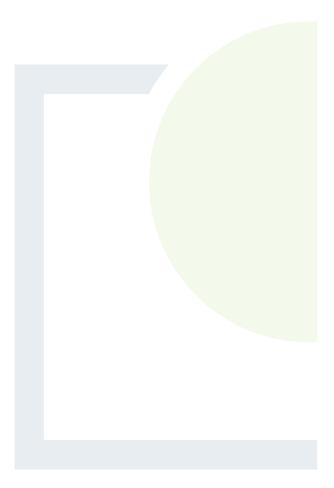


CONSULTANTS IN ENGINEERING, ENVIRONMENTAL SCIENCE & PLANNING

# **APPENDIX 15.1**

Visual Impact Assessment



### Appendix 15.1

### **Appraisal of Visual Receptor Sensitivity**

#### Degree of Associated within each Criterion

Strong association	Moderate association	Mild association	Negligible association

#### Receptor Sensitivity Criterion and Analysis at each Viewshed Reference Point (VRP)

Values associated with the view	VP1	VP2	VP3	VP4	VP5	VP6	VP7	VP8	VP9	<b>VP10</b>	<b>VP11</b>	VP12	VP13	VP14	VP15
Susceptibility of viewers to changes in views															
Recognised scenic value of the view															
Views from within highly sensitive landscape areas															
Primary views from residences															
Intensity of use, popularity (number of viewers)															
Viewer connection with the landscape															
Provision of vast, elevated panoramic views															
Sense of remoteness / tranquillity at the viewing location															
Degree of perceived naturalness															
Presence of striking or noteworthy features															
Sense of Historical, cultural and / or spiritual significance															
Rarity or uniqueness of the view															
Integrity of the landscape character within the view															
Sense of place at the viewing location															
Sense of awe															
Overall sensitivity assessment	ML	ML	м	ML	ML	ML	ML	м	ML	ML	м	ML	ML	ML	ML

N = Negligible; L = low sensitivity; ML = medium-low sensitivity M = medium sensitivity; HM = High-medium sensitivity; H = high sensitivity; VH = very high sensitivity

Values associated with the view	<b>VP16</b>	VP17	<b>VP18</b>	VP19
Susceptibility of viewers to changes in views				
Recognised scenic value of the view				
Views from within highly sensitive landscape areas				
Primary views from residences				
Intensity of use, popularity (number of viewers)				
Viewer connection with the landscape				
Provision of vast, elevated panoramic views				
Sense of remoteness / tranquillity at the viewing location				
Degree of perceived naturalness				
Presence of striking or noteworthy features				
Sense of Historical, cultural and / or spiritual significance				
Rarity or uniqueness of the view				
Integrity of the landscape character within the view				
Sense of place at the viewing location				
Sense of awe				
Overall sensitivity assessment	м	ML	м	H M

N = Negligible; L = low sensitivity; ML = medium-low sensitivity M = medium sensitivity; HM = High-medium sensitivity; H = high sensitivity; VH = very high sensitivity

Viewshed	l Reference Point			Viewing distance	Direction of View		
VP1	The Pastures h	ousing development, Char	leville	5.4km (T1)	SW		
Represe	Representative of:         • Centres of population						
Recepto	r Sensitivity	Medium-Low					
		development called The	location is from a margin Pastures, on the north town of Charleville is frace	n-western fringe	of the town's		
Existing	View	In this view, a foreground of a roadside and then pasture, gives way to tree-lined hedgerows, pylons and utility poles. Beyond this, a housing development is located, above which the low and partially tree-lined skyline of a low hill is visible. Two turbines (i.e. Rathnacally wind farm) can be clearly seen to the east (i.e. left) of that housing, whereas further west (i.e. right), two further turbines (i.e. Boorland wind farm) can be discerned at a greater distance.					
Visual In	npact of	Located over 5km away, the blade tips of the proposed development will be substantially screened, and less noticeable than existing, neighbouring turbines while no proposed hubs will be visible. Only the blades of two of the six turbines are likely to be visible partially rotating above the distant rooflines, although when the trees are in leaf (i.e. April-October) this will be even less discernible. Thus, overall, the visual presence is deemed to be subdominant.					
	d wind farm	or '					
		As a result, the magnitude	e of visual impact is conside	ered to be <b>Low</b> .			
Summar	У	Based on the assessment criteria and matrices outlined at <b>Section 15.2</b> the significance of residual visual impact is summarised below.					
		Visual Receptor Sensitivity	Visual Impact Magnitude	Significance	of Visual Impact		
		Medium-low	Low	Slight			

