Visual Impact Assessment Criteria and Matrices SECTION 8

8.1 Introduction

The potential significance of visual impact resulting from the construction and operation of the Crookwell 3 wind farm would result primarily from the combination of the following factors:

- The visibility or extent to which the proposed wind farm structures would be visible from surrounding areas;
- The degree of visual contrast between the wind farm structures and the capability of the surrounding landscape to visually accommodate the wind farm;
- The category and type of situation from which people may view the wind farm (categories include residents or motorists);
- The distance between the view location and the wind farm;
- The potential number of people with a view toward the proposed wind farm from any one location;
- The duration of time people may view the wind farm from any static or dynamic view location; and
- The visual sensitivity of view locations surrounding the wind farm.

An overall determination of visual impact at each view location has also been assessed and determined against the criteria outlined in **Table 13** below:

Criteria	Definition
Category of Viewer	
Static	Residence
Dynamic	Motorist or passenger
Number of Viewers	
High	>500 people per day
Moderate	250 - 500 people per day
Low	100 - 250 people per day

Table 13 - View Location Assessment Criteria

Criteria	Definition
Very Low	<100 people per day
View Distance	
Distant	>20km
Long	10km – 20km
Medium	5 – 10km
Short	1 – 5km
Very short	<1km
Period of View	
Long term	> 2 hours
Moderate term	30 - 120 minutes
Short term	10 – 30 minutes
Very Short Term	< 10 minutes

Table 14 - Visibility Criteria Matrix

		Distant and Long Distance			lediun stanc			Short Distance		Very Short Distance		
Period of View	L/M	S	VS	L/M	S	VS	L/M	S	VS	L/M	S	VS
High No. of Viewers	М	L	L	Н	М	М	Н	Н	М	Н	Н	Н
Moderate No. of Viewers	L	L	L	М	М	L	Н	М	М	Н	Н	М
Low No. of Viewers	L	L	L	М	L	L	М	М	L	Н	М	L
Very Low No. of Viewers	L	L	L	L	L	L	М	L	L	М	М	L

• Period of View L/M=Long to Moderate term, S=Short term , VS=Very Short term

• Levels of visibility L=low, M=medium and H=high

The visual impact criteria matrix outlined in **Table 14** is used **as a guide** to determine levels of visual impact. The determination of visual impact for each view location is also considered against other factors, which include the sensitivity of the view category and overall visibility of the wind farm from surrounding view locations. The general relationship between view category and its potential level of sensitivity is outlined in **Table 15**.

Table 15 – View Category Sensitivity

View Category	Sensitivity
Residential Dwelling Pedestrians (recreational)	Highest Sensitivity
Public Recreational Space	\bigtriangledown
Rural employment/farming	\bigtriangledown
Motorists	\bigtriangledown
Business (commercial) Industry	⊂ Lower Sensitivity



Figure 17 Residential View Locations

Legend

- Residence within 3km of proposed Crookwell 3 turbines
- Residence between 3km and 5km of proposed Crookwell 3 turbines
- Residence between 5km and 10km of proposed Crookwell 3 turbines
- Potential future or non-residential structure (included in Table 16 -Residential View Location Matrix)
- + Proposed Crookwell 3 East Turbine
- Proposed Crookwell 3 South Turbine
- Approved Crookwell 2 Turbine
- Crookwell Turbine (Existing)
- Approved Gullen Range Turbine





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CROOKWELL 3 WIND FARM

8.2 Residential View Location Visibility Matrix

Table 16 presents the Visibility Matrix for the Crookwell 3 wind farm for residential view locations. Potential residential view locations are illustrated in Figure 17.

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
R1	Residential Dwelling 'Evermore'	View east to south east toward Crookwell 3 South precinct as well as distant views toward turbines within the Crookwell East site.	2.8 km	9.5 km	Very Low	Long Term	High	Moderate to High	Low
R2	Residential Dwelling 'Bendemere'	View east to south east toward Crookwell 3 South site as well as distant views toward turbines within the Crookwell 3 East site.	2.3 km	9.6 km	Very Low	Long Term	High	Moderate to High	Low
R3	Residential Dwelling 'D'Ambrosio'	View east to south east toward Crookwell 3 South site as well as distant views toward turbines within the Crookwell East site.	2.5 km	10.2 km	Very Low	Long Term	High	Moderate to High	Low
R4	Residential Dwelling	View east to south east toward Crookwell 3 South site as well as distant views toward turbines within the Crookwell 3 East site.	3.1 km	10.8 km	Very Low	Long Term	High	Moderate to High	Low
R5	Residential	View east to south east toward Crookwell 3	2.9 km	10.6 km	Very Low	Long	High	Moderate	Low

Table 16 – Residential View Location Matrix

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	Dwelling	South site as well as distant views toward turbines within the Crookwell East site.				Term		to High	
R6	Residential Dwelling	View east to south east toward Crookwell 3 South site as well as distant views toward turbines within the Crookwell East site.	2.9 km	10.7 km	Very Low	Long Term	High	Moderate to High	Low
R7	Residential Dwelling 'Emohruo'	View east to south east toward Crookwell 3 South site as well as distant views toward turbines within the Crookwell East site.	2.9 km	10.9 km	Very Low	Long Term	High	Moderate to High	Low
R8	Residential Dwelling 'Narangi'	View south toward Crookwell 3 South turbines as well as distant views west toward upper portions of Crookwell 3 East turbines.	1.1 km	7.8 km	Very Low	Long Term	High	High	Low
R9	Residential Dwelling	Views north west to north east toward Crookwell 3 turbines are screened by tree cover and landform.	7.9 km	7.4 km	Very Low	Long Term	High	Nil	Nil
R10	Residential	Views north west to north east toward	6.7 km	7.1 km	Very Low	Long	High	Low	Low

