

# Pell Frischmann

Dyrick Hill Wind Farm

Abnormal Indivisible Load Route Survey

December 2021

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**Prepared for**

**EMPower**

Head Office  
2 Dublin Landings  
North Wall Quay  
North Dock  
Dublin  
D01 V4A3

**Prepared by**

**Pell Frischmann**

93 George Street  
Edinburgh  
EH2 3ES



Pell Frischmann



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# 1 Introduction

## 1.1 Purpose of the Report

Pell Frischmann (PF) has been commissioned by Emerging Markets Power (NI) Limited (EMPower) to undertake a study of the delivery route for wind turbine Abnormal Indivisible Loads (AIL) associated with the construction and development of Dyrick Hill Wind Farm, located to the west of Curradoon, County Waterford, Ireland.

The Route Survey Report (RSR) has been prepared to help inform EMPower on the likely issues associated with the development of the site with regards to off-site transport and access for AIL traffic. The report identifies the key issues associated with AIL deliveries and notes that remedial works, either in the form of physical works or as traffic management interventions will be required to accommodate the predicted loads.

The detailed assessment and subsequent designs of any remedial works are beyond the agreed scope of works between PF and EMPower at this point in time.

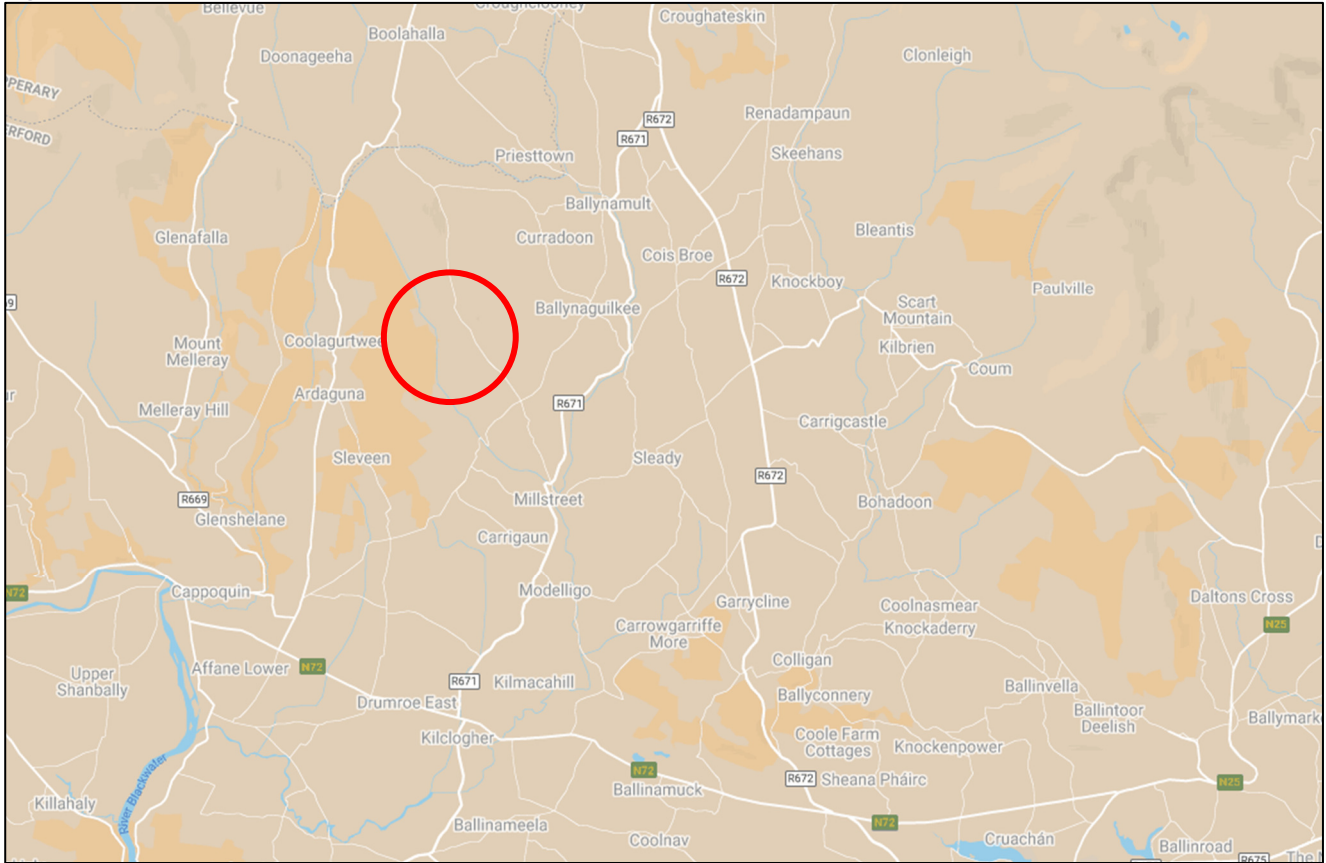
It is the responsibility of the wind turbine supplier to ensure that the entirety of the proposed access route is suitable and meets with their satisfaction. The turbine supplier will be responsible for ensuring that the finalised proposals meet with the appropriate levels of health and safety consideration for all road users has been made in accordance with the relevant legislation at the time of delivery.

## 2 Site Background

### 2.1 Site Location

The development site located to the west of Curradoon, County Waterford, Ireland. Figure 2-1 illustrates the general site location.

**Figure 2-1: Site Location Plan**



### 2.2 Candidate Turbine

EMPower have indicated that they wish to consider the worst case components from a Vestas V162 turbine at a hub height of 122.5m.

The details of the components have been provided by the turbine manufacturers and are detailed in Table 2-1.

**Table 2-1: Turbine Components Summary**

Component	Length (m)	Width (m)	Height / Min Diameter (m)	Weight (t)
Blade	81.100	4.500	4.000	27.100
Base Tower	17.430	(4.450) 4.150	4.189	80.100
Mid Tower 1	24.920	4.189	4.178	76.900
Mid Tower 2	29.960	4.178	4.166	66.500
Top Tower	30.000	4.166	4.008	56.800

Following review of the turbine dimensions it was decided that the assessment should be based on the V162 Blade and Mid Tower 2 length (combined with the Base Tower width) in order to represent the worst-case components

## 2.3 Proposed Delivery Equipment

To provide a robust assessment scenario based upon the known issues along the access route, it has been assumed that all blades would be carried on a Superwing Carrier trailer to reduce the need for mitigation in constrained sections of the route.

Figure 2-2: Superwing Carrier Trailer



The base and mid towers would be carried on a 4+7 clamp trailer. The hub, nacelle housing, and top towers would be carried on a six-axle step frame trailer.

Figure 2-3: Tower Trailer





### 3 Access Route Review

#### 3.1 Access Route

Due to travel restrictions associated with the Covid 19 outbreak, all results described below are based upon a desk top assessment of the access route as agreed with EMPOWER. Previous experience of sections of the route has been utilised as part of the assessment. A full site visit will be required to confirm that all constraints have been noted on the route.

The nearest, suitable Port of Entry (PoE) for the site is Bellview Port, Waterford. Loads can be offloaded by geared vessels or onshore mobile cranes. The harbour has been used for delivery of components for a number of windfarms including Meenwaun and Tullahennel wind farms.

#### 3.2 Proposed Access Route

EMPOWER have requested that two potential routes are reviewed. Both options share the same route from the port to POI 8 located at Ballymacmague.