Viewshed	Reference Point			Viewing distance	Direction of View			
VP2	Dooley's Cross	roads, Newtown Ballyhay		3.8km (T3)	W			
Represe	ntative of:		<ul><li>Local community views;</li><li>Amenity and heritage feature</li></ul>					
Recepto	r Sensitivity	Medium-Low						
This viewpoint is located outside a local, nationa Hub Route 1; what is considered to be the Ballyhoura Mountains from the N20, Charleville o				ost accessible 'g Buttevant.	gateway' to the			
Existing	<b>The foreground is one that is rather busy for the rural context, particularly with</b> strong vertical imprint from roadside utility poles. In this view the school build are located to the north (i.e. right) of the road, whereas to the south a field pasture is visually abutted by dense, mature trees lines along what is the Co Dublin Intercity rail line. Consequently, views in a westward direction are curtad by these thick, mature treelines.							
		of the proposed turbines However, only three of the being more noticeable the noticeability, the propose	are, winter vegetation of th s will have the capacity to ne blade sets will rotate par han the other three turbir al is substantially screened eemed to be subdominant.	be discerned fro tially above the t nes will be. Howe	om this location. reelines, thereby ever, in terms of			
	Aesthetically, this view will be a somewhat slightly ambiguous view of the propose blade sets, as none will rotate clearly above the treeline and some will only partially discernible between bare branches (and not visible when the trees are leaf). However, the proposed development will not be out of context with t productive rural setting, in which wind turbines are a common feature. In addition the muscular vertical imprint of the foreground utility poles will help temper the vis impact of the proposed turbines.							
		As a result, the magnitude	e of visual impact is conside	ered to be <b>Low</b> .				
Summar	У		criteria and matrices outlir sual impact is summarised I		<b>2</b> the			
		Visual Receptor Sensitivity	Visual Impact Magnitude	Significance	of Visual Impact			
		Medium-low	Low	Slight				

Viewshed	Reference Point			Viewing distance	Direction of View		
VP3	Ballyhoura Wa	y at Ballyhoura Hills		8.0km (T3)	W		
Represei	ntative of:	Amenity and her	itage feature				
Receptor	r Sensitivity	Medium					
		particularly for walking/ renowned for hosting the visitors from afar. The Ba	ins are a well-used reso trekking and mountain bil premier Mountain biking t allyhouras also have two w the Buttevant wind farm tween them.	king. In addition rails in the counti indfarms along tl	, it is nationally ry, which attracts neir western end		
Existing	View	The context of this location is from a track that both the Ballyhoura Way (National Way Marked Trail) and the Ballinaboola Loop (National Loop Walk) align. An adjacent area of relatively recent clear felling allows for views in the direction of the site, largely not attainable elsewhere along this hill range, owing to more mature conifer forestry blocks. The foreground to mid-distance in this scene is comprised of swathes of young conifer plantations, with more distant lowlands visible beyond. Two turbines (i.e. Rathnacally wind farm) can be clearly seen, whereas further west (i.e. left), two further turbines (i.e. Boorland wind farm) can be discerned.					
		From this elevated ang background feature, in co While noticeable, the p	will be fully visible from the gle, these will be fully r ombination with multiple of proposed development will d farms - visible from this p e sub-dominant.	evealed but as other turbines in I be one of sev	a modest-scale many directions. veral elements -		
Visual Im proposed	npact of d wind farm	Aesthetically, this will be a clear and legible view of the proposed turbines that will reveal a loose, staggered linear layout appropriate to the context. The regular spacing of the proposed turbines will present as a simple and obvious rhythm. The proposed development will be compatible with this progressive rural setting, where wind turbines are a common feature. Even when seen, the proposal would not have a patent effect on the visual amenity of the scene.					
		As a result, the magnitude	e of visual impact is conside	red to be <b>Low</b>			
Summar	у		ent criteria and matrices sual impact is summarised b		ection 15.2 the		
		Visual Receptor Sensitivity	Visual Impact Magnitude	Significance	of Visual Impact		
		Medium	Low	Slight			