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	Dwelling 'Pine Ridge 1'	Crookwell 3 turbines are screened by tree cover and tree planting surrounding residential dwelling.				Term			
R11	Residential Dwelling 'Pine Ridge 2''	Views north west to north east toward Crookwell 3 turbines are screened by tree cover and tree planting surrounding residential dwelling.	6.5 km	6.9 km	Very Low	Long Term	High	Low	Low
R12	Residential Dwelling	Views north west to north east toward Crookwell 3 turbines are partially screened by scattered tree cover; however medium distance views will extend toward some turbines within each site, including views toward turbines on ridgelines.	5.9 km	5.5 km	Very Low	Long Term	High	Moderate	Moderate
R13	Residential Dwelling	Views north west to north east toward Crookwell 3 turbines are partially screened by scattered tree cover; however medium distance views will extend toward some turbines within each site.	5.7 km	5.6 km	Very Low	Long Term	High	Moderate	Moderate

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
R14	Residential Dwelling 'Foxground Hayeselton'	Views north west to north east toward Crookwell 3 turbines are partially screened by scattered tree cover; however medium distance views will extend toward some turbines within each site.	5.5km	5.5 km	Very Low	Long Term	High	Moderate	Moderate
R15	Residential Dwelling	Views north west to north east toward Crookwell 3 turbines are partially screened by scattered tree cover; however medium distance views will extend toward some turbines within each site.	5.3 km	5.4k m	Very Low	Long Term	High	Moderate	Moderate
R16	Residential Dwelling 'Calamondah'	Views north west to north east toward Crookwell 3 turbines are partially screened by scattered tree cover including tree planting surrounding residential dwelling.	3.3 km	6.1 km	Very Low	Long Term	High	Moderate	Low
R17	Residential Dwelling 'Wollondilly' (1) (Crookwell 3	Views west and east toward Crookwell 3 turbines are generally screened by tree cover and planting surrounding residential dwelling.	1.3 km	6.0 km	Very Low	Long Term	High	Nil	Nil

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	Associated landowner)								
R18	Residential Dwelling 'Wollondilly' (2) (Crookwell 3 Associated landowner)	Views west and east toward Crookwell 3 turbines are generally screened by tree cover and planting surrounding residential dwelling.	1 km	5.9 km	Very Low	Long Term	High	Nil	Nil
R19	Residential Dwelling 'Wombat Hollow'	District views from hilltop location, including views south and west toward the Crookwell 3 South and East turbines.	1.1 km	6.1 km	Very Low	Long Term	High	High	Low
R20	Residential Dwelling 'Normaroo'	District views from hilltop location, including views west toward the Crookwell 3 East turbines. View west from residence partially screened by tree planting within and alongside property boundary.	2 km	5.5 km	Very Low	Long Term	High	Low	Moderate

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
R21	Residential Dwelling 'Ahgunyah' (Crookwell 2 Associated landowner)	View south and west toward Crookwell 3 South and East turbines are partially screened by vegetation.	3.5 km	6.7 km	Very Low	Long Term	High	Low	Low
R22	Residential Dwelling 'Minnamurra' (Crookwell 2 Associated landowner)	View south and west toward Crookwell 3 South and East turbines partially screened by vegetation.	2.8 km	7 km	Very Low	Long Term	High	Low	Low
R23	Residential Dwelling 'Gundowringa' (Crookwell 2 Associated	Views south to south west and east toward the Crookwell 3 turbines are largely screened by scattered tree cover. Landform will also tend to restrict any available views toward upper portions of turbine structures.	4 km	4.7 km	Very Low	Long Term	High	Low	Low

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	landowner)								
R24	Residential Dwelling 'Savannah' (Crookwell 2 Associated landowner)	Views south to south west and east toward the Crookwell 3 turbines are largely screened by scattered tree cover. Landform will also tend to restrict any available views toward upper portions of turbine structures.	3.5 km	4.9 km	Very Low	Long Term	High	Low	Low
R25	Residential Dwelling Cottage 1 'Gundowringa'	Views south to south west and east toward the Crookwell 3 turbines are largely screened by scattered tree cover. Landform will also tend to restrict any available views toward upper portions of turbine structures.	3.9 km	4.5 km	Very Low	Long Term	High	Low	Low
R26	Residential Dwelling Cottage 2 'Gundowringa'	Views south to south west and east toward the Crookwell 3 turbines are largely screened by scattered tree cover. Landform will also tend to restrict any available views toward upper portions of turbine structures.	4.0 km	4.6 km	Very Low	Long Term	High	Low	Low
R27	Residential	Views south to south west and east toward	3.8 km	4.5 km	Very Low	Long	High	Low	Low

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	Dwelling Cottage 3 'Gundowringa'	the Crookwell 3 turbines are largely screened by scattered tree cover. Landform will also tend to restrict any available views toward upper portions of turbine structures.				Term			
R28	Residential Dwelling Cottage 4 'Gundowringa'	Views south to south west and east toward the Crookwell 3 turbines are largely screened by scattered tree cover. Landform will also tend to restrict any available views toward upper portions of turbine structures.	3.6 km	4.8 km	Very Low	Long Term	High	Low	Low
R29	Residential Dwelling	Views north west to north east toward Crookwell 3 turbines partially screened by tree cover and planting surrounding residential dwelling.	4.3 km	5.5 km	Very Low	Long Term	High	Low	Low
R30	Residential Dwelling 'Airam'	Views north west to north east toward Crookwell 3 turbines partially screened by tree cover and planting surrounding residential dwelling.	4.5 km	5.3 km	Very Low	Long Term	High	Nil	Low
R31	Residential Dwelling	Views north west to north east toward Crookwell 3 turbines partially screened by	4.6 km	5.0 km	Very Low	Long Term	High	Nil	Low

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	'Youanmite'	tree cover and planting surrounding residential dwelling.							
R32	Residential Dwelling	Views north west to north east toward Crookwell 3 turbines partially screened by tree cover and planting surrounding residential dwelling.	4.0 km	5.0 km	Very Low	Long Term	High	Nil	Low
R33	Residential Dwelling 'Whispering Pines'	Views north west to north east toward Crookwell 3 turbines partially screened by tree cover and planting surrounding residential dwelling.	4.4 km	4.6 km	Very Low	Long Term	High	Nil	Low
R34	Residential Dwelling 'Kooloona'	Views north west to north east toward Crookwell 3 turbines partially screened by tree cover and planting surrounding residential dwelling.	4.1 km	4.6 km	Very Low	Long Term	High	Nil	Low
R35	Residential Dwelling	Views north west to north east toward Crookwell 3 turbines partially screened by tree cover and planting surrounding	4.1 km	4.4 km	Very Low	Long Term	High	Nil	Low

