

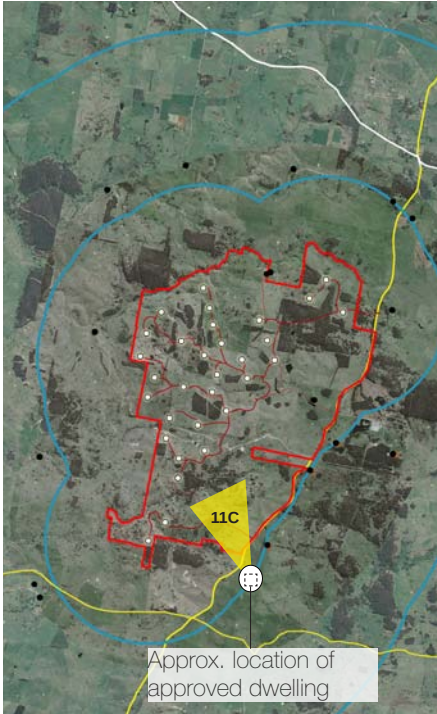
Annex I

Supplementary Material - Visual Impacts (Clouston)

Supplimentary material

CLOUSTON associates

PRIVATE RECEPTOR VIEWPOINT 11 (DA 18)



Viewpoint location



Area plan



Photo 11A - View looking north over the DA approved dwelling location in proximity to Biala Gurrundah Road

Location	Type	Nearest WTG	No. of properties	Receptors
Off Grabben Gullen Road	DA approved dwelling	2km	1 (DA 18 - proposed)	Future residential dwelling

Despite repeated attempts, it was not possible to gain access to this property. Photos have been taken from nearby locations to give an impression of the current view that can be experienced from this location. 3D visual representations have been produced to indicate the expected visual impact of the WTGs from the approximate dwelling location. A photomontage was not possible due to the absence of a site photo. The 3D representations give an accurate representation of the magnitude of expected visual impacts.

Current view	Expected Visual Impact
The approved DA site sits on a elevated hill, south of the topographical peak. As can be seen in Photo 11A and 11B, there are expansive and far reaching views available to the north west, south and east. A patchwork of fields, stands of woodland and individual tree plantings stretch into the distance. Very little built form is visible within the viewframe.	A simulated view of the Proposal from this property has been created using Google Earth and 3D modelling software - as shown in Photo 11C. The two closest WTGs would be clearly visible to the north west with blade motion easily discernible. These turbines will appear large and visually dominant. The upper portions of 11 more distant turbines to the north may also be visible, partially obscured by the elevated ridge line of the hill. Overall, a moderate/high impact on visual amenity is expected from this location. *The placement of the dwelling in a more elevated position may result in a greater number of turbines being visible. A view from the peak of the hill would take in all 31 of the Proposal's WTGs. This would lead to a visual impact rating of 'High'.

RECEPTOR IDENTIFICATION	RECEPTOR SENSITIVITY	MAGNITUDE				
		DISTANCE	QUANTUM OF VIEW	PERIOD OF VIEW	MAGNITUDE OF CHANGE	SUMMARY OF RATINGS
11	H	H	M	M	M	M

Overall Visual Impact Rating	MODERATE/HIGH*
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From Table 03, using a combination of sensitivity and magnitude ratings.