Viewshee	d Reference Point			Viewing distance	Direction of View		
VP4	N20 at Shinana	agh Bridge		3.3km (T6)	NW		
Represe	ntative of:	<ul><li>Major route</li><li>Local community</li><li>Amenity and her</li></ul>					
Recepto	r Sensitivity	Medium-Low					
Existing	View	Set within the central study area, this marginally elevated section of the N20, linking Charleville-Mallow and Limerick City-Cork City, is where it crosses over the Dublin- Cork rail line, which allows for considerably more elevated views in the broader directions of the site than is otherwise attainable from this busy National road. This location is also adjacent to where the Ballyhoura Way (National Way Marked Trail), where it crosses the N20. Upon a lower elevation, this busy foreground reveals a car park beside a residence, beyond which the pastoral patchwork of the study area can be seen. There is a strong vertical imprint present, owing to the car park lighting poles and utility poles. Stacked, mature hedgerows obscure much of the more distant views, although the ridgeline of a notably low distant hill can be seen. In the extreme north (i.e. right) of this vista, one existing turbine from the Rathnacally Wind Farm is visible, in a setting in which wind energy infrastructure is a regular, well-established feature.					
		three of the proposed tu the blade sets of a fourth tree. This trio of partially their blade sets are partia largely seen as a backg	of a foreground utility pole arbines will be noticeable f will be discernible through visible turbines (i.e. their illy so) will present at a moo round feature to a comp is deemed to be sub-domin	rom this elevate bare winter brar hubs are mostly lest but manifest lex foreground.	d location, while thes of a nearby obscured, while scale, but will be		
Visual In propose	npact of d wind farm	In terms of aesthetics, the proposal will present with a degree of visual clutter at this precise location, owing to the confluence of utility poles and lighting poles, but this will otherwise be a clear and legible view of turbines rising out of background farmland. In addition, the proposed development will be attuned to this productive, anthropocentric setting, where wind turbines are a well-worn feature. Even when seen, the proposal would not have a striking impact upon the visual amenity of the scene.					
		As a result, the magnitude	e of visual impact is conside	red to be <b>Low</b>			
Summar	Ъ		criteria and matrices outlin sual impact is summarised b		<b>2</b> the		
		Visual Receptor Sensitivity	Visual Impact Magnitude	Significance	of Visual Impact		
		Medium low	Low	Slight			

Viewshe	d Reference Point		Viewing distance	Direction of View			
VP5	Ballyhoura Wa	y north of Churchtown		2.6km (T6)	N		
<ul> <li>Local community views</li> <li>Amenity and heritage feature</li> </ul>							
Recepto	or Sensitivity	Medium-Low					
Existing	View	By way of context, this location is approx. 800m north of Churchtown town centre. However, no clear views in the direction of the site were apparent from the public sphere in that town. Consequently, this location was selected as it's closer to the site, as well as being along the Ballyhoura Way, while being moderately developed (i.e. more than 10 residences within approx. 200m of this location). Located upon a lowland sweep less than 3km from the nearest proposed turbine, a foreground, large field of pasture is evident, as well as roadside residences and multiple utility poles along a local road leading towards the site. More distantly, tall treelines obscure more distant views in the direction of the site.					
	npact of d wind farm	Owing to the aforementioned trees, the proposed development will be substantially screened from this location. However, one proposed turbine will be more visible between and above intervening trees and would be at a noticeable scale. Less apparent will be the blade sets of a further three turbines that will be partially visible rotating behind bare winter vegetation, although these are unlikely to be visible when the trees are in-leaf. The proposal will present as one of several other turbines visible from this broad view. Accordingly, the visual presence is deemed to be Sub-dominant.					
μομοзе	<b>roposed wind farm</b> In terms of aesthetics, this will be a cluttered and slightly ambiguous view of tu in alignment with the road and its residences. The proposed wind farm, as oppo- individual turbines, will be more discernible than visible, owing to the princonsistency of visibility of the proposed turbines in relation to intervening tree. Furthermore, visibility of the scene will be notably less attainable from April-Oc when the trees are in leaf.						
		On balance, the magnitud	de of visual impact is consid	ered to be Low.			
Summai	ſŶ		ent criteria and matrices sual impact is summarised b		ection 15.2 the		
		Visual Receptor Sensitivity	Visual impact Magnitude Significance of Visual				
		Medium low	Low	Slight			