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	'Clydesdale'	residential dwelling.							
R36	Residential Dwelling 'Tyrendarra'	Views north west to north east toward Crookwell 3 turbines partially screened by tree cover and planting surrounding residential dwelling.	4.1 km	3.8 km	Very Low	Long Term	High	Low to Moderate	Low to Moderate
R37	Residential Dwelling 'Carinya'	Views north west to north east toward Crookwell 3 turbines partially screened by tree cover and planting surrounding residential dwelling.	3.0 km	4.6 km	Very Low	Long Term	High	Low to Moderate	Low to Moderate
R38	Residential Dwelling	Views north west to north east toward Crookwell 3 turbines are partially screened by tree cover and planting surrounding residential dwelling.	2.4 km	5.0 km	Very Low	Long Term	High	Low	Low
R39	St Stephen's Pejar Anglican Church	Views north west to north east toward Crookwell 3 turbines are partially screened by tree cover and planting surrounding residential dwelling.	2.3 km	5.1 km	Very Low	Long Term	High	Low	Low
R40	Residential	Views north west to north east toward	4.0 km	3.8 km	Very Low	Long	High	Low to	Low to

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	Dwelling 'Tyrendarra'	Crookwell 3 turbines partially screened by tree cover and planting surrounding residential dwelling.				Term		Moderate	Moderate
R41	Middle Arm Fire Brigade Wayo Station	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
R42	Residential Dwelling	View north and north west toward Crookwell 3 turbines are partially screened by scattered tree cover and planting surrounding residential dwelling.	6.9 km	6.0 km	Very Low	Long Term	High	Nil	Low
R43	Residential Dwelling 'Rullawayo'	View north west toward Crookwell 3 South partially screened by scattered tree cover. Views north extend toward Crookwell East site including views toward turbines on ridgeline and skyline.	7.0 km	5.8 km	Very Low	Long Term	High	Low	Moderate to High
R44	Residential Dwelling	View north and north west toward Crookwell 3 turbines are partially screened by scattered tree cover and planting surrounding residential dwelling.	6.7 km	6.0 km	Very Low	Long Term	High	Nil	Low

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
R45	Residential Dwelling	View north and north west toward Crookwell 3 turbines are partially screened by scattered tree cover and planting surrounding residential dwelling.	6.3 km	5.6 km	Very Low	Long Term	High	Nil	Low
R46	Residential Dwelling 'Limokee'	View north and north west toward Crookwell 3 turbines are partially screened by scattered tree cover and planting surrounding residential dwelling.	6.3 km	5.5 km	Very Low	Long Term	High	Low	Low
R47	Residential Dwelling	View north west toward Crookwell 3 turbines are partially screened by scattered tree cover. Views extend north toward	6.5 km	5.3 km	Very Low	Long Term	High	Low	Low to Moderate
R48	Residential Dwelling 'Rolling Hills'	View north west toward Crookwell 3 South are generally screened by landform and vegetation. Views extend toward the Crookwell 3 East turbines.	6.2 km	5.1 km	Very Low	Long Term	High	Low	Low to Moderate
R49	Under construction	View north west toward Crookwell 3 South are generally screened by landform and vegetation. Views extend toward the	6.1 km	4.8 km	Very Low	Long Term	High	Low	Low to Moderate

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
		Crookwell 3 East turbines.							
R50	Residential Dwelling	Views north and north west toward the Crookwell 3 turbines are partially screened by tree cover and planting surrounding the residential dwelling.	6.1 km	4.2 km	Very Low	Long Term	High	Low	Low to Moderate
R51	Residential Dwelling	Views north west toward the Crookwell 3 South site are partially screened by tree cover and landform. Views extend north east toward the Crookwell 3 East turbines.	5.7 km	4.1 km	Very Low	Long Term	High	Low	Low to Moderate
R52	Residential Dwelling 'Mount Wayo'	Views north and north west toward the Crookwell 3 turbines are partially screened by tree cover and planting surrounding the residential dwelling.	6.0 km	4.0 km	Very Low	Long Term	High	Low	Low to Moderate
R53	Residential Dwelling	Views west toward Crookwell 3 South are generally screened by landform and tree cover. Views north to north east extend toward Crookwell 3 East turbines.	5.1 km	3.4 km	Very Low	Long Term	High	Low	High
R54	Residential	Views west toward Crookwell 3 South are	5.0 km	3.0 km	Very Low	Long	High	Low	High

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	Dwelling 'Ginmara'	generally screened by landform and tree cover. Views north to north east extend toward Crookwell 3 East turbines.				Term			
R55	Residential Dwelling	Views west toward Crookwell 3 South are generally screened by landform and tree cover. Views north to north east extend toward Crookwell 3 East turbines.	5.4 km	2.8 km	Very Low	Long Term	High	Low	High
R56	Residential Dwelling 'Mathlie'	Views west toward Crookwell 3 South are generally screened by landform and tree cover. Views north to north east extend toward Crookwell 3 East turbines.	5.0 km	3.2 km	Very Low	Long Term	High	Low	High
R57	Residential Dwelling 'Kenrich'	Views west toward Crookwell 3 South are generally screened by landform and tree cover. Views north to north east extend toward Crookwell 3 East turbines.	5.0 km	2.7 km	Very Low	Long Term	High	Low	High
R58	Residential dwelling	Views west toward Crookwell 3 South turbines are largely screened by landform and tree cover. Views north through to east extend toward the Crookwell 3 East	5.9 km	1.3 km	Very Low	Long Term	High	Nil	High

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
		turbines.							
R58a	Non residential dwelling - Woolshed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
R59	Residential Dwelling	Views west toward Crookwell 3 South turbines are largely screened by landform and tree cover. Views north through to east extend toward the Crookwell 3 East turbines.	5.9 km	1.3 km	Very Low	Long Term	High	Nil	High
R60	Residential Dwelling 'Pejar Park'	Views west toward Crookwell 3 South turbines are largely screened by landform and tree cover. Views north through to east extend toward the Crookwell 3 East turbines although partial screening is likely by tree planting within property	5.0 km	2.4 km	Very Low	Long Term	High	Nil	Moderate
R61	Residential Dwelling	View west toward Crookwell 3 South turbines are largely screened by landform and tree cover. Views north through to east	5.9 km	1.3 km	Very Low	Long Term	High	Nil	Moderate to High

