

Mynydd Llanhilleth Wind Farm

Appendix 6L: Schedule of Effects on Promoted Routes and National Cycle Network

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- 1.1 This appendix sets out the predicted visual effects of the Proposed Development for receptor groups using promoted routes and the National Cycle Network within the study area. The visual assessment has been conducted in accordance with the methodology included at **Appendix 6A** of the Environmental Statement.
- 1.2 This appendix should be read in conjunction with the following which are included at **Appendix 6B** of the Environmental Statement:
- **Figure 6.7** ZTV to blade tip;
 - **Figure 6.8** ZTV to hub height;
 - **Figure 6.12** LVIA Photoviewpoints; and
 - **Figure 6.18** Promoted Routes and Cycle Ways.
- 1.3 The chosen routes that have been assessed herein are as follows:
1. Torfaen Trail;
 2. Cistercian Way;
 3. Usk Valley Walk;
 4. Rhymney Valley Ridge Way;
 5. Beacons Way;
 6. Offa's Dyke Path (National Trail); and
 7. Sustrans National Cycle Network.
- 1.4 **Table EDP 1.1** below provides an overview of the effects and then each route is discussed thereafter.

Table EDP 1.1: Promoted Routes and NCN Summary of Effects.

Route	Sensitivity	Magnitude of Change	Level of Effect	Significance
Torfaen Trail	High	Low	Moderate/Minor	Not Significant
Cistercian Way	High	Imperceptible	Negligible	Not Significant
Usk Valley Walk	High	Very low	Minor	Not Significant
Rhymney Valley Ridge Way	High	Low	Moderate/Minor	Not Significant
Beacons Way	Very high	Very low	Moderate/Minor	Not Significant
Offa's Dyke Path (National Trail)	Very high	Imperceptible	Negligible	Not Significant
Sustrans National Cycle Network	High	Very low to Imperceptible	Minor to Negligible	Not Significant

1.5 To aid the visual assessment, computer modelling has been used to calculate how much of any individual route falls within the Zone of Theoretical Visibility (ZTV) study area. The ZTVs used are based on bare earth modelling, therefore they do not take intervening landform or vegetation into account. Desktop analysis and/or a ground truthing exercise has been conducted to further understand the likely extent of the visual envelope. The percentage coverage reported below gives a 'worst-case' of the extent of the routes that fall within the ZTV. In reality, this percentage is reduced by the screening effects of vegetation and/or built form.

1.6 The routes summarised above are described and assessed below.

Routes within 5km

Torfaen Trail

Table EDP 1.2: Summary of Visual Effects on Torfaen Trail.

Torfaen Trail	% Within ZTV to Tip	Sensitivity	Magnitude of Change
The Torfaen Trail is a 56km figure of eight route that stretches across most of Torfaen, with the centre of the figure of eight located within Pontypool.	39% (of the whole route)	High	Low
Level of Effect Type of effect	Moderate/Minor Long-term (reversible), adverse and Not Significant		

1.7 All of this route is within the study area and approximately 39% of the route is located within the blade tip ZTV. The locations where the route overlaps with the ZTV are along higher ground, from west facing slopes and the open upland commons.

1.8 The longest stretch of the route located within the ZTV is to the east along a ridgeline. This part of the route is located c.2.9km to the nearest turbine proposed. From this ridgeline, the longest

continuous stretch of the route that passes through open land (and therefore likely to gain views) is c.2.56km long, passing to the west of Mynydd Garnclochy. Views from this part would, however, be oblique. This part of the route also passes through woodland (a land feature not considered in the ZTV) therefore views to the Proposed Development are likely to be screened in part. Further south along the ridge (beyond Lasgarn Wood), there may be intermittent views gained towards the Proposed Development, however these would also be oblique. Views towards the proposals diminish as the route drops into Pontypool and built form and vegetation intervenes.