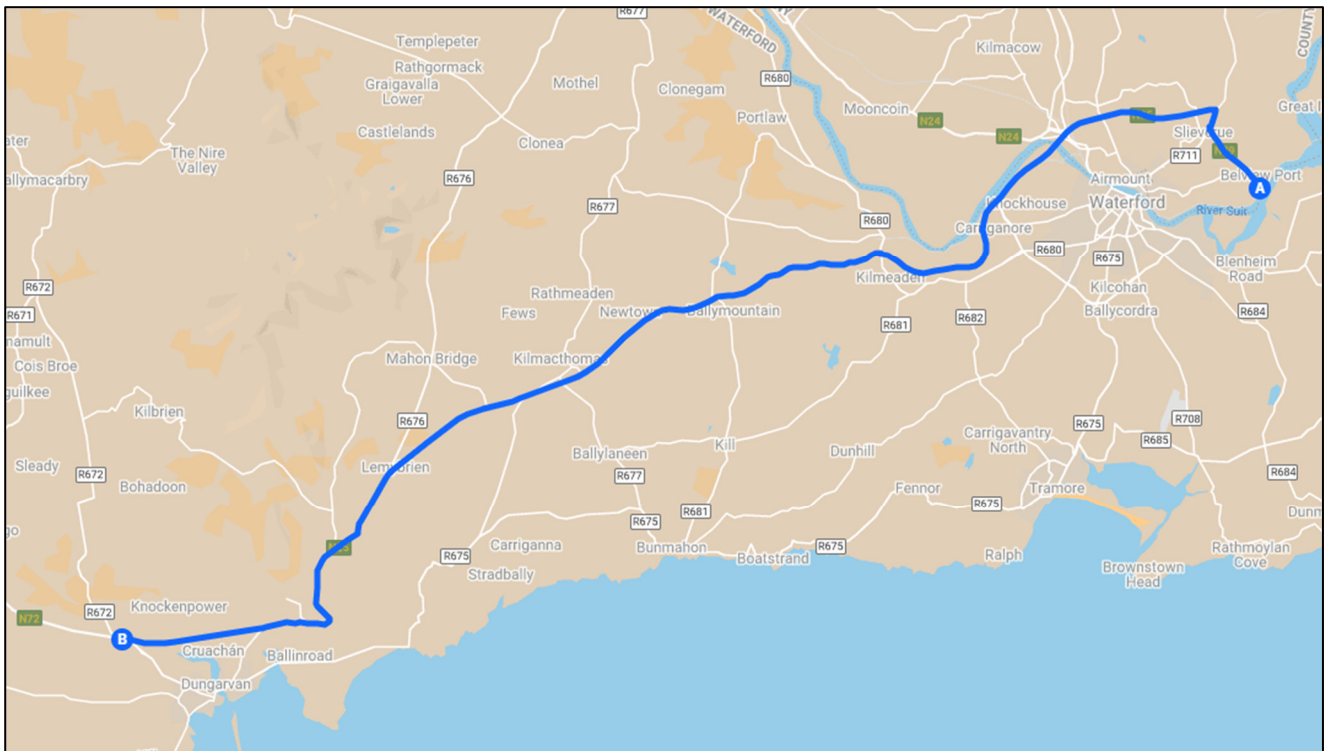
##### 3.2.1 Shared Route from Waterford Port

The proposed shared route from Waterford Port is detailed below:

- Loads would depart the port and join the N29 travelling north west;
- Loads will turn left and join the westbound N25; and
- Loads will turn right onto the N72 and continue west to Ballymacmague.

The proposed access route is illustrated below.

Figure 3-1: Shared Access Route



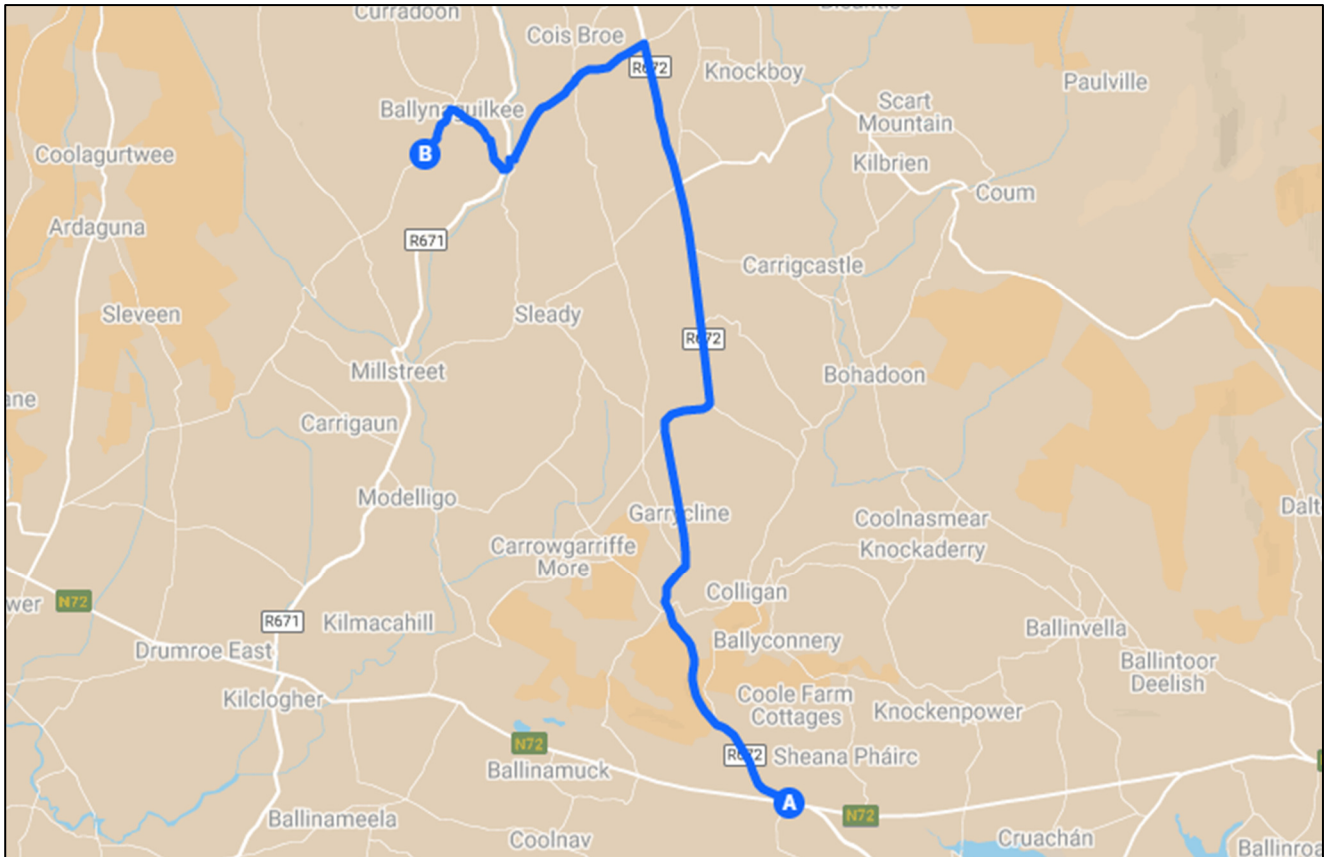
### 3.2.2 Route 1 – Eastern Route

The proposed eastern access route to site is detailed below:

- Loads will turn right onto the R672 and travel north west;
- Loads would turn left onto the L5071 leading west; and
- Loads will turn right and follow the unclassified road to the proposed site entrance.