Viewshee	d Reference Point			Viewing distance	Direction of View		
VP6	Residences on	local road southeast of sit	e	946m (T6)	Ν		
Represe	ntative of:	Local community	views				
Recepto	r Sensitivity	Medium-Low					
Existing	View	Beside and near this location, several residences are perched upon this low hillside to avail of rural views to the south (i.e. the opposite direction to the site). For the most part, medium-height roadside vegetation curtails views in the direction of the site, which is less than 1km from the location of the nearest turbine. Thus, owing to the relative proximity of the site, this location was selected owing to this cut/maintained roadside hedge presenting with the best possibility of views in the direction of the site.					
Visual In	npact of d wind farm	telecommunications mas varying degrees, althoug oblique angle to road use resident's primary views proposal will be substant components less that 14	roposed turbines, along wi it, will have the potential in only one hub is likely t ers, that will not be the ca is will continue to be the ially screened, the element is away that will likely d nee is deemed to be co-don	to be seen from to be seen. While se for local reside se out to the se so visible will be la raw attention to	this location, to this will be an ents, albeit those outh. While the rge scale moving		
p. op oor	-	Aesthetically, there will be some contextual confusion in this vista that will arise from large and relatively close turbines blades rotating above the foreground hedge. The visual context will result in the landscape setting in which the turbines will be anchored in not being visible. Furthermore, there will be turbine clutter to the right (i.e. east) of this scene, which will likely lead to some visual disharmony.			ound hedge. The turbines will be itter to the right		
		As a result, the magnitude	e of visual impact is conside	ered to be <b>Mediu</b> r	n.		
Summar	Ŋ		ent criteria and matrices sual impact is summarised		ection 15.2 the		
		Visual Receptor Sensitivity			of Visual Impact		
		Medium-low	Medium	Moderate-sl	ight		

Viewshe	d Reference Poin	Viewing distance	Direction of View				
VP7	L1322 at Coo	lcaum townland		746m (T3)	SW/W/NW		
Represe	entative of:	Local community	views				
Recepto	or Sensitivity	Medium-Low					
Existing	View	A roadside field entrance along a local road only allows for this view in the direction site. However, for the most part along this road, which angles for some distance within 1km of the nearest proposed turbines, views in the direction of the site and impeded by roadside vegetation. In this scene, behind/over/through a medium-heigh roadside hedgerow, a relatively large and flat pastoral field is evident. Relatively low stacked hedgerows/ treelines extend beyond it, while more to the north (i.e. right) the scene, one of the existing turbines from the Rathnacally wind farm is visible					
	mpact of ed wind farm	This will present as a clear and close view of all the proposed turbines, owing to the absence of any effective roadside or intervening vegetative screening. While conspicuous in its proximity and scale, the proposal will not be spatially dominant. Be that as it may, the proposal will be deemed to have a dominant visual presence Aesthetically, the proposal will be a highly legible and declarative view of a wind farm, but one that will not be over-scaled relative to the underlying terrain and prevailing					
propose	a wind farm	landcover pattern. One set of overlapping turbines at this precise location will be visible, but this will alter with any movement by road users along this road and there will be a clear scale differential/spatial separation between those turbines (i.e. these turbines will be overlapping, rather than stacked).					
		On balance of these facto <b>medium</b>	ors, the magnitude of visua	l impact is consid	lered to be High-		
Summa	ry		ent criteria and matrices sual impact is summarised l		ection 15.2 the		
Visual Receptor Sensitivity		Visual Impact Magnitude	agnitude Significance of Visual I				
		Medium-low	High-medium	Moderate			

Viewshee	d Reference Point			Viewing distance	Direction of View			
VP8	Cooline Cemet	tery, Cooliney townland		1.1km (T1)	SW			
-	6	Local Community	views					
Represe	ntative of:	Amenity & Heritage feature						
Recepto	r Sensitivity	Medium						
Existing	<ul> <li>This small cemetery dates to the 13<sup>th</sup> Century, and features the ruins of a chuwhere religious services ceased in the 18<sup>th</sup> Century, but burials appear to have been maintained to the present day (i.e. recently deceased community members evided on gravestones). Views in the direction of the site are not attainable from within the actual cemetery. However, a small, narrow pedestrian laneway connecting the road the cemetery has irregular vegetation aligning it and it is at one such opening in the vegetation where this location has been identified. Through the landside vegetation pastoral field is apparent, beyond which are a treeline and a rural residence. Little of be discerned beyond the mid-distance, only minute glimpse of an extensive runsphere beyond.</li> </ul>							
	and of	movement of a partially some attention, although	osed turbines will be scree visible single set of rotati this will be at an obscured g along this laneway. Over deemed to be minimal.	ng blades 1.1km d/unlikely viewing	away may draw angle to visitors			
Visual In propose	npact of d wind farm	Owing to the heavy degree of clutter created by intervening vegetation, there will be a slight degree of ambiguity in relation to the nature and context of the development. However, the proposal may not be noticed by a casual observer and even if noticed,						
		would not detract from t	he visual amenity of this b	usy, shortened sc	ene.			
		As a result, the magnitude	e of visual impact is conside	ered to be Low-ne	gligible.			
Summar	Ŋ		ent criteria and matrices sual impact is summarised		ection 15.2 the			
		Visual Receptor Sensitivity	Visual Impact Magnitude	Significance	of Visual Impact			
		Medium	Low-negligible	Slight-imper	ceptible			