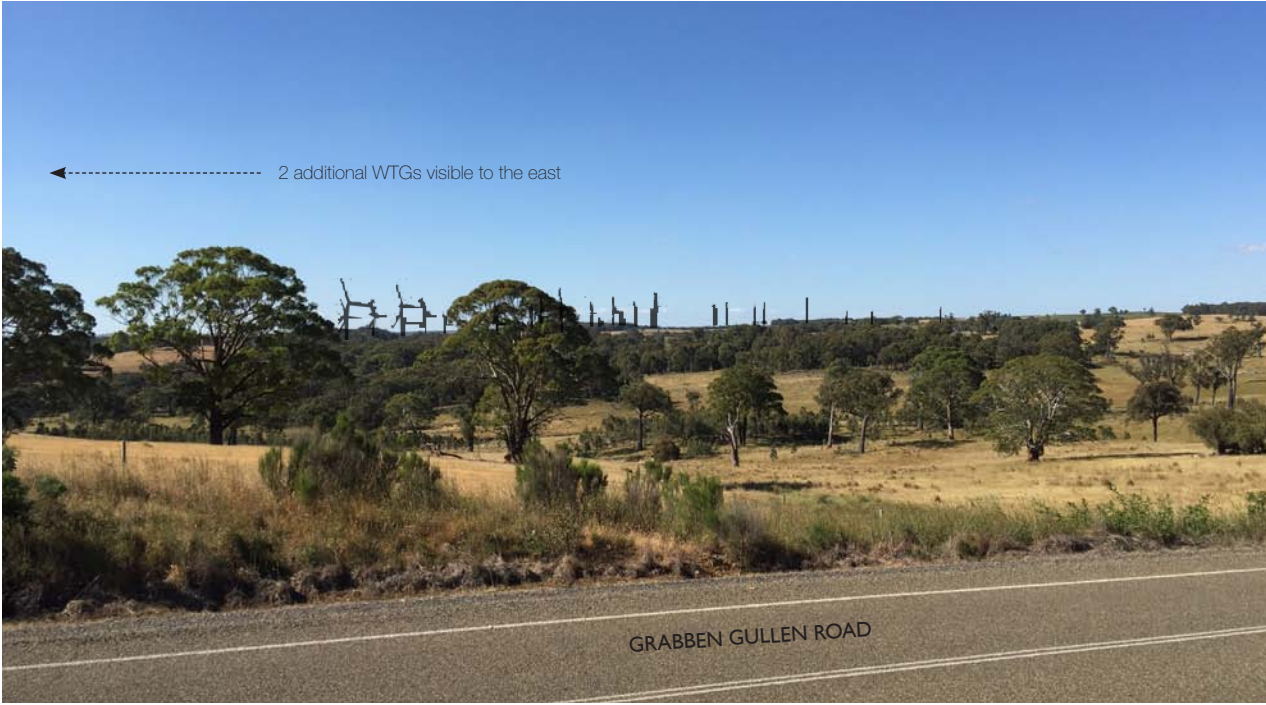


Photo 11B - View looking north west from Grabben Gullen Road below location of approved DA dwelling