The proposed access route is illustrated below.

**Figure 3-2: Proposed Access Route 1**



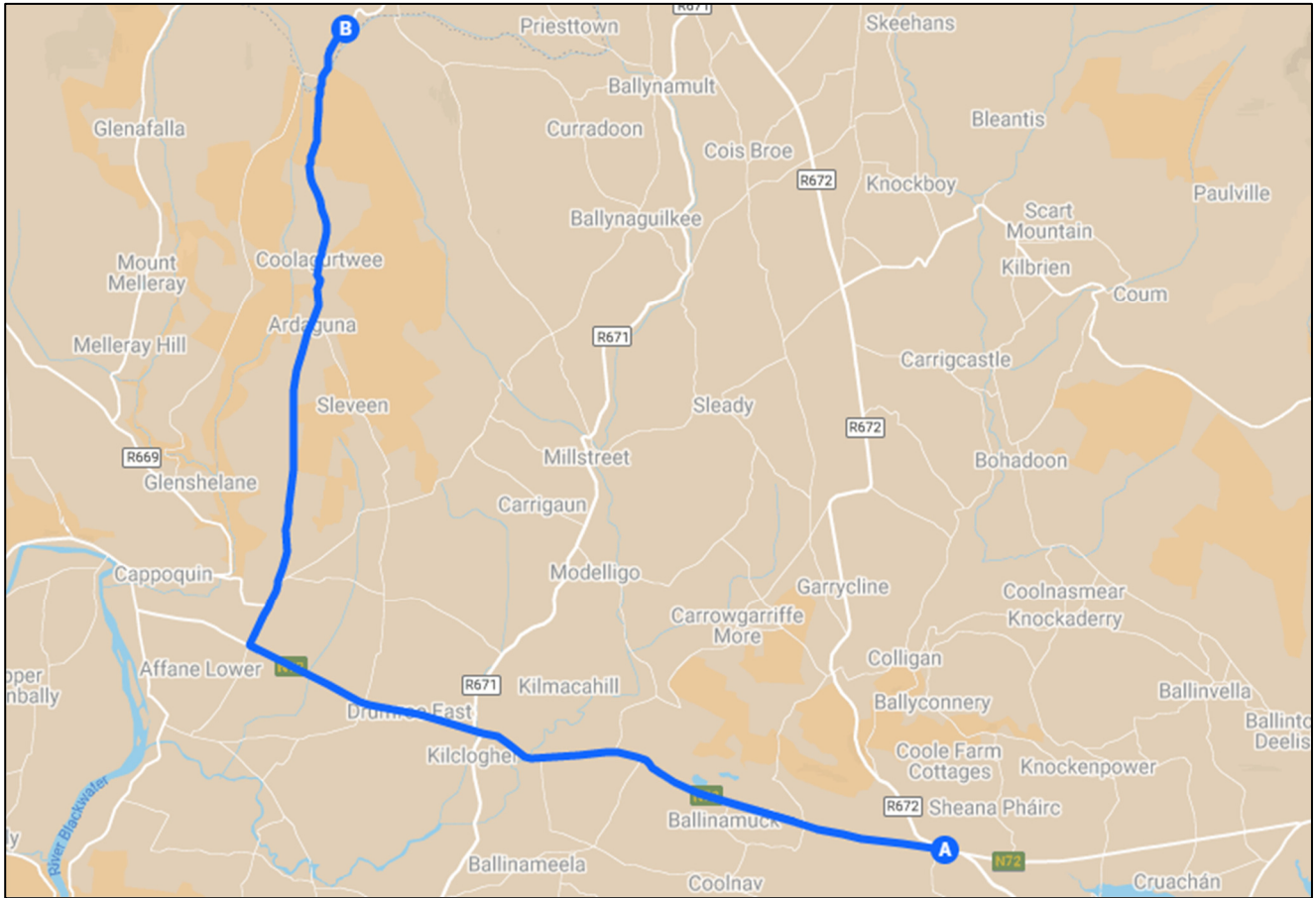
### 3.2.3 Route 2 – Western Route

The proposed western access route to site is detailed below:

- Loads will continue west on the N72 to Affane and turn right onto the L1027; and
- Loads will continue north to the proposed site entrance.

The proposed access route is illustrated in Figure 3-3.

Figure 3-3: Proposed Access Route 2





### 3.3 Route Constraints

The constraints noted on the routes are provided in the tables below. These cover all constraints from the port access gate through to the site access junction. No consideration of the transport issues within the development site have been undertaken and this includes the design of the site access junction.

Plans illustrating the location of the constraints are provided in Appendix A.

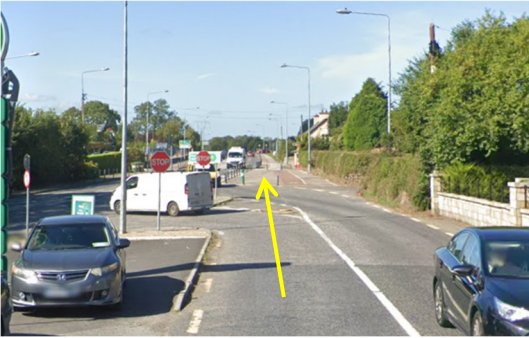
#### 3.3.1 Combined Route Constraints

**Table 3-1: Constraint Points and Details**

POI	Key Constraint	Details
<p>1</p>	<p><b>Bellview Port Exit, Waterford</b></p> 	<p>Loads will exit Bellview Port and continue onto the N25.</p> <p>It is recommended that at topographical survey is completed and the swept path assessment repeated to confirm the mitigation required to exit the port.</p> <p>A swept path assessment has been undertaken and indicates that loads will utilise the container storage area to allow for a more suitable approach to the level crossing at the exit. The area will need to be cleared of all obstacles and a load bearing surface laid to allow movement over the railway sidings and crane running line. It is strongly recommended that early discussions are held with the port authority to ensure that they are content with the proposed mitigation measures.</p> <p>Once past the level crossing, loads will overrun and oversail the north eastern verge where a load bearing surface should be laid and the gates, fence and posts should be removed. Loads will contraflow past the guard house and the traffic island should be cleared and provided with a load bearing surface. Existing utilities should be protected.</p> <p>Swept path assessment SK01 is included in Appendix B.</p>
<p>2</p>	<p><b>N29 Slieverue Roundabout</b></p> 	<p>Loads will take the 3<sup>rd</sup> exit from the roundabout.</p> <p>A swept path assessment has been undertaken and indicates that loads will overrun the approach and exit road splitter islands where load bearing surfaces should be laid and five road signs should be removed.</p> <p>Loads will overrun and oversail the roundabout island where a load bearing surface should be laid and the surface should be reprofiled to carriageway level. One road sign should be removed.</p> <p>Swept path assessment SK02 is included in Appendix B.</p>