- 1.9 The western part of the route between Pontypool and Blaenavon is the section that comes within the closest proximity of the Site (c.1.3km east from the nearest turbine proposed). Some direct views would be available when passing over higher, open ground. The route passes around the eastern edges of the plateau to the east and north-east of the Site, before crossing Coety Mountain. The path falls within the ZTV along the eastern edges of the plateau and along high ground at Coety Mountain. Where it passes to the east of plateau, it moves through scattered woodland, and it is likely that the Site would be screened intermittently. Where the route crosses Coety Mountain to the north, it passes through open upland with long, panoramic, and direct views. It is likely that the Proposed Development would be visible along the full extent of this path where it crosses Coety mountain through the ZTV. The northern part of the route, where it drops into the valley at Blaenavon, is outside the ZTV. Lastly, the majority of the southern half of the route is outside of the ZTV, therefore views to the proposals would be screened by landform.
- 1.10 As a locally promoted route, the Torfaen Trail is of high value. The route passes through a variety of landscapes including open and exposed upland, woodland, and urban areas. There are short stretches where changes to views would be significant as a result of the Proposed Development. For example, where there are open views and the full array would be visible, a **major/moderate** adverse effect was found. **PVPs 12 and 18 (Figure 6.12)** represent two views with significant impacts from the Torfaen Trail.
- 1.11 For the route as a whole, however, the susceptibility of the receptor is medium. The overall sensitivity is therefore considered to be high. The extent to which the Site would be visible along the route is limited almost entirely to the northern half of the figure of eight, and further still by intervening vegetation and topography. Views would mostly be oblique, however there would be some direct views from the route to the north of the Site as represented by **PVP 18 (Figure 6.12)**. The proposals would form a new element in available views, some are direct and some oblique, while the majority of the route would experience no change at all.
- 1.12 Furthermore, direct views would be limited to one direction of travel for a relatively short stretch. Given the reduced extent of visibility and the proportion of views likely to be affected by the proposals from the route as a whole, the magnitude of change is considered low. The level of effect to users of the route overall is considered be **Moderate/Minor** and Not Significant.

Routes between 5 - 15km

Cistercian Way

Table EDP 1.3: Summary of Visual Effect to Cistercian Way.

Cistercian Way	% Within ZTV to Tip	Sensitivity	Magnitude of Change
The Cistercian Way is a 1000km circular long-distance heritage footpath that extends across Wales. The south-eastern section of this route passes through the 26km study area. It passes the Site to the south, south of Caerphilly, through Cwmbran, and just north-east of Newport. It continues east beyond the 26km study area to the Wye Valley, before re-entering to the north-east (beyond 15km).	3% <i>(of the whole route)</i>	High	Imperceptible
Level of Effect Type of effect	Negligible Long-term (reversible), adverse and Not Significant		

- 1.13 The route passes through both the Brecon Beacons National Park and the Wye Valley AONB, however it does not fall within the ZTV where it passes through the BBNP; and, within the AONB, it falls within the ZTV only briefly. As a whole, only circa 3% of the route falls within the blade tip ZTV, and this is further reduced where the hub ZTV is concerned. Of the length of the route that falls within the broad study area, circa 20% falls within the blade tip ZTV. This, however, is further reduced by the screening effects of the built form and/or vegetation. Where the route passes through built-up areas, it is likely that the Proposed Development will be screened or heavily filtered.
- 1.14 Within 15km of the Site, the route falls within the ZTV for a short stretch, just north-east of Newport at Chepstow Hill. Here the route passes through some woodland, which would limit views to short stretches beyond the woodland edge and intermittent glimpses through the vegetation. Views would also be mostly oblique. Beyond 15km, to the south-east of the Site, the route mostly passes through woodland as it overlaps with the ZTV. Views of the proposals would only be gained along short stretches of open countryside. To the north-east of the Site, some 18km away, the route passes through woodland and agricultural land. Where it passes through woodland, there are unlikely to be views. The upper parts of the Proposed Development would appear intermittently or in filtered views, and in most cases, in oblique views.
- 1.15 The value of the route is considered to be very high, as a cultural heritage route that traverses the country and passes through both the AONB and BBNP. The users of the route may be less susceptible to change, due to the varied landscape and townscape through which it passes and the established presence of wind energy production in South Wales that would likely be present in views along the route in the south. The susceptibility of this receptor is medium to high. It is considered, therefore, that the sensitivity of this receptor is high.