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	'Wallaroobie'	extend toward the Crookwell 3 East turbines.							
R62	Residential Dwelling 'Cottonwood'	View west toward Crookwell 3 South turbines are largely screened by landform and tree cover. Views north through to east extend toward the Crookwell 3 East turbines.	5.9 km	1.3 km	Very Low	Long Term	High	Nil	Moderate to High
R63	Residential Dwelling [°] Rocky Corner'	Views south west toward Crookwell 3 South are largely screened by landform and vegetation including tree planting surrounding residential dwelling. Partial views north east to south east extend toward Crookwell 3 East turbines.	6.3 km	1.1km	Very Low	Long Term	High	Nil	High
R64	Residential Dwelling 'Valdarman Hill'	Views south west toward Crookwell 3 South are largely screened by landform and vegetation. Views north east to south east extend toward Crookwell 3 East turbines.	5.9 km	1.1 km	Very Low	Long Term	High	Nil	High
R65	Residential	Views south west toward Crookwell 3 South are largely screened by landform and	5.9 km	1.0 km	Very Low	Long	High	Nil	High

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	Dwelling 'Windalee'	vegetation. Views north east to south east extend toward Crookwell 3 East turbines.				Term			
R66	Residential Dwelling 'Little Vale' (1)	Views south west toward Crookwell 3 South are largely screened by landform and vegetation. Views east to south east extend toward Crookwell 3 East turbines.	8.7 km	1.0 km	Very Low	Long Term	High	Nil	High
R67	Residential Dwelling 'Little Vale' (2)	Views south west toward Crookwell 3 South are largely screened by landform and vegetation. Partial views east to south east extend toward Crookwell 3 East turbines.	9.1 km	1.2 km	Very Low	Long Term	High	Nil	Moderate
R68	Residential Dwelling 'Meadowvale' (Crookwell 2 Associated Resident)	Views south west toward Crookwell 3 South are largely screened by landform and vegetation. Views east to south east extend toward Crookwell 3 East turbines.	6.5 km	1.4 km	Very Low	Long Term	High	Nil	High

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
R69	Residential Dwelling 'Atholvale'	Views south west toward Crookwell 3 South are largely screened by landform and vegetation. Views east to south east extend toward Crookwell 3 East turbines.	6.9 km	1.0 km	Very Low	Long Term	High	Nil	Moderate to High
R70	Residential Dwelling 'Snowgums'	Views south west toward Crookwell 3 South are largely screened by landform and vegetation. Views east to south east extend toward Crookwell 3 East turbines.	6.4 km	1.8 km	Very Low	Long Term	High	Nil	Low
R71	Residential Dwelling 'Lyncross'	Views south to south west toward Crookwell South and East turbines are largely screened by tree cover and planting surrounding residential dwelling.	7.3 km	2.5 km	Very Low	Long Term	High	Nil	Low
R72	Residential Dwelling	Views south to south west toward Crookwell South and East turbines are largely screened by tree cover and planting surrounding residential dwelling.	7.9 km	2.8 km	Very Low	Long Term	High	Nil	Low
R73	Residential Dwelling	Views south to south west toward Crookwell South and East turbines are largely screened by tree cover and planting	8.2 km	3.4 km	Very Low	Long Term	High	Nil	Low

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	'Highlands'	surrounding residential dwelling.							
R74	Residential Dwelling 'Rosslyn'	Views south to south west toward Crookwell South and East turbines are screened by tree cover and planting surrounding residential dwelling.	8.9 km	4.2 km	Very Low	Long Term	High	Nil	Nil
R75	Residential Dwelling 'Rosslyn'	Views south to south west toward Crookwell South and East turbines are screened by tree cover and planting surrounding residential dwelling.	9.0 km	4.4 km	Very Low	Long Term	High	Nil	Nil
R76	Residential Dwelling 'Rosslyn'	Views south to south west toward Crookwell South and East turbines are screened by tree cover and planting surrounding residential dwelling.	9.1 km	4.5 km	Very Low	Long Term	High	Nil	Nil
R77	Residential Dwelling 'Bellevue	Views south toward Crookwell South and East turbines are screened by tree cover and planting surrounding residential	10.0 km	5.8 km	Very Low	Long Term	High	Nil	Nil

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	Park'	dwelling.							
R78	Residential Dwelling 'Leeston' (Crookwell 3 Associated Resident)	Views south west toward Crookwell 3 South are largely screened by landform and vegetation as well as planting surrounding residential dwelling. Views from the residence toward the majority of the Crookwell 3 East turbines are largely screened by windbreak tree planting to the north and north east of the dwelling.	6.4 km	620 m	Very Low	Long Term	High	Nil	Low
R79	Residential Dwelling 'Leeston' (Crookwell 3 Associated Resident)	Views south west toward Crookwell 3 South are largely screened by landform and vegetation as well as planting surrounding residential dwelling. Views from the residence toward the majority of the Crookwell 3 East turbines are largely screened by tree planting surrounding the dwelling.	6.4 km	620 m	Very Low	Long Term	High	Nil	Low
R80	Residential Dwelling	Views south west toward Crookwell 3 South are largely screened by landform and vegetation as well as planting surrounding	6.3 km	1.4 km	Very Low	Long Term	High	Nil	Low

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	'Hillview Park' (Crookwell 3 Associated Resident)	residential dwelling.							
R80a	(Church) Potential future residential	Views south west toward the Crookwell 3 South site are screened by landform and vegetation as well as planting surrounding the Church. Views extend east toward partial and filtered views of wind turbines within the Crookwell East site.	6.0 km	1.7 km	Very Low	Long Term	High	Nil	Moderate
R81	Residential Dwelling 'Rosslyn'	Views south west toward Crookwell South site are screened by landform and vegetation as well as planting surrounding residence. Views south toward Crookwell 3 East are partially screened by tree shelter planting to the south of the dwelling.	8.9 km	3.8 km	Very Low	Long Term	High	Nil	Low
R82	Residential Dwelling 'Rosslyn	Views south west toward Crookwell South site are screened by landform and vegetation as well as planting surrounding residence. Views south toward Crookwell 3	9.3 km	4.0 km	Very Low	Long Term	High	Nil	Low