POI	Key Constraint	Details
3	<p><b>N25 Luffany Roundabout</b></p> 	<p>Loads will take the 1<sup>st</sup> exit from the roundabout.</p> <p>A swept path assessment has been undertaken and indicates that loads will overrun and oversail the approach road splitter island where a load bearing surface should be laid and four road signs should be removed. Loads will oversail the eastern verge on approach to the roundabout where the blade tip will pass over the safety barrier. All traffic movements should be held.</p> <p>Loads will overrun and oversail the south western edge of the roundabout where a load bearing surface should be laid and one road sign should be removed.</p> <p>Loads will oversail the verge on the inside of the left turn. The loads suspension should be raised to allow oversail of the safety barrier. One road sign and one lighting column should be removed.</p> <p>Swept path assessment SK03 is included in Appendix B.</p>
4	<p><b>N25 Toll Booth</b></p> 	<p>Loads will pass through the toll booth on the N25 north of Waterford.</p> <p>Loads should utilise the wide load lane when passing through the gates.</p>
5	<p><b>N25 Carrick Road Roundabout</b></p> 	<p>Loads will continue straight through the roundabout.</p> <p>A swept path assessment has been undertaken and indicates that loads will overrun and oversail through the southern half of the roundabout island where a load bearing surface should be laid and the island should be reprofiled. One road sign should be removed.</p> <p>Swept path assessment SK04 is included in Appendix B.</p>
6	<p><b>N26 / N72 Junction</b></p> 	<p>Loads will depart the N25 and turn right onto the N72.</p> <p>A swept path assessment has been undertaken and indicates that loads overrun and oversail the northern verge on the inside of the right movement. A load bearing surface should be laid and two road signs should be removed.</p> <p>Swept path assessment SK05 is included in Appendix B.</p>

POI	Key Constraint	Details
7	<b>N72 / R672 Junction</b> 	<p>Loads will turn right at the junction.</p> <p>A swept path assessment has been undertaken and indicates that loads will utilise the existing hatched overrun area to the north of the junction. The traffic bollards should be removed.</p> <p>Swept path assessment SK06 is included in Appendix B.</p>




### 3.3.2 Route 1 Constraint Points




Table 3-2: Constraint Points and Details – Route 1



POI	Key Constraint	Details
8	<b>N72 / R672 Junction Master McGrath Monument</b> 	<p>Loads will turn right at the junction onto the R672.</p> <p>A swept path assessment has been undertaken and indicates that loads will oversail the southern verge on approach to the junction however no mitigation is required.</p> <p>Loads will overrun and oversail the north eastern verge on the inside of the right turn where a load bearing surface should be laid, and three road signs and two bollards should be removed.</p> <p>Swept path assessment SK07 is included in Appendix B.</p>
9	<b>R672 East of Ballylemon Lower</b> 	<p>Loads will continue north on the R672.</p> <p>A swept path assessment has been undertaken and indicates that loads should be raised using the trailer suspension settings in order that they can oversail the verge on the inside of the right bend where vegetation should be trimmed.</p> <p>Swept path assessment SK08 is included in Appendix B.</p>

POI	Key Constraint	Details
10	<p><b>R672 South of Colliganwood</b></p> 	<p>Loads will continue north through the left / right bends.</p> <p>A swept path assessment has been undertaken and indicates that loads will overrun and oversail the northern verge through the initial left bend where a load bearing surface should be laid. It is recommended that a topographical survey is completed and the swept path assessment repeated to confirm the required works. Vegetation to be trimmed and <b>third party land</b> may be required to construct the proposed mitigation.</p> <p>Loads will oversail the verge on the inside of the following right bend where one bollard should be removed.</p> <p>Swept path assessment SK09 is included in Appendix B.</p>
11	<p><b>R672 South of Calligan</b></p> 	<p>Loads will continue through the left bend.</p> <p>Loads will oversail the verge on the inside of the bend where vegetation should be trimmed.</p>
12	<p><b>R672 Colligan</b></p> 	<p>Loads will continue through two right bends when travelling north.</p> <p>A swept path assessment has been undertaken and indicates that loads will overrun into the existing hatched overrun area on the outside of the initial right bend. This should be extended with a load bearing surface and vegetation should be trimmed back.</p> <p>Loads will overrun and oversail the verge on the outside of the following right bend. Vegetation should be cleared and a load bearing surface laid. Reprofiting will be required. A section of wall will need to be removed and <b>third party land</b> may be required to construct the proposed mitigation.</p> <p>Loads will oversail into <b>third party land</b> on the inside of the right bend where the hedge and fence should be removed.</p> <p>Swept path assessment SK10 is included in Appendix B.</p>

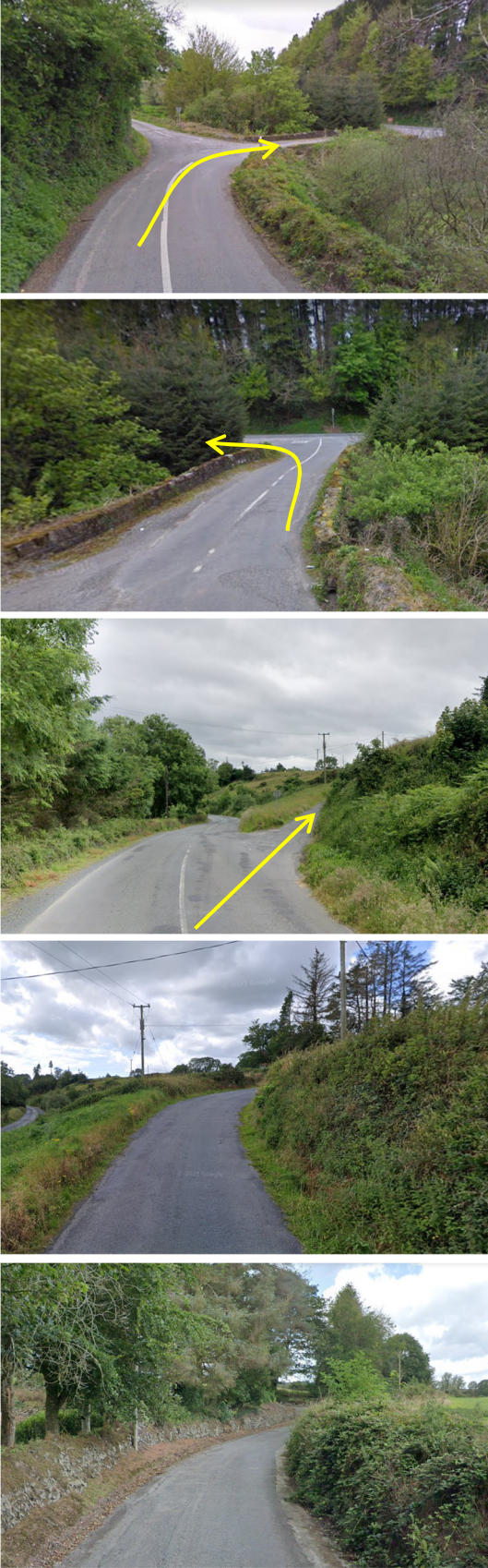




POI	Key Constraint	Details
13	<p><b>R672 West of Colligan</b></p> 	<p>Loads will continue north through the left bend on the R672</p> <p>A swept path assessment has been undertaken and indicates that loads will overrun the inside of the bend and oversail both verges. A load bearing surface should be laid and one traffic bollard should be removed. Existing utilities should be protected.</p> <p>Swept path assessment SK11 is included in Appendix B.</p>
14	<p><b>R672 North of Garrycline</b></p> 	<p>Loads will continue through a long right bend north of Garrycline</p> <p>A swept path assessment has been undertaken and indicates that loads will oversail both verges throughout the bend with <b>third party land</b> required on the inside of the bend. One road sign should be removed.</p> <p>Loads will overrun the western verge on entry to the bend where a load bearing surface should be laid and the verge will need to be reprofiled. Trees and vegetation should be removed.</p> <p>Swept path assessment SK12 is included in Appendix B.</p>
15	<p><b>R672 West of Colligan</b></p> 	<p>Loads will continue through the left bend travelling north.</p> <p>A swept path assessment has been undertaken and indicates that loads will oversail both verges throughout the left bend. <b>Third party land</b> will be required on the inside of the bend where the suspension should be raised to allow oversail of the verge. Two road signs, the fence and vegetation should be removed.</p> <p>A load bearing surface should be laid on the outside of the bend and existing utilities should be protected. Traffic and chevron signs should be removed.</p> <p>Swept path assessment SK13 is included in Appendix B.</p>