- 1.16 In the worst case, users of the route may experience direct views towards the Site for a short period at approximately 15km from the nearest turbine. The Proposed Development would form a minor constituent of the view and the magnitude of change to these users would be very low.
- 1.17 Given the limited intervisibility anticipated and the relative distance of views likely to be affected by the proposals from the route as a whole, the magnitude of change is considered Imperceptible. The level of effect to users of the route, overall, is considered be **Negligible**.

Usk Valley Walk

Table EDP 1.4: Summary of Visual Effect to Usk Valley Walk.

Usk Valley Walk	% Within ZTV to Tip	Sensitivity	Magnitude of Change
The Usk Valley Walk is a 77km locally promoted route that connects Caerleon to Brecon along the Usk valley, passing through Usk and Abergavenny.	21% <i>(of the whole route)</i>	High	Very low
Level of Effect Type of effect	Minor Long-term (reversible), adverse and Not Significant		

- 1.18 The route is approximately 10km north-east of the Site at its closest point (where it is outside the ZTV). The route passes through the Brecon Beacons National Park and through the north-east edge of Blaenavon World Heritage Site. Where this route passes through these designated areas, it does fall within the ZTVs (to tip or to hub). Due to the route’s position (within a valley), the extent to which the Site would be visible from the route is very limited. Furthermore, woodland is a common feature of the valley slopes, which provides screening in some places where the route does fall within the ZTV.
- 1.19 The direction of the route infers that views towards the Site that are available will all be oblique. The extent of the route that falls within the ZTV to tip is c.21% and, within the hub ZTV, is reduced further by approximately 5%. Possible, oblique views of the Proposed Development from these areas would be limited, distant views from over 10km; however, significant effects are deemed unlikely even from short stretches of the path as typically, the route follows lower contours along vegetated water courses and minor roads.
- 1.20 This route is considered of very high value overall. The susceptibility of the user is high as the route generally passes through rural countryside, with only some parts passing through urban areas. The overall sensitivity of this receptor is high.
- 1.21 The Proposed Development would be barely noticeable in filtered views from this route and in most cases (along at least 75% of the route) would be completely screened.
- 1.22 Given the limited intervisibility anticipated and the relative distance of views likely to be affected by the proposals from the route as a whole, the magnitude of change is considered very low. The level of effect to users of the route, overall, is considered be **Minor** and Not Significant.

Rhymney Valley Ridge Way

Table EDP 1.5: Summary of Visual Effect to Rhymney Valley Ridge Way.

Rhymney Valley Ridge Way	% Within ZTV to Tip	Sensitivity	Magnitude of Change
The Rhymney Valley Ridgeway Walk is a 45km circular walk that follows the ridgelines of the Rhymney Valley around Caerphilly.	44% <i>(of the whole route)</i>	High	Low
Level of Effect Type of Effect	Moderate/Minor Long-term (reversible), adverse and Not Significant		

- 1.23 The route falls within the tip and hub ZTVs intermittently as it dips in and out of the valley from the ridgeline. At its nearest point, the route comes within c.9.5km of the nearest proposed turbine. Where the route overlaps with the ZTV, parts pass through woodland where views towards the Proposed Development would be screened.
- 1.24 Views from the north-western part of the route, which broadly follows the 10km distance band, are represented by **PVP 24 (Figure 6.12)**. Where the route falls within the ZTV along this stretch, it generally crosses through open countryside, with a short stretch that follows the boundary of a woodland where views may be screened. This part of the route also passes existing turbines, one of which is as close as c.100m from the route. Views from this part of the route would generally be oblique.
- 1.25 The western part of the route (from Penbryn to Caerphilly) passes in and out of the valley. Where it runs onto higher ground, it falls within the ZTV. Along the higher ground the routes generally pass through open countryside, where screening is limited to that provided by hedgerows and hedgerow trees. Where views are available towards the proposals from this part of the route, they would occasionally be direct but for the majority, views would be oblique.
- 1.26 The southern section of the route passes in and out of woodland. Where it falls within woodland, it is likely that and views to the Site would be screened. Views from this route would mostly be oblique.
- 1.27 The Rhymney Valley Ridge Walk does not pass through any nationally designated landscapes. Its value is found in the local value of the route itself. The route is of high value. Although the route passes through open countryside along the ridges, it also dips into urban areas. Furthermore, the route directly passes two existing wind turbines and (as represented in **PVP 24 (Figure 6.12)**) solar development. The susceptibility of the receptor is considered to be medium. The overall sensitivity of the receptor is high.
- 1.28 There is potential for significant effects from very discrete parts of this route, although from the views investigated, no significant effects were found. Overall, the Proposed Development would be screened and filtered, and when seen it would only form a minor constituent of the view. This is due to a combination of distance and orientation; the mostly oblique direction of views