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
		East are partially screened by tree shelter planting to the south of the dwelling.							
R83	Residential Dwelling 'Trappers Folly'	View north toward Crookwell 3 East turbines with partial screening toward Crookwell South site.	6.7 km	4.3 km	Very Low	Long Term	High	Low	High
R84	Residential Dwelling 'Nierrina Heights'	View north toward Crookwell 3 East turbines with partial screening toward Crookwell South site.	5.7 km	3.1 km	Very Low	Long Term	High	Low	High
R85	Residential Dwelling 'The Peak'	View west toward the Crookwell 3 turbines is generally blocked by a combination of landform and woodland vegetation.	15 km	6.3 km	Very Low	Long Term	High	Nil	Nil
R86	Residential Dwelling	View west toward the Crookwell 3 turbines is generally blocked by a combination of landform and woodland vegetation.	14.0 km	6.1 km	Very Low	Long Term	High	Nil	Nil

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
R87	Residential Dwelling 'Grey Wood'	View west toward the Crookwell 3 East turbines is generally blocked by a combination of landform and woodland vegetation.	13.1 km	5.0 km	Very Low	Long Term	High	Nil	Nil
R88	Residential Dwelling 'Ghost Gum Gully'	View west toward the Crookwell 3 East turbines is generally blocked by a combination of landform and woodland vegetation.	14.2 km	5.6 km	Very Low	Long Term	High	Nil	Nil
R89	Residential Dwelling 'Windvale'	View west toward the Crookwell 3 East turbines is generally blocked by a combination of landform and woodland vegetation.	13.6 km	5.0 km	Very Low	Long Term	High	Nil	Nil
R90	Residential Dwelling 'Glenwood Park'	View west toward the Crookwell 3 East turbines is generally blocked by a combination of landform and woodland vegetation.	13.9 km	5.1 km	Very Low	Long Term	High	Nil	Nil
R91	Residential	Views west toward the Crookwell 3 turbines are blocked by a combination of landform	13.2 km	4.2 km	Very Low	Long	High	Nil	Nil

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	Dwelling	and timbered areas.				Term			
R92	Residential Dwelling	View west toward the Crookwell 3 East turbines is generally blocked by a combination of landform and woodland vegetation.	14.9 km	6.9 km	Very Low	Long Term	High	Nil	Nil
R93	Residential Dwelling 'Pearces Hill'	View west toward the Crookwell 3 East turbines is generally blocked by a combination of landform and woodland vegetation.	14.8 km	5.9 km	Very Low	Long Term	High	Nil	Nil
R94	Residential Dwelling	View west toward the Crookwell 3 East turbines is generally blocked by a combination of landform and woodland vegetation.	15.4 km	6.3 km	Very Low	Long Term	High	Nil	Nil
R95	Residential Dwelling	View west toward the Crookwell 3 East turbines is generally blocked by a combination of landform and woodland vegetation.	15.8 km	6.5 km	Very Low	Long Term	High	Nil	Nil

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
R96	Residential Dwelling	View west toward the Crookwell 3 East turbines is generally blocked by a combination of landform and woodland vegetation.	15.2 km	5.8 km	Very Low	Long Term	High	Nil	Nil
R97	Residential Dwelling	View south west toward Crookwell 3 South turbines is screened by landform and timbered areas. View extends toward turbines within the Crookwell East site.	12.0 km	2.6 km	Very Low	Long Term	High	Nil	Low to Moderate
R98	Residential Dwelling 'Daramalar'	View south west toward the Crookwell 3 East turbines is generally blocked by a combination of landform and woodland vegetation.	14.2 km	5.3 km	Very Low	Long Term	High	Nil	Nil
R99	Residential Dwelling 'Mountain Ash'	View south west toward the Crookwell 3 East turbines is generally blocked by a combination of landform and woodland vegetation.	13.6 km	4.9 km	Very Low	Long Term	High	Nil	Nil
R100	Residential Dwelling	View south west toward the Crookwell 3 East turbines is generally blocked by a	13.4 km	4.6 km	Very Low	Long Term	High	Nil	Nil

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	'Greenways'	combination of landform and woodland vegetation.							
R101	Residential Dwelling 'Hetherington Glen'	View south west toward the Crookwell 3 East turbines is generally blocked by a combination of landform and woodland vegetation.	13.8 km	5.4 km	Very Low	Long Term	High	Nil	Nil
R102	Residential Dwelling 'Holmwood'	View south west toward the Crookwell 3 East turbines is generally blocked by a combination of landform and woodland vegetation.	12.6 km	4.6 km	Very Low	Long Term	High	Nil	Nil
R103	Residential Dwelling 'Ivy Lodge'	View south west toward the Crookwell 3 East turbines is generally blocked by a combination of landform and tree cover.	12.5 km	4.5 km	Very Low	Long Term	High	Nil	Nil
R104	Residential Dwelling 'Highland Park'	Views south west toward Crookwell 3 South turbines are screened by landform. Views toward Crookwell 3 East are partially screened by tree cover and planting surrounding residential dwelling.	10.6 km	2.7 km	Very Low	Long Term	High	Nil	Low

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
R105	Residential Dwelling 'Jaradean'	Views south west toward Crookwell 3 South turbines are screened by landform. Views toward Crookwell 3 East are partially screened by tree cover and planting surrounding residential dwelling.	11.1 km	3.6 km	Very Low	Long Term	High	Nil	Low
R106	Residential Dwelling 'Rosedale'	Views south west toward Crookwell 3 South turbines are screened by landform. Views toward Crookwell 3 East are partially screened by tree cover and planting surrounding residential dwelling.	9.0 km	1.9 km	Very Low	Long Term	High	Nil	Low
R107	Residential Dwelling 'Quinton'	Views west to north west toward Crookwell 3 South are largely blocked by landform and scattered tree cover. Views north extend toward Crookwell 3 East site.	7.9 km	3.3 km	Very Low	Long Term	High	Nil	High
R108	Residential Dwelling 'Eagleview'	Views south toward Crookwell 3 turbines generally screened by landform and vegetation.	10.8 km	3.8 km	Very Low	Long Term	High	Nil	Nil
R109	Residential	Views south toward Crookwell 3 turbines	9.7 km	4.0 km	Very Low	Long	High	Nil	Low