Viewshec	Reference Point			Viewing distance	Direction of View		
VP9	Local residence	es at Fiddane townland		846km (T2)	S/SW		
Represe	ntative of:	Local community	views				
Recepto	r Sensitivity	Medium-Low					
Existing	View	<ul> <li>A roadside field entrance only permits this view in the direction of the site. However for the most part along this road, which angles at times within 900m north of the nearest proposed turbines, views in the direction of the site are impeded by roadside vegetation. In this scene, a tree-lined field boundary to the east (i.e. left) of the view i apparent, as is relatively open landscape elsewhere in the vista. From this marginally elevated location in relation to the site, views of the site are widely attainable including the tall, thin telecommunication tower within it.</li> </ul>					
Visual In	npact of	field boundary will partia On the western side of the above low vegetation, rot the location of the other levels to which each tur elements rotating less	ne of two halves. To the ea lly screen four of the prop he view, there will be an u tating clear of the skyline; a proposed turbines amon bine will be screened, the than 900m away, in t er, will result in the visual	osed turbines, to nambiguous view a turbine that will gst the trees. Des e presence of the andem with a	varying degrees. v of two turbines tend to highlight spite the varying ese large moving tall (stationary)		
	d wind farm	pact of					
		On balance, the magnitud	le of visual impact is consid	ered to be <b>Mediu</b>	ım.		
Summar	у		ent criteria and matrices sual impact is summarised		ection 15.2 the		
		Visual Receptor Sensitivity Visual Impact Magnitude Significance of Visu					
		Medium-low	Medium	Moderate			

Viewshee	Viewshed Reference Point			Viewing distance	Direction of View	
VP10	Local residence	Local residences at Cloonkeen townland			SW	
Represe	ntative of:	Local Community	views			
Recepto	r Sensitivity	Medium-Low				
Existing	View	This view is permitted by an approx. 10m-wide field entrance off this relatively quiet local road, and at a location that is marginally elevated in relation to the site. This results in relatively extensive and/or unimpeded views of most of the site, little more than 1km from the nearest proposed turbine. However, mostly along this road, dense roadside vegetation curtails views in the direction of the site. In the foreground, a pastoral field, an agricultural laneway and a two-storey residence are evident sloping down towards lower ground. A darker-hued, bog-like hollow can be perceived in the distance, which marks part of the site, upon which a tall thin telecommunications tower is discernible.				
Visual In	•	The proposal will present as an unambiguous view of a wind farm just over 1km from this roadside, visible across a darker-hued, bog-like hollow. It will be a prominent and noticeable middle ground feature of a vast sweeping view, and such large, moving elements near to here will draw attention to themselves. While it will introduce a much higher intensity of built development into this scene, the proposed turbines will not be spatially overbearing in this downhill view. Be that as it may, the visual presence is deemed to be dominant.				
thin proposed telecommunications mast, in a setting extent of the scheme and height of turbines, despite a n with the foreground dwelling and one instance of turb be an important part of the available vista and will be		Aesthetically, this will be a clear and legible view of the proposed turbines and a tall, thin proposed telecommunications mast, in a setting that can accommodate the extent of the scheme and height of turbines, despite a minor degree of scale disparity with the foreground dwelling and one instance of turbine overlap. The proposal will be an important part of the available vista and will be one of the most noticeable elements in it, appreciably reducing the visual amenity of the scene.		commodate the of scale disparity The proposal will		
		As a result, the magnitude of visual impact is considered to be <b>High-medium</b> .				
Summar	γ		ent criteria and matrices sual impact is summarised l		ection 15.2 the	
		Visual Receptor Sensitivity	Visual Impact Magnitude	Significance	of Visual Impact	
		Medium-low	High-medium	Moderate		

