen views of the ridgeline in these directions. Consultation with the landowner would be required to discuss appropriate mitigation methods.



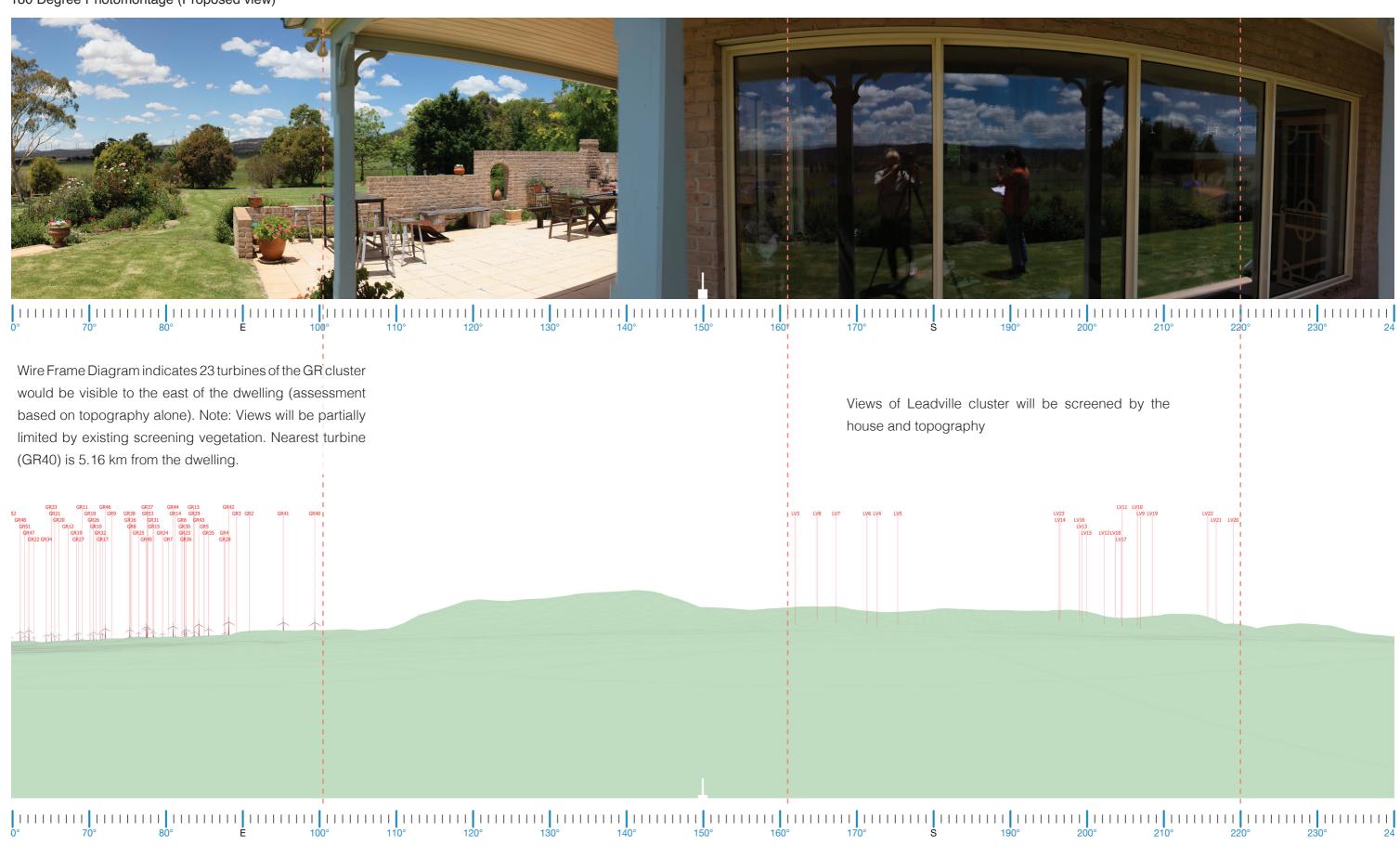
# E.63. Dwelling Assessment Dwelling 184