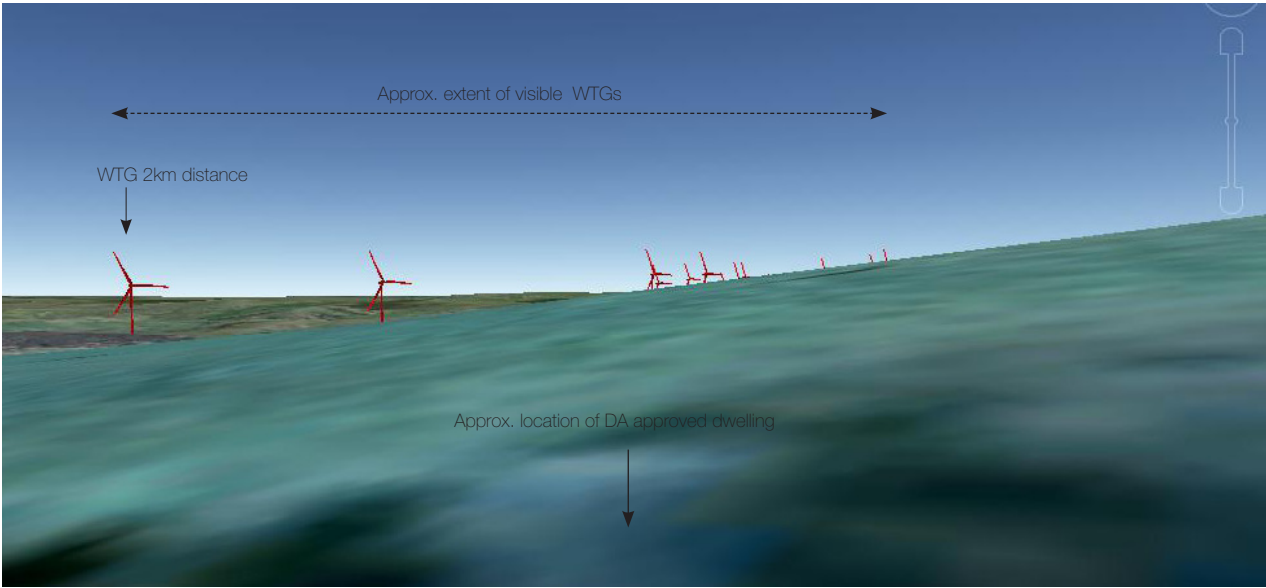


Photo 11C - Simulated view looking north west from location of approved dwelling

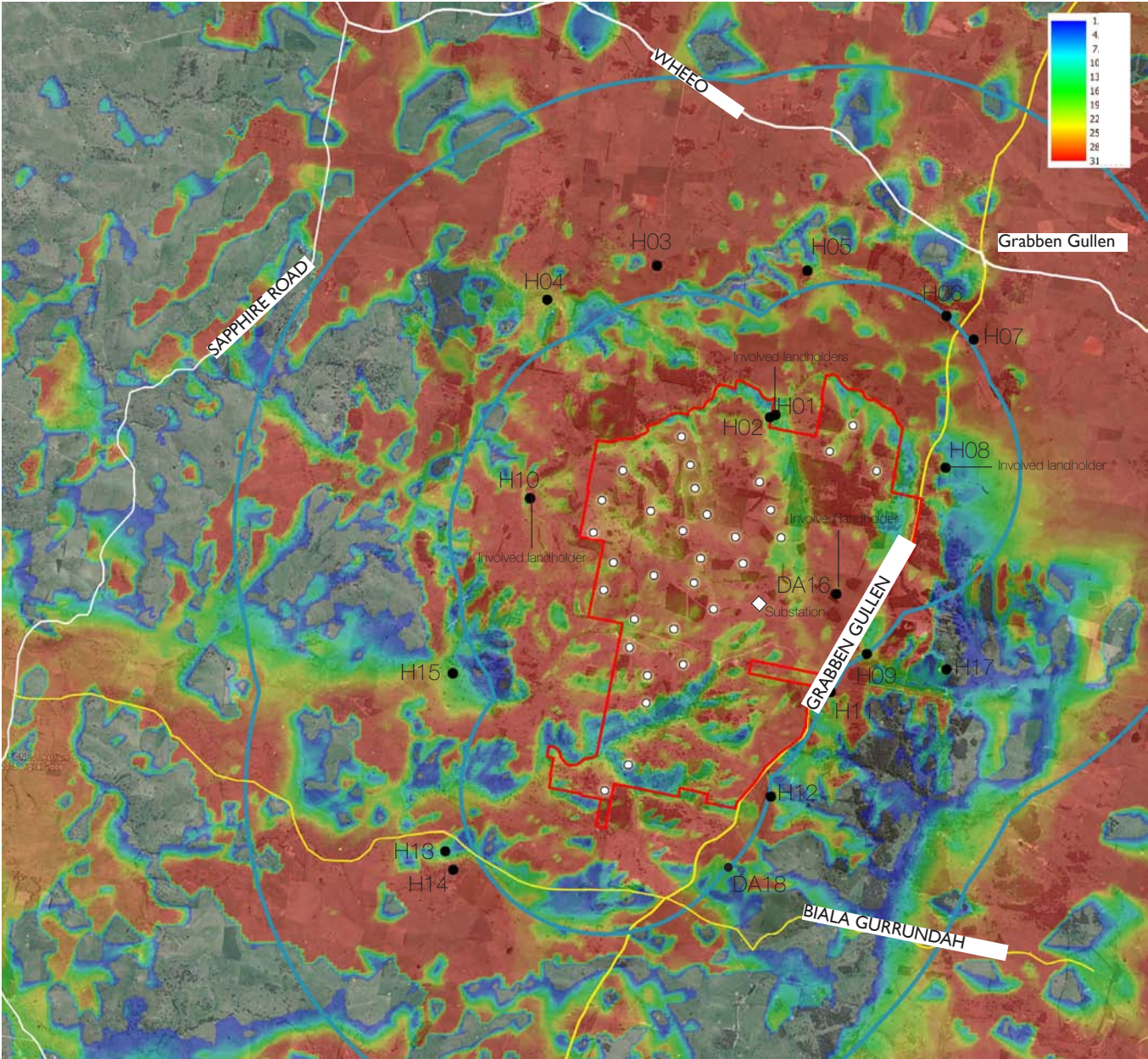
COMBINED AND SEQUENTIAL VISIBILITY

From viewpoint 11, there is the potential for the Biala wind turbines to be visible combined or sequentially with the Gullen Range wind farm and the Gunning wind farm (refer Photo 11D).

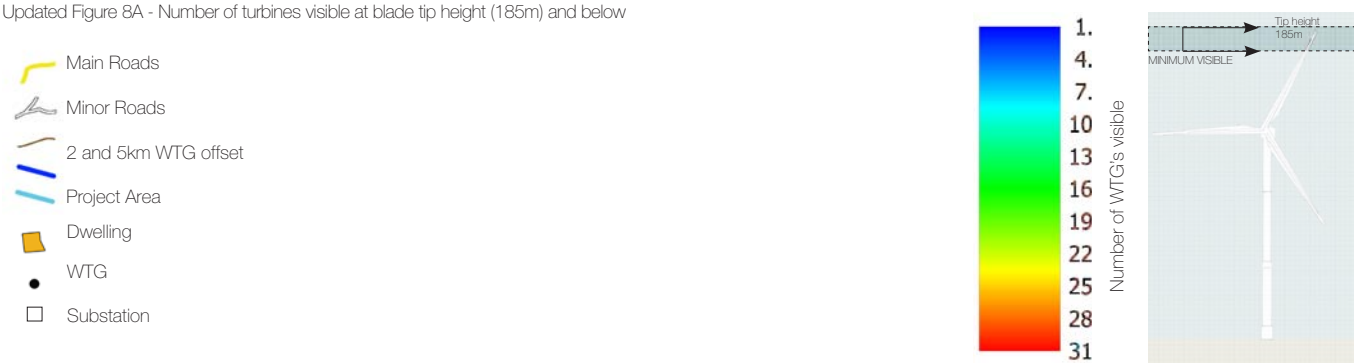
GUNNING (31 WTGs)		
VIEWPOINT	COMBINED VISIBILITY	SEQUENTIAL VISIBILITY
11	The BWF and Gunning wind farms will be visible in succession from this viewpoint. A viewer will have visual accessibility to several BWF turbines to the north west and by turning their head, a view towards the majority of Gunning WTGs in the south east. These turbines are at a distance of approximately 5km. A mod/high cumulative visual impact is expected as the WTG's will appear to partially surround the property.	Sequential views will occur for motorists travelling along Biala Gurrundah Road. Both wind farms are in close proximity to these roads, leading to a perceived sense of increased wind farm development in the area.
GULLEN RANGE (73 WTGs)		
VIEWPOINT	COMBINED VISIBILITY	SEQUENTIAL VISIBILITY
11	The Gullen Range wind farm is positioned to the north of this viewpoint. Views towards the Gullen WTGs would be blocked by the elevated topography to the north of the dwelling. If the dwelling was located at a higher elevation, combined views would be accessible and both the Gunning and Gullen Range WTGs would be clearly visible, leading to a high cumulative visual impact.	Sequential views will occur for motorists travelling along Biala Gurrundah Road. Both wind farms are in close proximity to these roads, leading to a perceived sense of increased wind farm development in the area.