Viewshee	Viewshed Reference Point				Direction of View		
VP11	Cemetery at K	illabraher South townland		2.9km (T4)	E		
		Local Community	<i>i</i> views				
Representative of:		Amenity & Herita	age feature				
Receptor Sensitivity Medium							
Existing	View	east of this small local cer present day (i.e. recentl Unlike most locations a foreground vegetation s direction of the site but and beyond, for upwards views in the direction of	ely elevated in relation to metery, where burials appe y deceased community m long the roads in the cer surrounding this cemetery allows for commanding vio s of 180 degrees. However the site are very challengin he far east (i.e. left) of the e evident.	ar to have been n embers evident o ntral study area, does not obscu ews across the ce r, it is worth noti g to attain, owing	naintained to the on gravestones). the lack of any ire views in the entral study area ng that roadside g to a mid-height		
		The proposal will present at a modest but noticeable scale, offering clear and full visibility of the proposed turbines from this uphill locale. It will be a readily noticeable element in this vista, albeit in the context of a broad, sweeping vista. Thus, the visual presence of the proposal is deemed to be co-dominant.					
Visual Impact of proposed wind farm In terms of aesthetics, there will be a clear and legible view of the proposed from this location. There will be a minor overlap of turbine pairs, albeit w separation between them. It will not be spatially dominant or over-scaled, the underlying landform in this broad, productive landscape where wind to a common feature.				rs, albeit with spatial ver-scaled, relative to			
		As a result, the magnitude of visual impact is considered to be Medium-low					
Summar	Ŷ		ent criteria and matrices sual impact is summarised I		ection 15.2 the		
		Visual Receptor Sensitivity	Visual Impact Magnitude	Significance	of Visual Impact		
		Medium	Medium-low	Moderate-sl	ight		

Viewshee	Viewshed Reference Point			Viewing distance	Direction of View	
VP12	Dromina GAA	romina GAA club, Dromina			E/SE	
Representative of:       • Local Community views         • Amenity & Heritage feature         • Centres of population						
Recepto	r Sensitivity	Medium-Low				
Existing	View	village of Dromina. There most of the village, apart Beyond the Gaelic grour direction of the site. Pleas be supporters and, there	ral study area, this location is no potential of views of from isolated micro-locale nds, a low hill with strong se note: this location is at t efore, represents the wor pposed wind farms from Dro	the proposed turk s such as these G g treelines obscur he top of embank st of all worst c	oines from within AA club grounds. red views in the sment for would-	
Visual In propose	npact of d wind farm	Over 4.5km away, the blade tips of one turbine will be discernible from this location, though very unlikely to be noticed. Even if spotted, the proposal will have no impact upon the visual amenity of the scene.				
As a result, the magnitude of visual impact is considered         Summary       Based on the assessment criteria and matrices o         significance of residual visual impact is summarised below		s outlined at Se				
		Visual Receptor Sensitivity	Visual Impact Magnitude	Significance	of Visual Impact	
		Medium low	Negligible	Imperceptib	le	

Viewshed Reference Point				Viewing distance	Direction of View		
VP13	Housing deve	lopment, Buttevant		8.2km (T6)	NW		
Representative of:     • Centre of population							
Recepto	or Sensitivity	Medium-Low					
Existing	View	The context of this view is from marginally elevated terrain to the west of Buttevan town centre, at the most northern point (i.e. 'dead end' of a <i>cul de sac</i> housing development). In that regards, it represents the most likely unimpeded views, from the public sphere, in the direction of the site from Buttevant. To the northeast of this vista, the town's development can be easily seen, while otherwise sweeping pastoral fields and thick, tree-clad field boundaries can be seen. A distant turbine from the Rathnacally wind farm is discernible on the skyline.					
		To the northwest, partially above and partially between intervening treetops, the rotating blade tips of upwards of the three turbines will be partially visible, over 8km away. Although substantially screened, such moving blade sets amongst skyline elements may draw some attention from the onlooker. Overall, the visual presence is deemed to be sub-dominant to Minimal.					
tips rotating on the skyline amongst treetops, as there will be no those turbines' landscape positional context. Even if seen from t proposal will have no material impact upon the inherent visual an			Aesthetically, this view will present as a slightly ambiguous scenario, owing to blade tips rotating on the skyline amongst treetops, as there will be no visual context of those turbines' landscape positional context. Even if seen from this location, the proposal will have no material impact upon the inherent visual amenity, in a vista already informed by wind energy infrastructure.				
		As a result, the magnitude of visual impact is considered to be Low-negligible					
Summai	Based on the assessment criteria and matrices outlined at Section 15.2 the significance of residual visual impact is summarised below.				ection 15.2 the		
		Visual Receptor Sensitivity	Visual Impact Magnitude	Significance	of Visual Impact		
		Medium low	Low-negligible	Slight-imper	ceptible		