180 Degree Photomontage (Proposed view)



# **E.63.** Dwelling Assessment Dwelling 184 (Representative of Dwelling 183, located outside 4950m)

180 Degree Photomontage (Proposed view)



# E.64. Dwelling Assessment Dwelling 311

DWELLING 311				
Nearest proposed turbine (km):	5.79 km	Visibility Distance Zone:	Far Middleground (FM)	
Number of proposed turbines within 8000 m:	20	Viewer Sensitivity Zone:	Level 2: Moderate (Rural Dwelling)	
Number of theoretical 60° Sectors (Based on 2D Plan):	4	Landscape Character Unit:	LCU03: Alluvial plains	
Number of visible 60° Sectors (Based on 3D Assessment):	2	Scenic Quality Rating:	Low	
Number of potentially visible turbines (Based on topography alone)	43 16 at tip 27 at hub	Visual Influence Zone:	VIZ3	

**Visual Impact Rating: Low** 

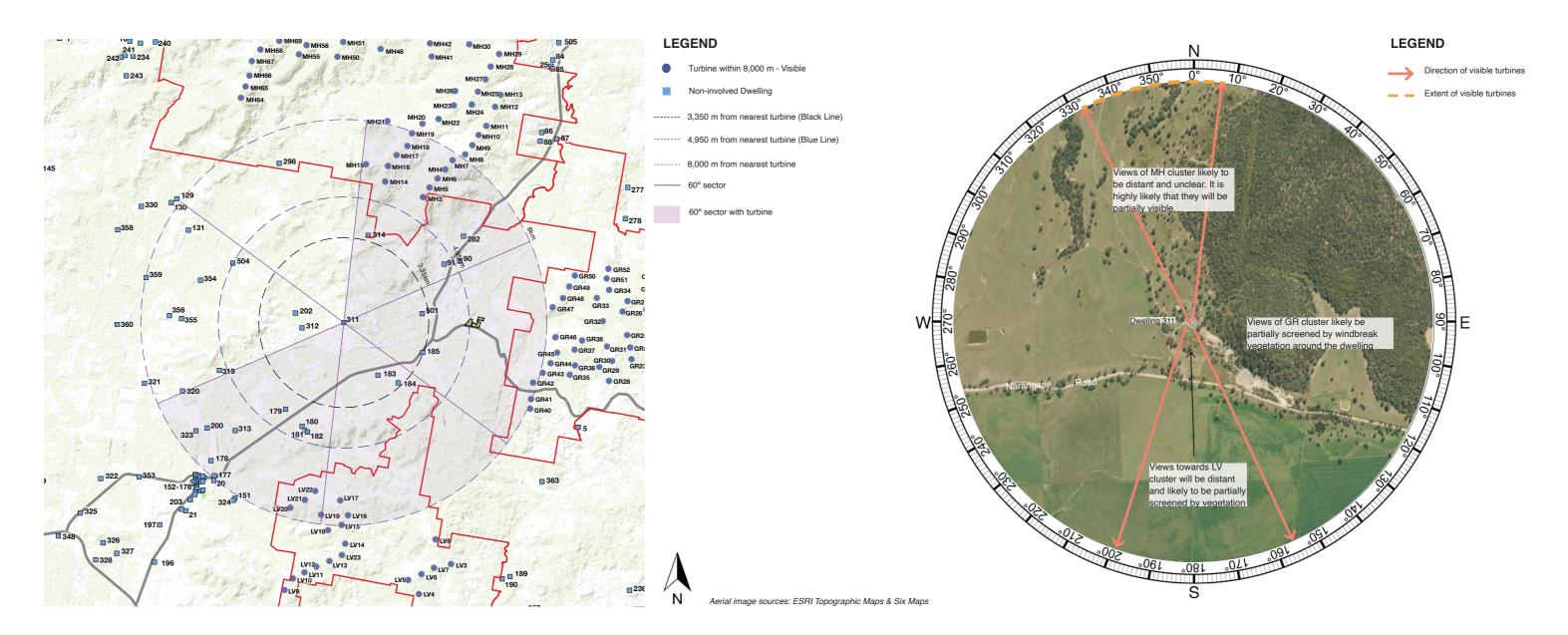
#### Assessment Notes:

An assessment based on topography alone identified that a total of 43 turbines (16 at tip and 207 at hub height) would be visible from this dwelling. Of these, 20 turbines are located within 8km of the dwelling. The dwelling can be accessed via Black Stump Way. Aerial imagery indicates that the house is surrounded by windbreak plantations on the western, southern and eastern sides. Topographical changes in the east obliterate views towards the GR cluster. Views towards LV cluster in the south are distant and will be partially screened by vegetation. MH cluster would be partially visible in the north due to the difference in elevation between this dwelling and the ridges associated with the WTG clusters. Existing vegetation is likely to partially screen views of the Mount Hope cluster. However, because they are distant and situated beyond 8000m from the dwelling, they will not be clearly visible. No turbines were identified within the black and blue lines of visual magnitude of this dwelling. The Project will form a part of the visual catchment at this location but views will be distant. The Project has the potential to be theoretically visible in up to four (4) 60 degree sectors but is visible in up to two (2) 60 degree sectors which is deemed acceptable in accordance with the Bulletin. The visual impact resulting from the Project has been rated as *Low* from this dwelling.

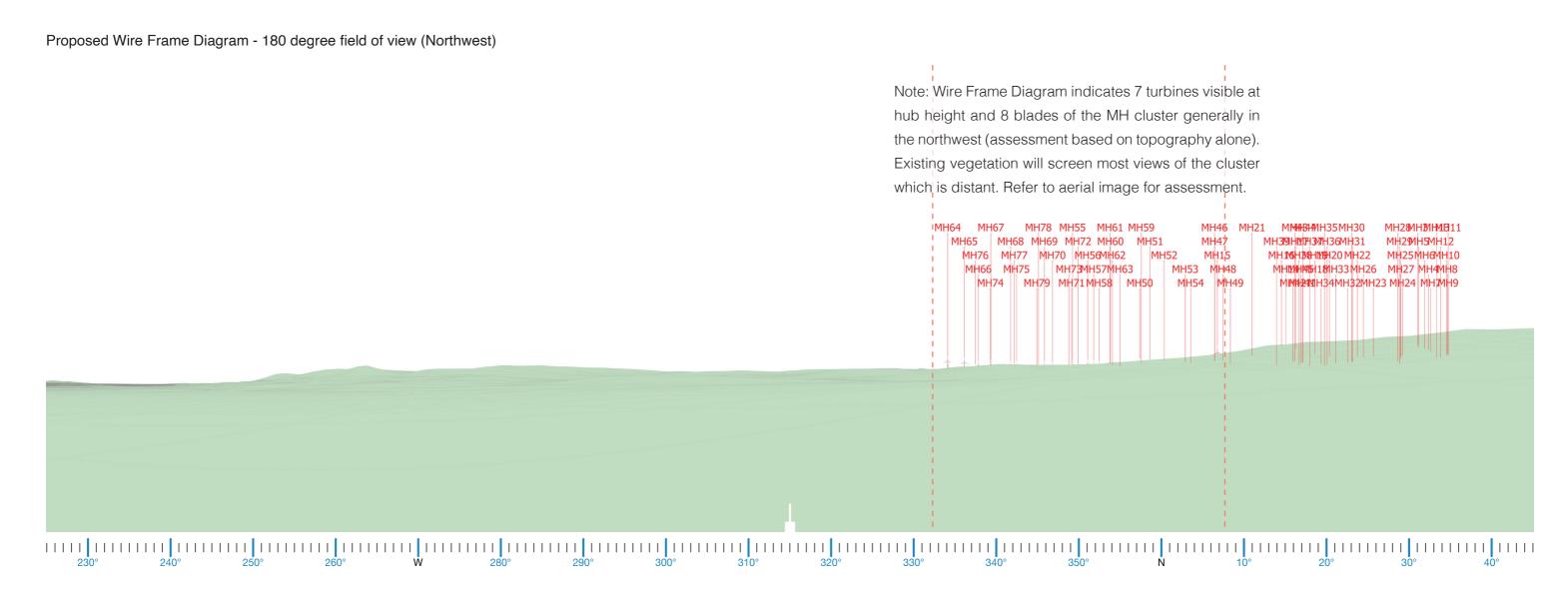
### Visual Performance Objectives Evaluation (VIZ3):