POI	Key Constraint	Details
16	<p><b>R672 / L5071 Junction</b></p> 	<p>Loads will turn left onto the L5071.</p> <p>A swept path assessment has been undertaken and indicates that loads will need to utilise an offline track in order to 'cut the corner'. A load bearing surface should be laid in <b>third party land</b> and a stone wall, trees and wire fence should be removed. Embankment to be reprofiled. Detailed design of the proposed track is required.</p> <p><u>An indicative road edge has been provided from this point to the site entrance based on the available aerial mapping where the road is considered to be greater than 4.5m. An indicative 4.5m has been provided for the remaining section as this is the minimum required running width required by turbine manufacturers. All marking up is beyond this 4.5m road width. A clearance width of 5.5m is required. <b>Third party land</b> may be required to achieve the above mitigation.</u></p> <p>Swept path assessment SK14 is included in Appendix B.</p>
17	<p><b>L5071 South East of Tooraneena</b></p> 	<p>Loads will continue east through the crossroads.</p> <p>A swept path assessment has been undertaken and indicates that loads will oversail into <b>third party land</b> on both sides of the road. Suspension should be raised to allow oversail of the bridge parapet on the inside of the bend where trees should be removed and clearance to overhead utilities should be ensured.</p> <p>The blade tip will oversail into <b>third party land</b> to the south east of the road where trees and vegetation should be cleared.</p> <p>Swept path assessment SK15 is included in Appendix B.</p>
18	<p><b>L5071 South East of Tooraneena</b></p> 	<p>Loads will continue west on the L5071.</p> <p>A swept path assessment has been undertaken and indicates that loads will oversail the inside of the left bend where trees / vegetation and verge to be removed. Potential <b>third party land</b> required.</p> <p>Swept path assessment SK16 is included in Appendix B.</p>

POI	Key Constraint	Details
<p>19</p>	<p><b>L5071 Crossroads South of Tooraneena</b></p> 	<p>Loads will continue south west through the staggered cross junction.</p> <p>A swept path assessment has been undertaken and indicates that one road sign, trees, vegetation and timber fence to be removed. Load bearing surface to be laid. Verge to be reprofiled. <b>Third party land</b> required.</p> <p>Swept path assessment SK17 is included in Appendix B.</p>
<p>20</p>	<p><b>L5071 North East of Clooncogaile</b></p> 	<p>Loads will continue south west on the L5071.</p> <p>A swept path assessment has been undertaken and indicates that loads will oversail the verge on the inside of the left bend where the embankment will need to be reprofiled. <b>Third party land</b> required.</p> <p>Swept path assessment SK18 is included in Appendix B.</p>



POI	Key Constraint	Details
21, 22, 23, 24	<p data-bbox="220 226 624 253"><b>River Finisk Bridge / R671 Junction</b></p> 	<p data-bbox="778 226 1449 342">Loads will go through a majorly constrained section where it is recommended that the swept path assessment is repeated on a topographical survey base plan to ensure the feasibility of the manoeuvre.</p> <p data-bbox="778 387 1449 539">A swept path assessment has been undertaken and indicates that loads will oversail into <b>third party land</b> on both sides of the road and trees / vegetation should be cleared throughout the section. A load bearing surface will be required in the eastern verge on approach to the bridge.</p> <p data-bbox="778 584 1449 736">Suspension settings should be raised to allow oversail of the bridge parapets by loads and care should be taken to ensure adequate clearance is still available to overhead utilities. Discussions with the council should be held to ensure that the bridge has suitable bearing capacity for the proposed loads.</p> <p data-bbox="778 781 1449 893">Loads will overrun the western verge following the bridge where the land will need to be reprofiled and a load bearing surface laid. A total of seven utility poles and two road signs will need to be removed through the section.</p> <p data-bbox="778 938 1449 1117">Loads will overrun the western verge following the bridge where the land will need to be reprofiled and a load bearing surface laid. A total of seven utility poles and two road signs will need to be removed through the section.</p> <p data-bbox="778 1162 1385 1189">Swept path assessment SK19 is included in Appendix B.</p>

POI	Key Constraint	Details
25	<p><b>Ballynaguilkee Lower Left / Right Bends</b></p> 	<p>Loads will continue north on the Ballynaguilkee Lower road.</p> <p>A swept path assessment has been undertaken and indicates that loads will need to utilise an offline track in <b>third party land</b> to the west of the road in order to negotiate the chicane. A full load bearing surface will be required and land reprofiled. Trees and vegetation should be cleared.</p> <p>Swept path assessment SK20 is included in Appendix B.</p>
26, 27, 28	<p><b>Ballynaguilkee Lower Bends</b></p> 	<p>Loads will continue north west through the constrained section. The swept path assessments should be repeated on a topographical survey base to confirm the feasibility of load movements through the section.</p> <p>Loads will overrun and oversail into <b>third party land</b> on both sides of the road throughout the section. Load bearing surfaces should be laid and verges will need to be reprofiled. Five utility poles, trees / vegetation and fence should be removed. The blade clearance to the buildings should be confirmed using the topographical survey.</p> <p>The trailer suspension settings should be raised to increase ground clearance for oversail. Care to be taken to ensure that clearance to overhead utilities is maintained.</p> <p>Swept path assessment SK21 is included in Appendix B.</p>





POI	Key Constraint	Details
<p>29, 30, 31</p>	<p><b>Ballynaguilkee Lower / Ballynaguilkee Upper Junction and Left / Right Bends</b></p> 	<p>Loads will turn left at the junction before continuing south on the unclassified road.</p> <p>A swept path assessment has been undertaken and indicates that loads will oversail into <b>third party land</b> to the north of the approach road where two utility poles and vegetation should be cleared.</p> <p>Loads will overrun and oversail into <b>third party land</b> on the inside of the left bend where a load bearing surface should be laid and one road sign and the fence and gate should be removed. Vegetation should be cleared.</p> <p>Loads will overrun and oversail into <b>third party land</b> on both sides of the road throughout the remainder of the section. Loads bearing surfaces should be laid and the verges should be reprofiled. Four utility poles should be removed along with trees and vegetation.</p> <p>Trailer suspension should be raised through the final right bend to allow oversail of the wall on the inside of the bend.</p> <p>Swept path assessment SK22 is included in Appendix B.</p>
<p>32, 33</p>	<p><b>Ballynaguilkee Upper Left Bends</b></p> 	<p>Loads continue south through a constrained section which needs widening and upgrading.</p> <p>A swept path assessment has been undertaken and indicates that loads will oversail into <b>third party land</b> on both sides of the road throughout the section where verges will need to be reprofiled. An area of load bearing surface should be laid on the inside of the initial left bend.</p> <p>Five utility poles, a number of fences and trees / vegetation should be removed.</p> <p>Swept path assessment SK23 is included in Appendix B.</p>

POI	Key Constraint	Details
34	<b>Ballynaguilkee Upper Proposed Site Entrance One</b> 	<p>Loads will turn into a new access junction.</p> <p>No details have been provided for the exact location of the proposed junction and as such no swept path has been undertaken at this time. The junction should be constructed to meet manufacturer and local road authority standards.</p>




### 3.3.3 Route 2 Constraint Points




Loads will follow the shared route to POI 8 where loads for route 2 will continue straight ahead as detailed in Table 3-3 below.