Viewshed	Viewshed Reference Point			Viewing distance	Direction of View	
VP14	R578 at Knock	illy townland		13.5km (T4)	NE	
Represei	ntative of:	Major route				
Receptor	r Sensitivity	Medium-Low				
Existing	View	challenging to attain in the terrain combining with ta along the R578, which co is reflective of such der	y area, unimpeded views in the south-western quadrant III/thick/densely-vegetated connects the village of Drom nse vegetative roadside so re theoretical visibility of the attainable.	of the wider stuc roadside hedgero ina with the town creening; in wha	dy area, owing to ows. This location n of Newmarket, t is one of few	
Visual Im proposed	npact of d wind farm	Owing to the aforementioned tall/thick/densely-vegetated roadside hedgerows, no views of the proposed development will be attainable from this location. Thus, the magnitude of visual impact is considered to be <b>Negligible</b> .				
Summar	y	Based on the assessment criteria and matrices outlined at <b>Section 15.2</b> the significance of residual visual impact is summarised below.				
		Visual Receptor Sensitivity	Visual Impact Magnitude	Significance	of Visual Impact	
		Medium-low	Negligible	Imperceptib	le	

Viewshee	Viewshed Reference Point			Viewing distance	Direction of View	
VP15	P15 N20 at Baltydaniel West townland			14.4 km (T6)	NW	
Represe	ntative of:	Major route				
Recepto	r Sensitivity	Medium-Low				
Existing ViewThis busy section of the N20, between Buttevant and Mallow, allows views (i.e. in a bare ground scenario) in the direction of the site f travelling north, albeit more than 10km from the site. However, ro vegetation tends to curtail views in the direction of the site along thi National Road.				e for road users robust roadside		
Visual In propose	npact of d wind farm	Owing to the aforementioned robust roadside vegetation, no views of the proposed development will be attainable from this location. As a result, the magnitude of visual impact is considered to be <b>Negligible</b> .				
Summar	у	Based on the assessment criteria and matrices outlined at <b>Section 15.2</b> the significance of residual visual impact is summarised below.				
		Visual Receptor Sensitivity	Visual Impact Magnitude	Significance	of Visual Impact	
		Medium-low	Negligible	Imperceptib	le	

Viewshed	Viewshed Reference Point				Direction of View	
VP16	Doneraile Esta	Doneraile Estate, Doneraile			NW	
<ul> <li>Heritage &amp; Amenity feature;</li> <li>Centre of population</li> </ul>						
Receptor	Sensitivity	Medium				
Existing	/iew	The context of this view is that of the stately and aesthetic Doneraile Estate, which aligns the northern side of the town of Doneraile and is set on the banks of the Awbeg river. The estate is, in effect, a well-managed public parkland under the stewardship of the OPW and used widely by the local community, in particular. The recently restored Doneraile Court dates from the 1720s, and is also open to the public. As with so many intact historical estates of that period, a thick (i.e. 50-100m) band of mature woodland borders the parkland, abutting the estate's boundary walls; mature trees that tend to obscure more distant views.				
	Visual Impact of proposed wind farm As a result, the magnitude of visual impact is considered to be Negligible.					
Summary Based on the assessment criteria and matrices ou significance of residual visual impact is summarised below						
		Visual Receptor Sensitivity	Visual Impact Magnitude	Significance	of Visual Impact	
		Medium	Negligible	Imperceptib	le	

Viewshee	Viewshed Reference Point			Viewing distance	Direction of View	
VP17	N20 at Ballyfo	okeen townland, Co. Lime	rick	12.8km (T1)	S/SE	
Represe	ntative of:	Major route				
Recepto	r Sensitivity	Medium-Low				
Existing ViewThis busy section of the N20, between Charleville and Limerick O theoretical views (i.e. in a bare ground scenario) in the direction of th users travelling south, albeit more than 10km from the site. However, in vegetation tends to curtail views in the direction of the site along the National Road.				the site for road , robust roadside		
Visual In propose	npact of d wind farm	Owing to the aforementioned robust roadside vegetation, no views of the proposed development will be attainable from this location. As a result, the magnitude of visual impact is considered to be <b>Negligible</b> .				
Summar	у	Based on the assessment criteria and matrices outlined at <b>Section 15.2</b> the significance of residual visual impact is summarised below.				
		Visual Receptor Sensitivity	Visual Impact Magnitude	Significance	of Visual Impact	
		Medium-low	Negligible	Imperceptib	le	