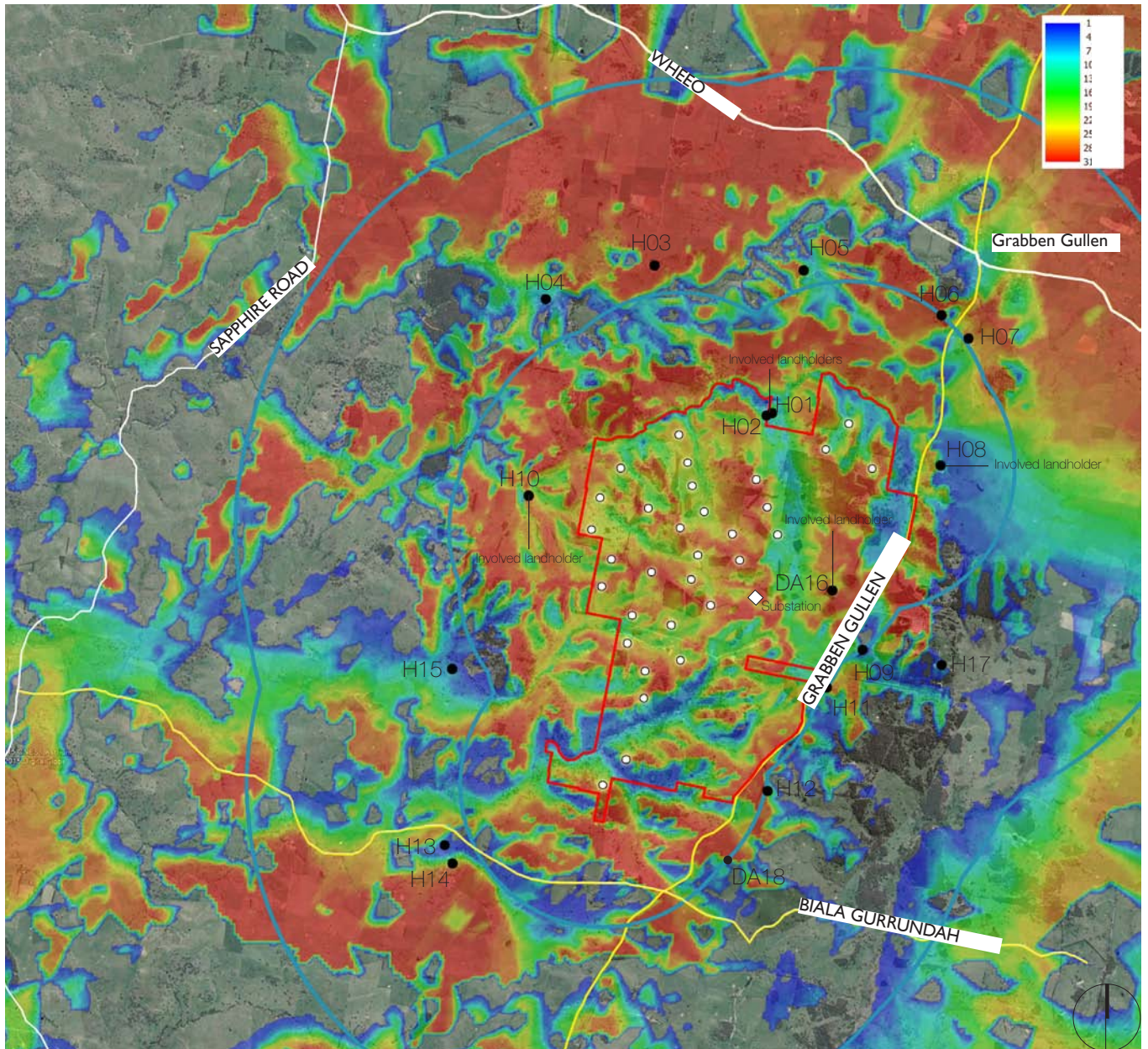


Photo 11D - Gullen and Gunning wind farms as viewed from Grabben Gullen Road in proximity to viewpoint 11



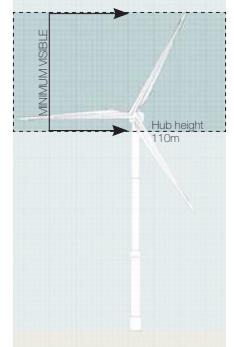
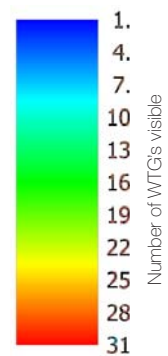
Updated Figure 8A - Number of turbines visible at blade tip height (185m) and below





Updated Figure 8B - Number of turbines visible at hub height (110m) and below

- Main Roads
- Minor Roads
- 2 and 5km WTG offset
- Project Area
- Dwelling
- WTG
- Substation