available would be limited to less than half of the route. The magnitude of change is considered low overall. The level of effect to users of the route overall is considered be **Moderate/Minor** and Not Significant.

Beacons Way

Table EDP 1.6: Summary of Visual Effect to Beacons Way.

Beacons Way	% Within ZTV to Tip	Sensitivity	Magnitude of Change
The Beacons Way is a 159km route that passes through the length of the Brecon Beacons National Park from Abergavenny to Llangadog. The extent of the route located within the 26km study area is approximately 74.5km.	7% <i>(of the whole route)</i>	Very high	Very low
Level of Effect Type of Effect	Moderate/Minor Long-term (reversible), adverse and Not Significant		

- 1.29 At its nearest point, the route is located some 12.8km from the nearest proposed turbine. The extent of the route located within the 26km study area is approximately 74.5km. Of this, c.15% falls within the tip ZTV and c.5% falls within the hub ZTV. This is due to the route passing in and out of valleys where screening is provided by the surrounding hills. Where the Proposed Development is likely to be visible is from high points along the route, including The Skirrid, Hatterrall Hill, Garn Wen, Crug Mawr, Table Mountain, and Gwaun Cerrig Llwydion. These points are located between 15 and 26km from the Site. Within the valleys and along valley slopes however, the Proposed Development would not be perceptible from the route.
- 1.30 The nearest of the high points that views towards the Site would be gained from, is at The Skirrid. The most distant points that views towards the Site would be gained, is from Gwaun Cerrig Llwydion (represented by **PVP 30 (Figure 6.12)**). Both high points fall within the hub ZTV, where it is likely that the hubs of the turbines would be visible. The remaining high points are located only within ZTV to tip and views of the Proposed Development would be limited to the blades of the proposed turbines. Panoramic views are available from The Skirrid, Table Mountain, and Gwaun Cerrig Llwydion and the field of view affected by the proposals would be a small proportion of the views available.
- 1.31 Passing through a nationally designated landscape, the Beacons Way is of very high value. The route passes through a range of landscapes, often remote and mostly rural. The susceptibility of the receptor is very high. The sensitivity of receptors using the Beacons Way is therefore very high.
- 1.32 As the extent of the route from which views to the proposed turbines could be gained is very limited, and with the consideration of the distance between the route and the Proposed Development; the Proposed Development would form a barely noticeable change to the route as a whole. The magnitude of change would therefore be very low. The level of effect to the route overall is considered **Moderate/Minor** and Not Significant.

Routes between 15 - 26km

Offa's Dyke Path National Trail

Table EDP 1.7: Summary of Visual Effect to Offa's Dyke Path.

Offa's Dyke Path	% Within ZTV to Tip	Sensitivity	Magnitude of Change
Offa's Dyke Path is a National Trail extending 285km from Sedbury Cliffs to Prestatyn. It broadly follows the Dyke King Offa, passing through multiple counties and regularly crossing between Wales and England.	4% <i>(of the whole route)</i>	Very high	Imperceptible
Level of Effect Type of Effect	Negligible Long-term (reversible), adverse and Not Significant		