No visual performance objectives apply to this dwelling due to the Visual Influence Zone Rating (VIZ3)

#### Mitigation Measures:



# E.64. Dwelling Assessment Dwelling 311



### Note:

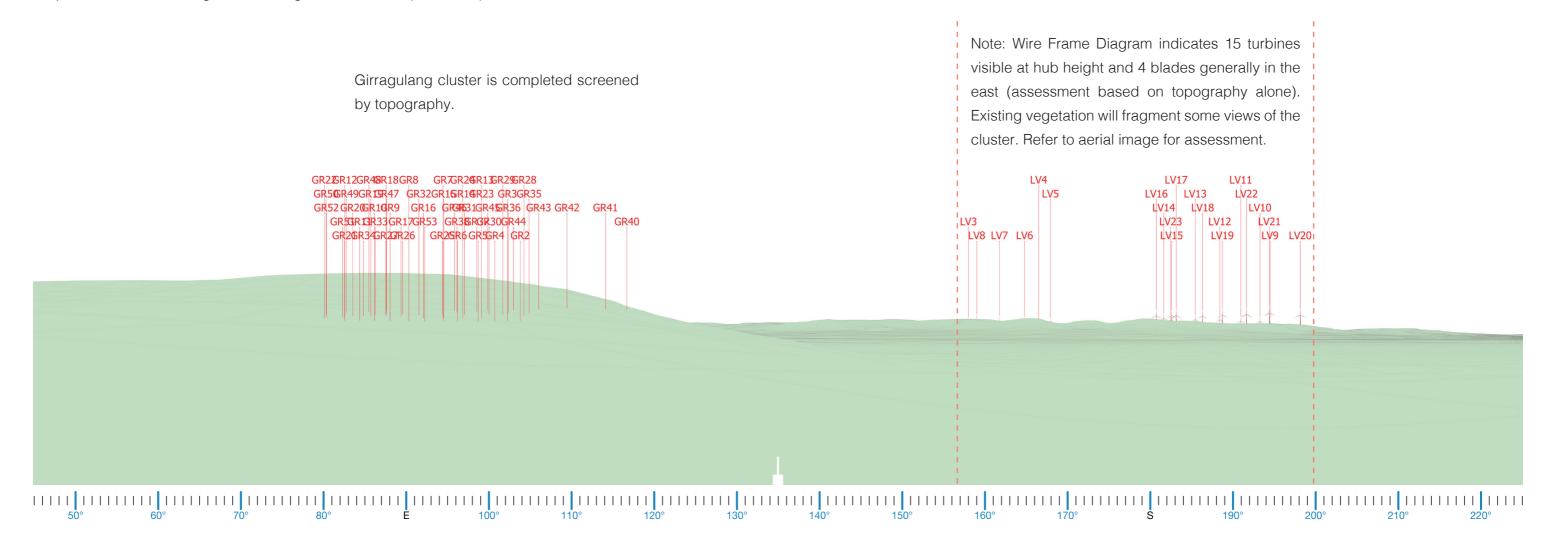
No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.

# E.64. Dwelling Assessment Dwelling 311

Proposed Wire Frame Diagram - 180 degree field of view (Southeast)



### Note:

No access to Site was available.

The wire frame diagram is a preliminary assessment tool that represents a bare ground scenario - i.e., 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.