Table 3-3: Constraint Points and Details – Route 2

POI	Key Constraint	Details
8	<b>N72 / R672 Junction Master McGrath Monument</b> 	<p>Loads will continue west on the N72.</p> <p>No mitigation is required.</p>
35, 36	<b>N72 Bends at Kilcannon</b> 	<p>Loads will continue west on the N72 at Kilcannon.</p> <p>Loads will occupy the entire road width through the section however no physical mitigation is required.</p>



POI	Key Constraint	Details
37, 38	<b>N72 Ballinahemmerly</b> 	<p>Loads will continue west on the N72 through the right then left bends.</p> <p>Loads will oversail both verges through the right bend. Loads will utilise the existing overrun area on the outside of the bend and trees should be trimmed on both sides of the road.</p> <p>The vertical profile of the road at this location is pronounced and should be reviewed during the test run stage to ascertain if tar wedges will be required to prevent grounding.</p> <p>Loads will oversail the verge on the inside of the left bend where trees should be trimmed.</p> <p>Swept path assessment SK24 is included in Appendix B.</p>
39	<b>N72 / L1027 Junction</b> 	<p>Loads will turn right at the junction.</p> <p>Loads will overrun and oversail into <b>third party land</b> on the inside of the right turn where a load bearing surface should be laid. Two utility poles, two road signs, two gates, one marker post, one bollard and a stone wall should be removed. A road sign and concrete base should be removed from the centre of the junction.</p> <p>Swept path assessment SK25 is included in Appendix B.</p>
40	<b>L1027 Turbeha</b> 	<p>Loads will continue north on the L1027.</p> <p><u>The road from this point to site is not wide enough for long sections. An indicative 4.5m widening has been provided as this is the minimum required running width required by turbine manufacturers. All marking up is beyond this 4.5m road width. A clearance width of 5.5m is required. <b>Third party land</b> may be required to achieve the above mitigation.</u></p> <p>Loads will oversail both verges through the right bend with <b>third party land</b> required to the east of the road. The trailer suspension should be raised to allow oversail of the verge. Trees and vegetation should be cleared.</p> <p>Swept path assessment SK26 is included in Appendix B.</p>

POI	Key Constraint	Details
41, 42	<b>L1027 North of Ardaguna</b> 	<p>Loads will continue north on the L1027.</p> <p>It is recommended that the section is retracked on a topographical base plan to confirm the required mitigation. Sections of the road are not visible from available mapping as such mitigation cannot be proposed.</p> <p>On approach to this section, loads will travel through a steep section of road where the ground clearance should be confirmed during the test run.</p> <p>Loads will oversail both verges through the left then right bends with <b>third party land</b> required on both sides of the road. A section of stone wall and a pillar will need to be removed from the inside of the left bend along with tree and vegetation throughout.</p> <p>Two utility poles will need to be removed from the inside of the right bend and the land should be reprofiled.</p> <p>Swept path assessment SK27 is included in Appendix B.</p>
43, 44	<b>L1027 North East of Glenshelane Woods</b> 	<p>Loads will continue north through a sinuous section of the L1027.</p> <p>The route continues to require widening to a minimum of 4.5m with a clearance width of 5.5m which will likely require third party land to provide.</p> <p>Loads will oversail both verges through the initial left bend with <b>third party land</b> required on both sides of the road.</p> <p>Loads will overrun into <b>third party land</b> on the inside of the following right bend where land should be reprofiled and a load bearing surface should be laid.</p> <p>Throughout the section, five utility poles, fences, trees and vegetation should be removed. Suspension settings should be raised to provide additional ground clearance. Care should be taken to ensure adequate clearance to overhead utilities.</p> <p>Swept path assessment SK28 is included in Appendix B.</p>
45	<b>L1027 Coolagurtwee</b> 	<p>Loads will continue north through the section.</p> <p>Loads will oversail into <b>third party land</b> on both sides of the road where one utility pole, a number of fences, gates, stone walls, vegetation and trees should be removed.</p> <p>Swept path assessment SK29 is included in Appendix B.</p>



POI	Key Constraint	Details
46	<p>L1027 North of Coolagurtwee</p> 	<p>Loads will continue north on the L1027 to the north of Coolagurtwee.</p> <p>Loads will oversail both verges throughout the section where trees and vegetation should be trimmed.</p> <p>Loads will overrun and oversail into <b>third party land</b> to the east of the road through the right/ left bend. A load bearing surface should be laid and the land reprofiled. The stone wall should be removed along with trees and vegetation. Loads will oversail into <b>third party land</b> to the west of the road where one utility pole and a section of fence should be removed.</p> <p>Swept path assessment SK30 is included in Appendix B.</p>
47, 48	<p>L1027 Coolagurtwee</p>  	<p>Loads will continue north through two right bends.</p> <p>Loads will oversail both sides of the road through the initial right bend where <b>third party land</b> will be required on the inside of the bend. The stone wall, fence, gate and trees / vegetation should be cleared and the verge should be reprofiled.</p> <p>Loads will oversail both verges through the following right bend and overrun the outside of the bend where a load bearing surface should be laid and the land reprofiled. <b>Third party land</b> will be required in land to the west. The stone wall, fence and trees / vegetation should be removed.</p> <p>Swept path assessment SK31 is included in Appendix B.</p>
49, 50	<p>L1027 Coolagurtwee</p>  	<p>Loads will continue north climbing a steep gradient through the section.</p> <p>Loads will oversail both verges through the section with <b>third party land</b> required to the east. Vegetation and trees should be cleared and a fence should be removed.</p> <p>Swept path assessment SK32 is included in Appendix B.</p>

POI	Key Constraint	Details
51, 52,	<p><b>L1027 South East of Knockscullage</b></p> 	<p>Loads will continue north through the sinuous section.</p> <p>Loads should be raised on suspension settings to allow them greater ground clearance for oversail. Care should be taken to ensure adequate clearance to overhead utilities is maintained.</p> <p>Loads will oversail both verges throughout the section where vegetation should be cleared. Loads will overrun and oversail the western verge through POI 52 where a load bearing surface should be laid and <b>third party land</b> is required.</p> <p>Loads will oversail the inside of the right bend. Vegetation and trees should be cleared from both sides of the road through the right bend.</p> <p>Swept path assessment SK33 is included in Appendix B.</p>
53	<p><b>L1027 South East of Knockscullage</b></p> 	<p>Loads will continue north through the left then right bends.</p> <p>Loads should be raised on suspension settings to allow them greater ground clearance for oversail. Care should be taken to ensure adequate clearance to overhead utilities is maintained.</p> <p>Loads will oversail both verges through both bends with <b>third party land</b> required on the inside of the left bend and a land search required on the inside of the right bend to confirm the extent of adopted boundary available. Vegetation should be cleared and a section of fence removed.</p> <p>Swept path assessment SK34 is included in Appendix B.</p>
54	<p><b>L1027 Potential Site Entrance Two</b></p> 	<p>Loads will turn into a new access junction.</p> <p>No details have been provided for the exact location of the proposed junction and as such no swept path has been undertaken at this time. The junction should be constructed to meet manufacturer and local road authority standards.</p>

### 3.4 Identified Alternative Routes Constraint Points

The client identified two further constraint points for assessment on two alternative access routes. Initial swept path assessments have been completed at these locations to identify whether either route is potentially suitable for further assessment. The locations are shown in Figure 3-4 below and detailed in Table 3-4. Due to the extreme works required on the swept path assessments, no further assessment of these have been completed as part of this study.