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	Dwelling 'Frendale'	generally screened by landform and vegetation.				Term			
R110	Residential Dwelling 'Wallaroy'	Views south toward Crookwell 3 turbines generally screened by landform and vegetation.	9.6 km	4.3 km	Very Low	Long Term	High	Nil	Low
R111/112	Community Hall	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
R113	Residential Dwelling 'Karinga'	Views south toward Crookwell 3 turbines generally screened by landform and vegetation.	10.6 km	3.8 km	Very Low	Long Term	High	Nil	Nil
R114	Residential Dwelling 'Frenleigh'	Views south toward Crookwell 3 turbines generally screened by landform and scattered tree cover.	10.6 km	3.4 km	Very Low	Long Term	High	Nil	Low
R115	Roslyn Bush Fire Brigade building	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
R116	Residential Dwelling 'Railway House'	Views south toward Crookwell 3 turbines generally screened by landform and scattered tree cover.	9.4 km	4.5 km	Very Low	Long Term		Nil	Low
R117 R118 R119	Rainmore Potential future residential dwelling	Development approvals have been granted to build a residential dwelling at three locations within the Rainmore property. Each location was inspected and assessed and the R117 location included in this matrix as the worst case scenario for potential visual impact. Views toward Crookwell 3 turbines from R118 and R119 are partially (or completely) screened by landform and/or vegetation. For R117 views south extend toward the Crookwell 3 South turbines. The view toward Crookwell 3 East turbines is blocked by landform and vegetation.	1.5 km	6.3 km	Very Low	Long Term	High	High	Nil
R120	Residential	Views south and west toward Crookwell 3 turbines generally screened by landform	5.1km	7.1 km	Very Low	Long	High	Nil	Nil

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
	'Elmgrove'	surrounding residential dwelling.							
R121	Residential Dwelling	View south west toward Crookwell 3 South turbines are screened by scattered tree cover and planting surrounding residential dwelling. View south toward Crookwell 3 East turbines.	11.0 km	5.0 km	Very Low	Long Term	High	Nil	Low
R122	Residential Dwelling 'Merryvale'	Views south toward Crookwell South and East turbines are screened by tree cover and planting surrounding residential dwelling.	11.6 km	7.8 km	Very Low	Long Term	High	Nil	Nil
R123	Residential Dwelling	Views south to south east and west toward Crookwell South and East turbines are largely screened by tree cover and planting surrounding residential dwelling.	5.1 km	9.6 km	Very Low	Long Term	High	Nil	Low
R124	Residential Dwelling	Views south to south east and west toward Crookwell South and East turbines are largely screened by scattered tree cover and landform.	4.0 km	9.5 km	Very Low	Long Term	High	Low	Low

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
R125	Residential Dwelling	Views east toward the Crookwell 3 East site are partially screened by landform. Views toward the Crookwell 3 South extend south east from the residential dwelling.	4.0 km	10.3 km	Very Low	Long Term	High	Moderate	Low
R126	Residential Dwelling	Views east toward the Crookwell 3 East site are partially screened by landform. Views toward the Crookwell 3 South extend south east from the residential dwelling.	4.2 km	11.0 km	Very Low	Long Term	High	Moderate	Low
R127	Residential Dwelling	Views west extend toward the Crookwell 3 South site. Views toward the Crookwell 3 East site are partially screened by scattered tree cover and landform.	5.2 km	12.8 km	Very Low	Long Term	High	Low to Moderate	Low
R128	Residential Dwelling 'Bannister'	View north west toward the Crookwell 3 East site are largely screened by scattered tree cover and landform	4.4 km	13.0 km	Very Low	Long Term	High	Moderate	Nil
R129	Residential Dwelling	Views north east toward Crookwell 3 wind turbines are partially screened by scattered tree cover as well as planting within the	4.6 km	13.2 km	Very Low	Long Term	High	Low to Moderate	Nil

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
		property.							
Area A 5 – 10km	Residential Dwellings (9 in total)	Residential view locations within Area A generally situated alongside the Goulburn Crookwell Road and will tend to have restricted views toward the Crookwell 3 South and East turbines.	14.7 km	7.5 km	Very Low	Long Term	High	Low	Nil
Area B 5 – 10km	Residential Dwellings (11 total)	Residential view locations within Area B are located to the north of Middle Arm Road and will tend to have restricted views toward the Crookwell 3 South and East turbines.	6.2 km	5 km	Very Low	Long Term	High	Nil	Nil
Area C 5 – 10km	Residential Dwellings (13 total)	Residential view locations within Area C (other than those with an ID reference) are generally located alongside Middle Arm Road or to the west at around 10km from the Crookwell 3 East precinct. Residential view locations within Area C will tend to have limited views toward the Crookwell 3 wind farm, with views blocked for the most part by ridgeline landform and	13 km	8 km	Very Low	Long Term	High	Nil	Nil
View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
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		woodland vegetation.							
Area D 5 – 10km	Residential Dwellings (1 total)	The residential view locations within Area D (other than those with an ID reference) is located to the east of the Goulburn Crookwell Road. The residential view locations within Area D will tend to have limited views toward the Crookwell 3 wind farm, with views generally blocked for the most part by woodland vegetation.	8.5 km	8.5 km	Very Low	Long Term	High	Nil	Nil
Area E 5 – 10km	Residential Dwellings (9 total)	Residential view locations within Area E are generally located alongside Range Road to the south of the Crookwell 3 South precinct. Residential view locations within Area E will tend to have limited views toward the Crookwell 3 wind farm, with views blocked for the most part by landform and woodland vegetation.	7 km	13.5 km	Very Low	Long Term	High	Nil	Nil