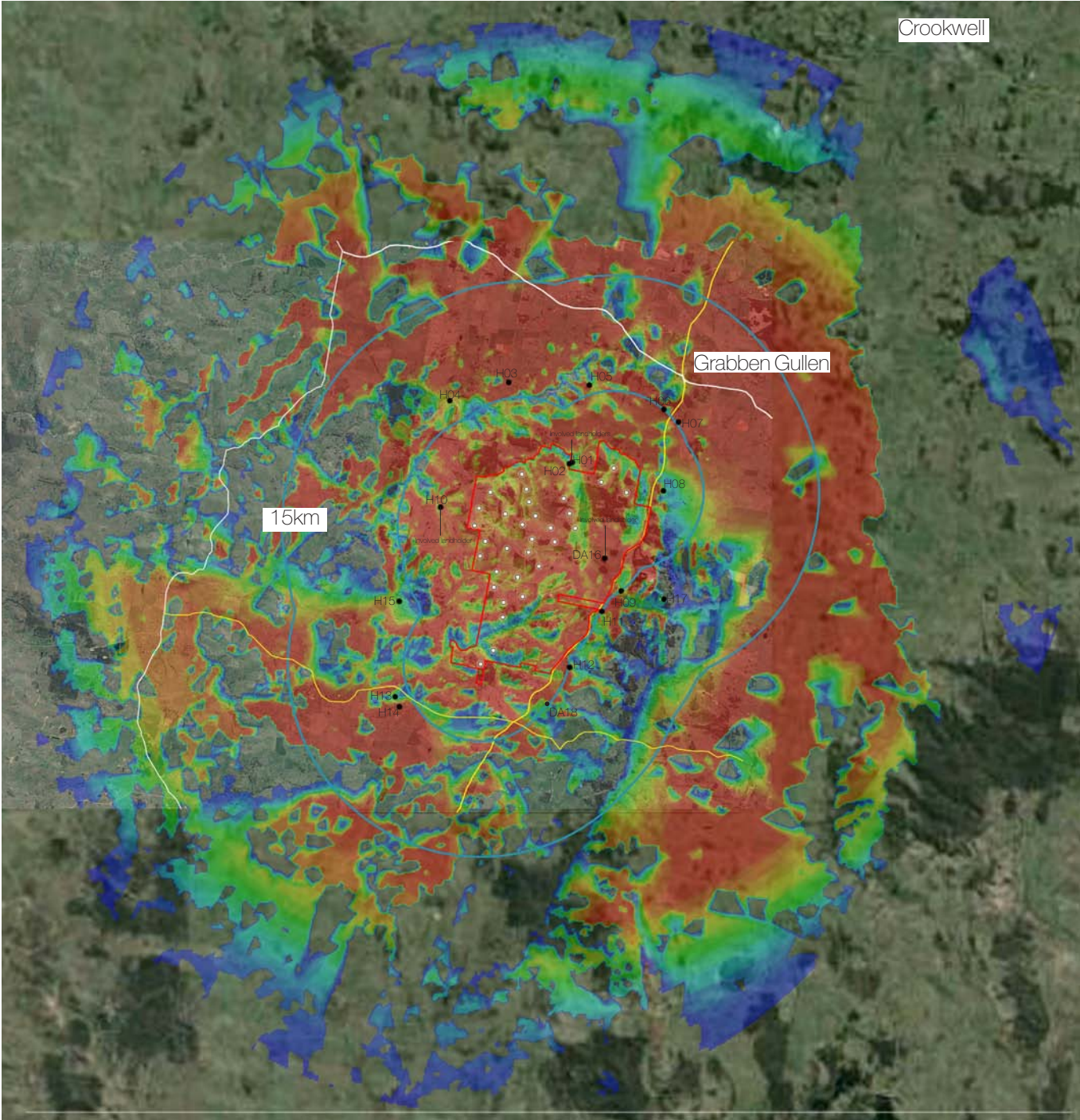


Figure 14A - Number of turbines visible at blade tip height (185m) and below - 15km radius