**Figure 3-4: Alternative Route Constraint Points**

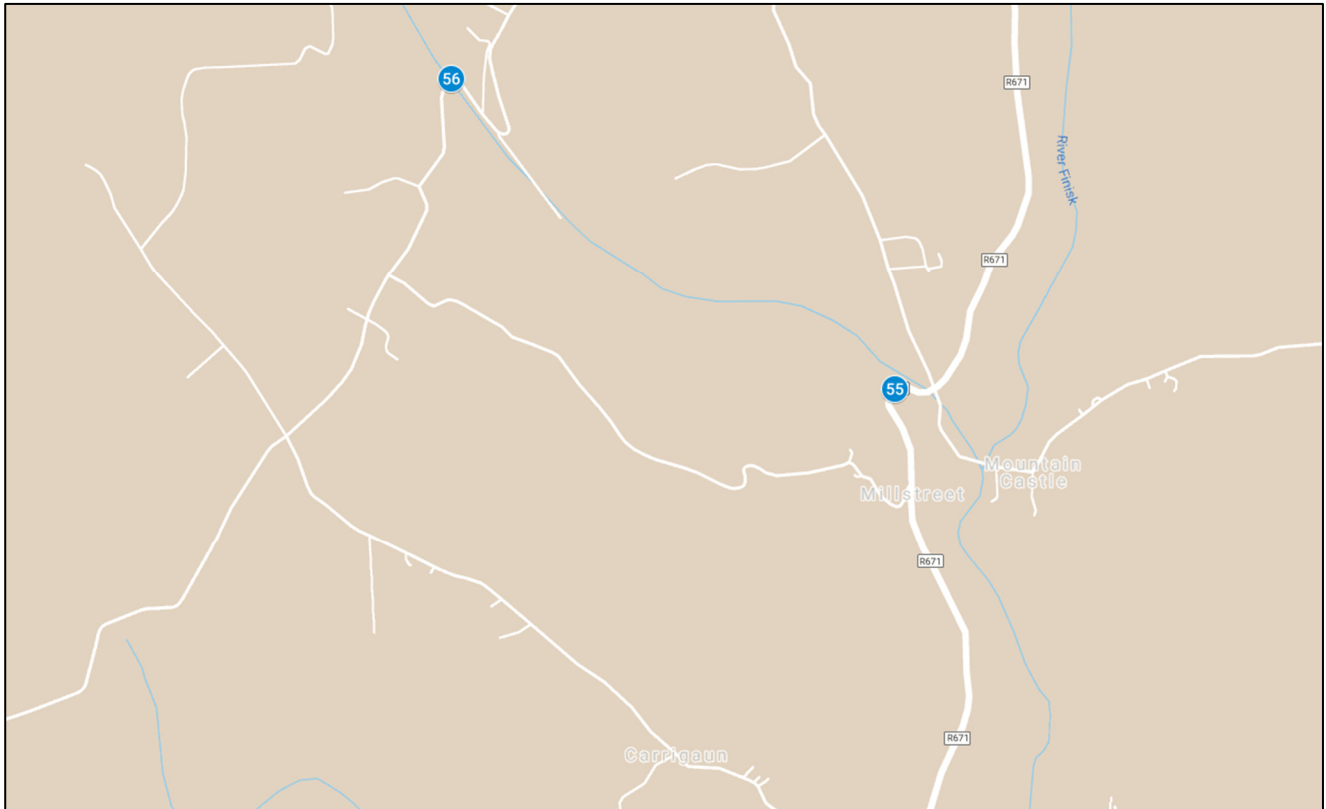




Table 3-4: Alternative Constraint Points and Details

POI	Key Constraint	Details
54	<p data-bbox="217 255 507 288"><b>Farnane Upper, Cappagh</b></p> 	<p data-bbox="775 255 1445 315">Loads would be required to negotiate two hairpin bends in order to utilise this route.</p> <p data-bbox="775 360 1445 479">It was not possible to negotiate the vehicles through the initial right bend without substantial <b>third party land</b> and significant earth works and as such no further assessment of this route is considered physically or financial possible.</p>



POI	Key Constraint	Details
55	<p><b>R671 Millstreet</b></p> 	<p>Loads would be required to negotiate an extremely tight right bend followed by a left.</p> <p><b>Third party land</b> would be required on both sides of the road throughout the sinuous section. The available mapping is not accurate enough to confirm the feasibility of the manoeuvre. A topographical survey would be required due to the minimal clearances to buildings and considerable earth works shown.</p>

### 3.5 Swept Path Assessment Results and Summary

The detailed swept path drawings for the locations assessed are provided in Appendix B for review. The drawings in Appendix B illustrate tracking undertaken for the worst case loads at each location.

The colours illustrated on the swept paths are:

- Grey / Black – OS / Topographical Base Mapping;
- Green – Vehicle body outline (body swept path);
- Red – Tracked pathway of the wheels (wheel swept path); and
- Purple – The over-sail tracked path of the load where it encroaches outwith the trailer (load swept path).

Where mitigation works are required, the extents of over-run and over-sail areas are illustrated on the swept path drawings.

Please note that where assessments have been undertaken using Ordnance Survey Ireland (OSI) base mapping or available CAD georeferenced aerial mapping, there can be errors in this data source.

Where provided by the client, topographical data has been utilised. Please note that PF cannot accept liability for errors on the data source, be that OSI base mapping, aerial imagery or client supplied data.

### 3.6 Access Junction Considerations

The access junctions into the site would need to be built to accommodate the proposed physical size of loads and the number of trips predicted during the construction phase.

The design and form of the junction would need to be discussed with the local road authority. The design of the junctions should take into account the requirement for provision of visibility splays which should be defined by the road authority.

The junctions would also need to be built in accordance with the turbine supplier design criteria.

### 3.7 Summary Issues

It is strongly suggested that following a review of the RSR, EMPower should undertake the following prior to the delivery of the first abnormal loads, to ensure load and road user safety:

- That any necessary topographical surveys are undertaken and the swept path results completed;
- A review of axle loading on structures along the entire access route with the various road agencies is undertaken immediately prior to the loads being transported in case of last minute changes to structures;
- A review of clear heights with utility providers and the transport agencies along the route to ensure that there is sufficient space to allow for loads plus sufficient flashover protection (to electrical installations);
- That any verge vegetation and tree canopies which may foul loads is trimmed prior to loads moving;
- That a review of potential roadworks and or closures is undertaken once the delivery schedule is established in draft form;
- That a test run is completed to confirm the route and review any vertical clearance issues; and
- That a condition survey is undertaken to ascertain the extents of road defects prior to loads commencing to protect the developer from spurious damage claims.