Table 16 – Residential View Location Matrix

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
Area F 5 – 10km	Residential Dwellings (15 total)	Residential view locations within Area F are generally located alongside Range Road to the west of the Crookwell 3 South precinct. The residences will tend to have limited visibility toward the Crookwell 3 South precinct with views blocked for the most part by landform and woodland vegetation.	6 km	15 km	Very Low	Long Term	High	Low	Nil
Area G 5 – 10km	Residential Dwellings (15 total)	Residential view locations within Area G are generally located alongside the Kialla and Pejar Roads to the west of the Crookwell 3 South precinct. The residences will tend to have limited visibility toward the Crookwell 3 South precinct with views blocked for the most part by landform and woodland vegetation.	6 km	6.2 km	Very Low	Long Term	High	Low	Nil
Area H 5 – 10km	Residential Dwellings (14 total)	Residential view locations within Area H are generally located alongside the Third Creek and Gorham Roads to the north west of the Crookwell 3 South precinct. The residences will tend to have limited	6 km	10.2 km	Very Low	Long Term	High	Low	Nil

Table 16 – Residential View Location Matrix

Table 16 – Residential View Location Matrix

View location reference	Category of view location	View context	Distance to closest turbine Crookwell 3 South	Distance to closest turbine Crookwell 3 East	Relative number of people	Period of view	View location sensitivity	Visual Impact Crookwell 3 South	Visual Impact Crookwell 3 East
		visibility toward the Crookwell 3 South precinct with views blocked for the most part by landform and woodland vegetation.							



CROOKWELL 3 WIND FARM

GREEN BEAN DESIGN

8.3 Public View Location Visibility Matrix

Table 17 presents the Visibility Matrix for the Crookwell 3 wind farm for public view locations. Potential public view locations are illustrated in Figure 18.

View location reference	Category of view location	View context	Approx. distance of road section	Approx. distance to closest Crookwell 3 turbine	Relative number of people	Period of view	View locations sensitivity	Visual impact Crookwell 3 South	Visual impact Crookwell 3 East
R1 Goulburn Crookwell Road north	Motorist	Views from vehicles travelling south and north along the road extend across the surrounding landscape from high points and ridgeline areas, but are also restricted in places by roadside vegetation and undulating landform.	9 km	1 km	High	Very short term (approx 5 to 6 mins)	Low	Low	Nil
R2 Goulburn Crookwell Road	Motorist	Views toward Crookwell 3 South turbines from vehicles travelling along the road tend to be restricted to a high point south of Pejar Road, and become obscured by a road cutting falling to Pejar Dam. Direct views toward	5 km	9.8 km	High	Very short term (approx 4 mins)	Low	Low	Low

View location reference	Category of view location	View context	Approx. distance of road section	Approx. distance to closest Crookwell 3 turbine	Relative number of people	Period of view	View locations sensitivity	Visual impact Crookwell 3 South	Visual impact Crookwell 3 East
		the Crookwell 3 South turbines occur from vehicles travelling north toward Crookwell for a short distance of road.							
R3 Goulburn Crookwell Road south	Motorist	Views from vehicles travelling north along the road toward the Crookwell 3 South and East precincts are generally screened by landform and vegetation.	8 km	4 km	High	Very short term (approx 5 mins)	Low	Nil	Nil
R4 Woodhouselee Road North	Motorist	Views from vehicles travelling south along the road toward the Crookwell 3 East precinct are generally screened by landform and vegetation.	9 km	2.5 km	Low	Very short term (approx 5 to 6 mins)	Low	Nil	Low
R5 Woodhouselee	Motorist	Views from vehicles travelling north and south along Woodhouselee Road	9 km	900 m	Low	Very short term (approx 5	Low	Nil	Low

View location reference	Category of view location	View context	Approx. distance of road section	Approx. distance to closest Crookwell 3 turbine	Relative number of people	Period of view	View locations sensitivity	Visual impact Crookwell 3 South	Visual impact Crookwell 3 East
Road		will include direct and indirect views toward the Crookwell 3 East turbines; however some screening will be provided by roadside vegetation and adjoining undulating landform.				to 6 mins)			
R6 Woodhouselee Road South	Motorist	Views from vehicles travelling north along the road toward the Crookwell 3 East precinct are generally screened by landform and vegetation.	3 km	5 km	Low	Very short term (approx 2 mins)	Low	Low	Low
R7 Middle Arm Road North	Motorist	Views toward the Crookwell 3 East precinct from vehicles travelling east or west along the road are generally blocked by landform and vegetation, although some indirect	14 km	3-4 km	Low	Very short term (approx 10 mins)	Low	Nil	Low

View location reference	Category of view location	View context	Approx. distance of road section	Approx. distance to closest Crookwell 3 turbine	Relative number of people	Period of view	View locations sensitivity	Visual impact Crookwell 3 South	Visual impact Crookwell 3 East
		views may occur along the west portion of the road.							
R8 Middle Arm Road East	Motorist	Views toward the Crookwell 3 East precinct from vehicles travelling north and south along the road are generally blocked by landform and vegetation.	9 km	7 km	Low	Very short term (approx 5 to 6 mins)	Low	Nil	Nil
R9 Range Road & Kialla Road.	Motorist	Views toward the Crookwell 3 South precinct from vehicles travelling north and south along the roads are largely screened by woodland vegetation and topography for the greater portion of the roads; however there is limited potential for indirect and distant views toward some of the Crookwell 3	21 km	4.5 km	Low	Short term (approx 12 to 15 mins)	Low	Low	Nil

View location reference	Category of view location	View context	Approx. distance of road section	Approx. distance to closest Crookwell 3 turbine	Relative number of people	Period of view	View locations sensitivity	Visual impact Crookwell 3 South	Visual impact Crookwell 3 East
		South turbines from a short portion of Kialla Road.							
R10 Pejar Road	Motorist	Views toward the Crookwell 3 South precinct from vehicles travelling east and west are partially screened by landform and vegetation alongside the road corridor. There are some limited opportunities for partial views toward upper sections of some turbines as the road passes over high points between drainage lines.	10 km	2 km	Low	Very short term (approx 5 to 7 mins)	Low	Low	Nil
R11 Dawson's Creek Road	Motorist	Elevated views extend south toward the Crookwell 3 South precinct from the north portion of Dawson's Creek road. As the road falls toward the south views	2 km	2.5 km	Low	Very short term (approx 1 to 2 mins)	Low	Low	Low