Viewshed Reference Point				Viewing distance	Direction of View		
VP18	Elevated road	at Gortroe Townland	15.3km (T2)	SE			
Representative of:         • Elevated residential views							
Recepto	r Sensitivity	Medium					
Existing	View	An isolated hillside rises in the north-western quadrant of the study area, about the townlands of Gortroe and Corronoher, approx. 15km northwest of the site. Several elevated south-facing residences are located across this hillside, and the location of this viewpoint is set before the entrance to one. In addition, there are multiple stretches along this road where an absence of tall or mid-height roadside vegetation allows for distant views in the direction of the site. Several of the existing turbines within the central study area are faintly discernible from this location.					
		Along with several of the existing turbines within the central study area, some of the proposed turbines will be faintly discernible to the stationary observer (e.g. residents rather than road users) from this location. However, distance over scale combined with the resulting low visual contrast across more than 15km will result in a visual presence of Minimal.					
Visual Impact of proposed wind farm When visible, the proposal will present with an unambiguous layout distant skyline. It is highly likely, however, that the proposed turbines viewed in tandem with the adjacent (existing) turbines. In that regard, and considerable distance, the proposed development will not have material in				When visible, the proposal will present with an unambiguous layout rising above distant skyline. It is highly likely, however, that the proposed turbines will only be viewed in tandem with the adjacent (existing) turbines. In that regard, and from this considerable distance, the proposed development will not have material impact upon the visual amenity of the scene.			
		As a result, the magnitude of visual impact is considered to be Low-negligible					
Summai	γ		ent criteria and matrices sual impact is summarised		ection 15.2 the		
		Visual Receptor Sensitivity	Visual Impact Magnitude	Significance	of Visual Impact		
		Medium	Low-negligible	Slight-imper	ceptible		

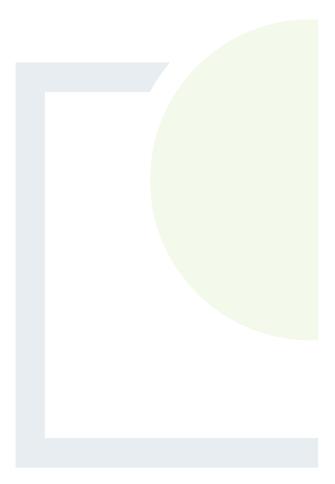
Viewshed	Reference Point			Viewing distance	Direction of View	
VP19	Lough Gur	-		27.4km (T1)	SW	
Poproso	atativo of:	Key view				
Representative of:		Amenity and her	itage feature			
Receptor	r Sensitivity	High-medium				
Existing View		renowned, located in so the nearest proposed tu	ex is a site of internation outhern Co. Limerick. Altho rbine (and, therefore, app on this Visual Impact Asses	ough located app rox. 7km outside	prox. 27km from the study area),	
		The Lough Gur complex is centred on a shallow, horseshoe shape at the base of Knockadoon Hill, with a lakeside visitor centre, car park. However, the largest stone circle in Ireland, and accompanying dolmen and the remains of stone age houses, is located to the north of the lake. Closer to the lake there is also a (Castle) Tower House and the ruins of a Norman Castle (Black Castle). The lake and the surrounding area is known to be one of Ireland's most important archaeological sites, with humans having lived here continuously since Neolithic times (i.e. the last 5000-6000 years).				
		A short lakeside walk terminates with a short, steep walk up a wooded hillside that looks down over the lake. From this viewing location (i.e. the location of this viewpoint), beside some benches, distant views in the direction of the site can be availed. However, it is worth noting that this elevated location - only attained at the end of this pathway - is the only section of the complex that is accessible to the public, which experiences potential visibility of the proposed development (i.e. even in a bare ground scenario, the other elements and areas of the Lough Gur complex will experience not potential views of the proposed turbines).				
Visual Im	npact of	turbines will be faintly However, distance over s and an engaging lower fo	turbines within the central discernible to the station cale, the resulting low visua pre-to-middle ground will m us, its visual presence is de	ary observer fro al contrast across ean the proposed	m this location. more than 27km d development is	
proposed wind farm		Where and when visible, the proposed development will present with an unambiguous layout rising above a much distant skyline. However, it will remain very much a far-flung feature of this rural context that will be barely and infrequently visible.				
		As a result, the magnitude of visual impact is considered to be Low-negligible.				
Summar	y		ent criteria and matrices sual impact is summarised l		ection 15.2 the	
		Visual Receptor Sensitivity	Visual Impact Magnitude		of Visual Impact	
		High-medium	Low-negligible	Imperceptib	le	



CONSULTANTS IN ENGINEERING, ENVIRONMENTAL SCIENCE & PLANNING

# **APPENDIX 15.2**

LVIA Maps



## LVIA viewpoint locations selected for the Annagh Wind Farm project