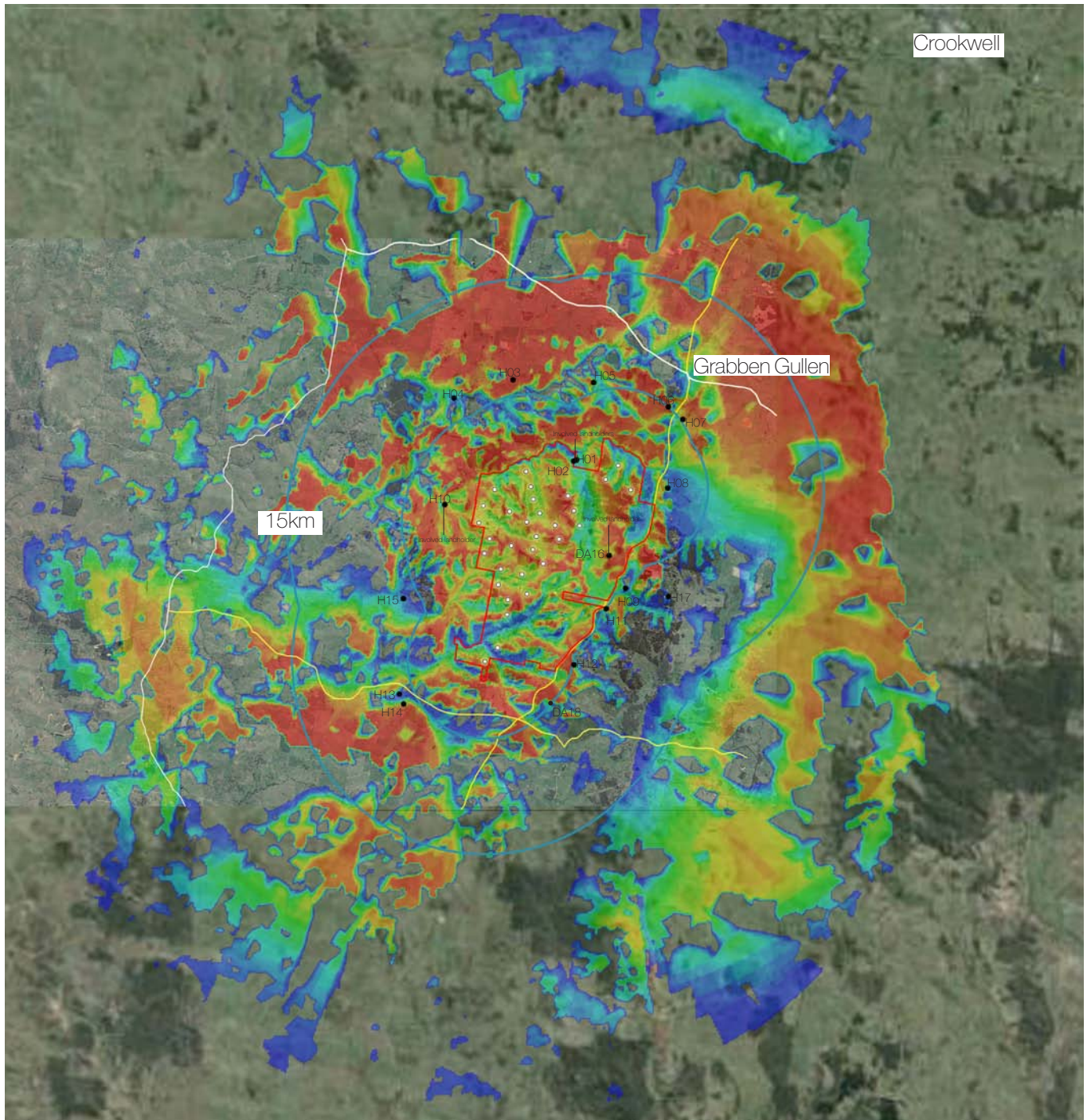


Figure 14B - Number of turbines visible at hub height (110m) and below - 15km radius

- Main Roads
- Minor Roads
- 2 and 5km WTG offset
- Project Area
- Dwelling
- WTG
- Substation