- 1.33 The route passes through both the Wye Valley AONB and the BBNP. At its closest point, the route is c.18.6km from the nearest proposed turbine. Roughly 31km of the 285km is located within the broad study area, and 15% of which falls within the tip ZTV.
- 1.34 Where the route falls within the hub ZTV, it passes through woodland. It is likely that views to the Site from this part of the route would be screened, with only glimpsed views through gaps in the woodland and from beyond the woodland edge. As the route moves broadly north-west, only the tips of the turbines would be visible at limited points, where the path rises onto higher ground through open countryside. Views from this route would mostly be oblique with some direct views.
- 1.35 Due to its national designation, the route is of very high value. The route passes through a variety of landscapes, although most are rural landscapes. The susceptibility of receptors using the national trail is considered to be high. The sensitivity of the receptor is, therefore, very high. As only a short stretch of the route would experience a change to views from a considerable distance, and due to the greater length that remains unaffected, the magnitude of change to the route overall would be imperceptible. The level of effect on the route, overall, is considered **Negligible**.

Sustrans National Cycle Network (NCN)

- 1.36 A series of National Cycle Routes (NCR) were identified within the blade tip ZTV as part of the baseline data trawl. NCR within the LVIA study area, which have been considered further as part of the LVIA assessment, are as follows:

Within 5km:

- NCR49;



- NCR465;
- NCR466; and
- NCR492;

Between 5–15km:

- NCR46;
- NCR47;
- NCR423; and
- NCR467;

Between 15–26km:

- NCR4; and
- NCR42.

Sensitivity of Receptors using the NCN

1.37 As a national network, the network is of very high value. Although receptors using these routes may be doing so for the appreciation of the landscape, it is unlikely that this would be the sole intention. It is also common for routes to pass through urban areas as well as rural landscapes. Receptors using the routes tend to travel at speeds that render experiences transient. Furthermore, it is likely that those using the route would have a certain level of focus towards the direction of travel. **Table 1.8** provides a summary of the likely visual effects to the network as a whole.

Table EDP 1.8: Summary of Visual Effect to National Cycle Network.

National Cycle Network	% Within ZTV to Tip	Sensitivity	Magnitude of Change
The National Cycle Network (NCN) is a network of signed paths across the UK.	15% (of the network within 26km)	High	Very low to Imperceptible
Level of Effect Type of Effect	Minor to Negligible Long-term (reversible), adverse and Not Significant		

Effects to NCN Users up to 5km

1.38 Generally, NCN routes within 5km of the Site fall within the valleys; therefore, users would not gain views towards the Site from these parts of the routes. To the east, route 492 passes through Pontypool and north along the Lwyd Valley. Within Pontypool and other urban areas along this



route, views of the turbines would be intermittent glimpses between buildings (as represented by **PVP 9 (Figure 6.12)**). Where the route moves out of the urban areas (to the west of Pontypool and Abersychan), the route is well treed on both sides and views will likely be filtered and screened. As it traverses north of Talywain it moves through woodland where views are likely to be almost entirely screened.

- 1.39 To the south, route 466 connects Pontypool with Swffryd, adjacent to the A472. This route passes mostly through woodland and at points through urban areas. Views are likely to be filtered and screened by buildings and woodland along the route. After a break in the route, it continues from Aberbeeg north through the Ebbw Valley. This part of the route also passes mostly through woodland and most views would be screened or filtered.
- 1.40 To the west, route 465 connects north from Llanhilleth through Abertillery. Generally, as with the other routes, route 465 passes through urban and wooded areas. Views towards the Site would be filtered and screened along much of the route.
- 1.41 The introduction of the proposed wind turbines would be barely noticeable to users of the NCN within 5km of the Site. The magnitude of change would be very low and the resulting level of effect **Minor** and Not Significant.

Effects to NCN Users Beyond 5km

- 1.42 Beyond 5km of the Site, the NCN routes rarely fall within the ZTV, they generally follow the pattern and distribution of the settled valley bottoms. Furthermore, there are few occasions where the routes of the NCN are directed towards the Site. The magnitude of change to users of these routes would not be any greater beyond 5km than it is within 5km of the Site; and with distance, the magnitude of change would diminish. For NCN within 5-26km, the magnitude of change would be imperceptible and the level of effect **Negligible** and Not Significant.
- 1.43 In summary, the predicted effects on each receptor group using a path or network named above has been assessed herein. The findings show that of the routes assessed within 26km, none are considered to have significant effects overall as a result of the proposals assessed herein.