View location reference	Category of view location	View context	Approx. distance of road section	Approx. distance to closest Crookwell 3 turbine	Relative number of people	Period of view	View locations sensitivity	Visual impact Crookwell 3 South	Visual impact Crookwell 3 East
		tend to be screened by tree planting alongside the road corridor.							
R12 Third Creek Road/Gorham Road	Motorist	Views toward the Crookwell 3 South and East turbines from vehicles travelling along these roads are largely screened by woodland vegetation and undulating landform.	13 km	4 km	Low	Very short term (approx 9 mins)	Low	Nil	Nil
R13 St Stephens Road	Motorist	Views extend north west to west toward the Crookwell 3 South precinct from a short portion of the road with views toward Crookwell 3 East turbines largely screened by vegetation to the east of the road corridor.	3 km	3 km	Low	Very short term (approx 2 to 3 mins)	Low	Low	Nil

View location reference	Category of view location	View context	Approx. distance of road section	Approx. distance to closest Crookwell 3 turbine	Relative number of people	Period of view	View locations sensitivity	Visual impact Crookwell 3 South	Visual impact Crookwell 3 East
R14 Carrabungla Road	Motorist	Views from vehicles travelling south along the road are partially screened by trees alongside the road corridor	6 km	4 km	Low	Very short term (approx 5 to 6 mins)	Low	Nil	Low
R15 Pejar Dam Picnic Area	Visitor	Views toward the Crookwell 3 South and East turbines are largely screened by landform and vegetation.	-	1.4 km	Low	Short to Medium term	High	Low	Nil
R16 Crookwell 1 Viewing Area	Visitor	View south toward Crookwell 3 South and East turbines	-	6 km	Low	Short to Medium term	Low	Low	Low

8.4 Future residential dwellings

The majority of existing residential dwellings in the vicinity of the wind farm are located below surrounding ridgelines to maximise potential for shelter from prevailing wind, and/or where exposed tend to include a degree of shelter from windbreak planting or tree planting around dwellings. The tendency to locate residential dwellings in sheltered situations also acts to limit the extent of available views across the surrounding landscape for the majority of residential view locations, although there are a small number of dwellings that appear to have been located on properties to take advantage of distant and panoramic views.

Potential future planning for residential dwellings would be able to take advantage of any approved layout design for Crookwell 3 when determining the optimal location for residential dwellings on individual portions of land to minimise views toward wind turbines if desired. In some circumstances future residential dwellings could be located to take advantage of local topographic features in order to screen views toward wind turbines or implement in advance mitigation measures such as tree planting for windbreak and/or screening purposes.

Should residential dwellings be constructed on existing portions of land immediately adjacent to the wind farm site, there is likely to be an associated visual impact not only with additional residential structures within the landscape but also a range of domestic infrastructure associated with it.

8.5 Summary of Visual Impact

This LVIA identified a total of 131 potential residential view locations within the 5km Crookwell 3 viewshed; however, seven of these view locations were determined to be non residential structures including meeting halls, rural fire stations and agricultural structures. An additional 87 residential view locations were identified within the 5km to 10km Crookwell 3 viewshed and were grouped into areas A to H as illustrated in **Figure 17**.

 Table 18 outlines the assessment of residential view locations within the Crookwell 3 wind farm 5km

 viewshed.

	Visual Impact Rating within 5km Crookwell 3 viewshed (Total from 124 residential dwellings)								
	Nil Low Low to Moderate Moderate Moderate to High High								
Crookwell 3 South	71 (57%)	30 (24.5%)	5 (4.5%)	8 (6%)	7 (5.5%)	3 (2.5%)			
Crookwell 3 East	32 (26%)	55 (45%)	10 (8%)	8 (6%)	4 (3%)	15 (12%)			

Table 18 – Summary of Visual Impact Rating within 5km viewshed

Table 19 outlines the assessment of residential view locations within the Crookwell 3 wind farm 5kmto 10km viewshed.

Table 19 - Summary	of Visual Impa	rt Rating between	the 5km to 1	0km viewshed
	y or visual impav	st realing between		

	Visual Impact Rating within 5km to 10km Crookwell 3 viewshed (Total from 87 residential dwellings)					
Areas A to H	Nil	Low	Low to Moderate	Moderate	Moderate to High	High
Crookwell 3 South	30 (34%)	57 (66%)	-	-	-	-
Crookwell 3 East	87 (100%)	-	-	-	-	-

Residential dwellings identified within Areas A to H were determined to have a Low visual impact and Nil where landform and timbered areas screened views toward the Crookwell 3 wind farm.

The field assessment for the majority of residential view locations was undertaken from the closest publicly accessible location, with a conservative approach adopted where there was no opportunity to confirm the actual extent of available view from areas within or immediately surrounding the residence. It is anticipated that some visibility ratings would be less than those determined subject to a process of verification from private property.

A total of 16 public view locations were identified as part of the visual assessment process. The public view locations are illustrated in **Figure 18**.

An assessment of the visual impact for each public view locations indicated that for the Crookwell 3 South and East wind farm layout options:

- 0 of the 16 public view locations have been determined to have a High visual impact;
- 0 of the 16 public view locations have been determined to have a Moderate visual impact;
- 11 of the 16 public view locations have been determined to have a Low visual impact; and
- 5 of the 16 public view locations have been determined to have a Nil visual impact.

This LVIA acknowledges that the Crookwell 3 wind farm will have the potential to be visible to people engaged in predominantly farming or recreational activities from both public and private land, where views toward wind turbines may occur from surrounding and non-associated rural areas. Ultimately the level of visual impact would depend on the type of activities engaged in as well as the location of the activities together with the degree of screening provided by local landform or vegetation within individual properties.

Whilst views toward the turbines would occur from a wide area of surrounding rural and agricultural land, this LVIA has determined that the sensitivity of visual impacts is less for those employed or carrying out work in rural areas compared to potential views from residential dwellings.

It should be noted that the term 'visual impact' does not necessarily imply or represent an individual's negative response toward the visibility of wind turbines, and that perceptions of wind farms amongst individuals within any community can be positive, negative or neutral.

Traffic Volume figures (AADT's) and resultant determination of motorist numbers have been sourced from the Crookwell 3 wind farm Traffic and Transport Study, prepared by URS Australia (September 2010).