## 4 Summary

### 4.1 Summary of Access Review

PF has been commissioned by EMPower to prepare a desk based Route Survey Report to examine the issues associated with the transport of AIL turbine components to the development site.

This report identifies the key points and issues associated with the proposed routes and outlines the issues that will need to be considered for successful delivery of components.

The access review has been based upon a Vestas V162 blade and worst case tower component.

The report is presented for consideration to EMPower. Various third party land arrangements, road modifications and interventions are required to successfully access the site. If these are assessed, approved and undertaken, access to the consented wind farm site is considered potentially feasible.

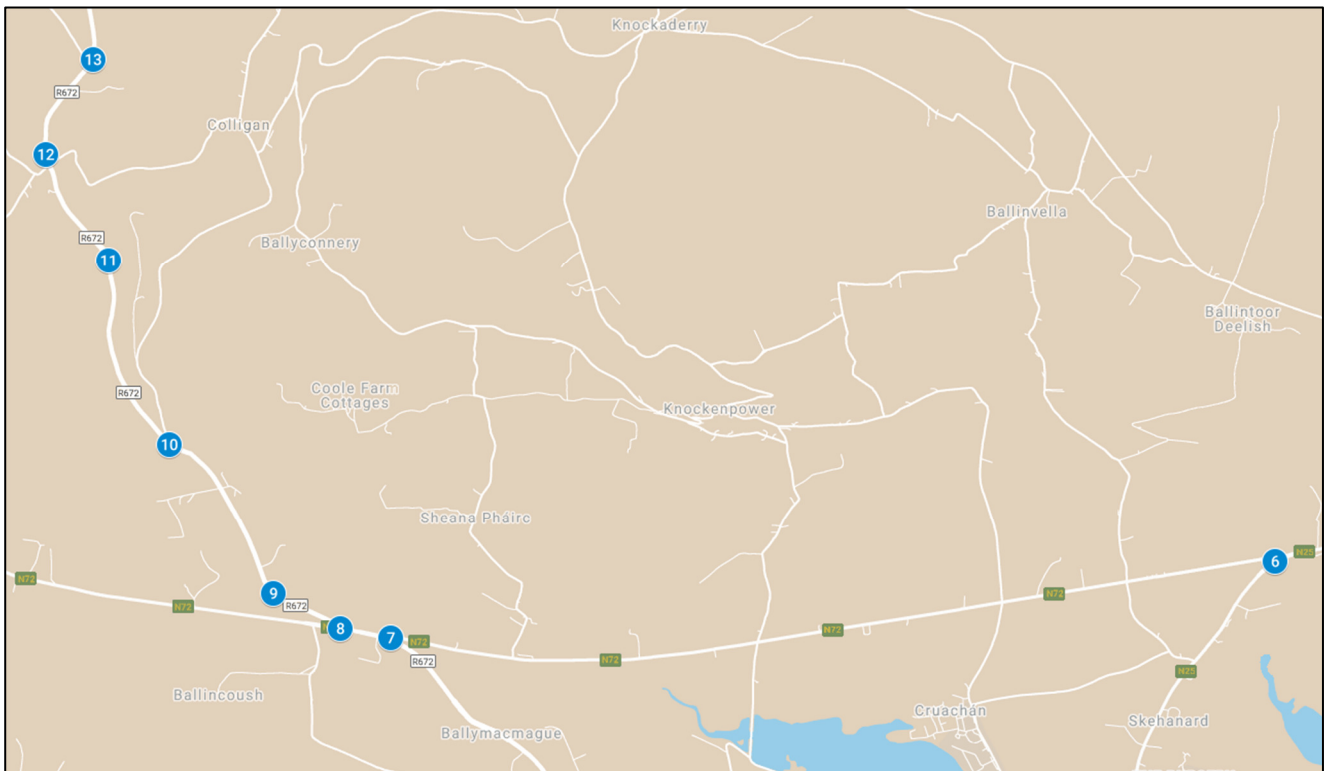
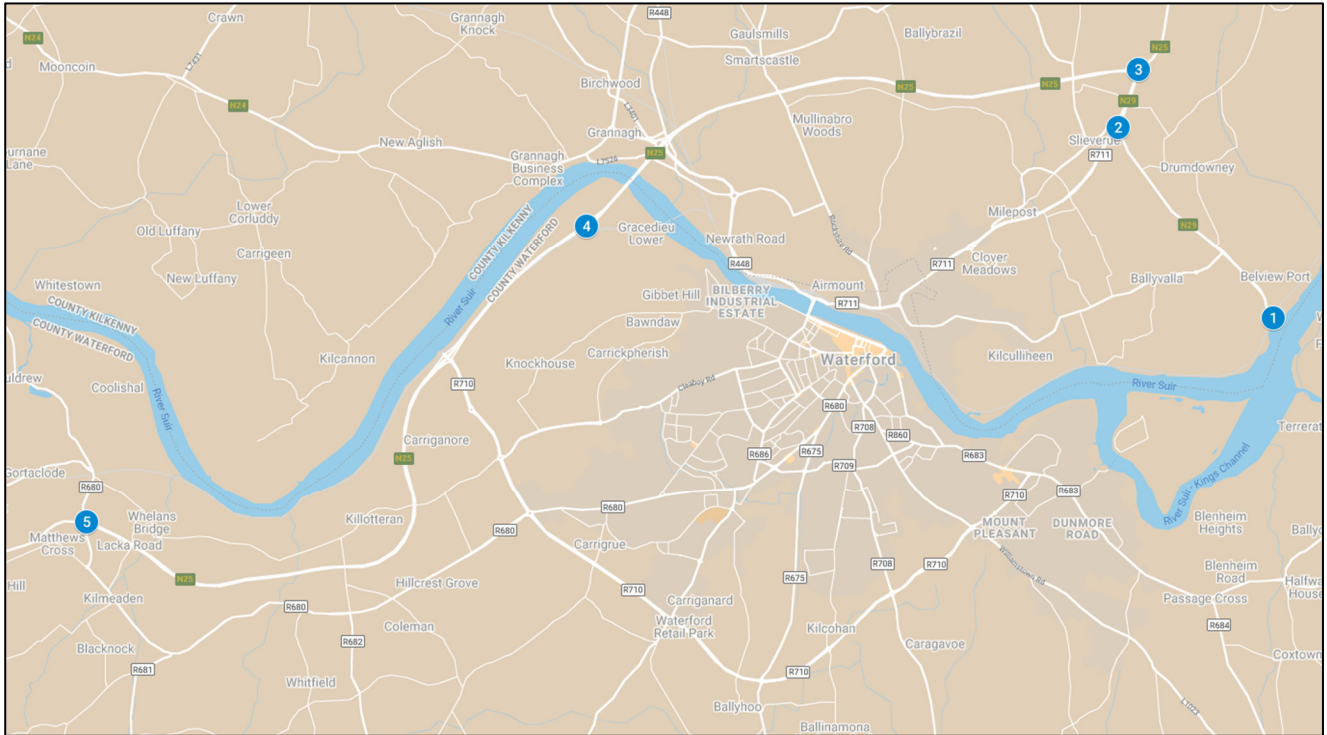
### 4.2 Further Actions

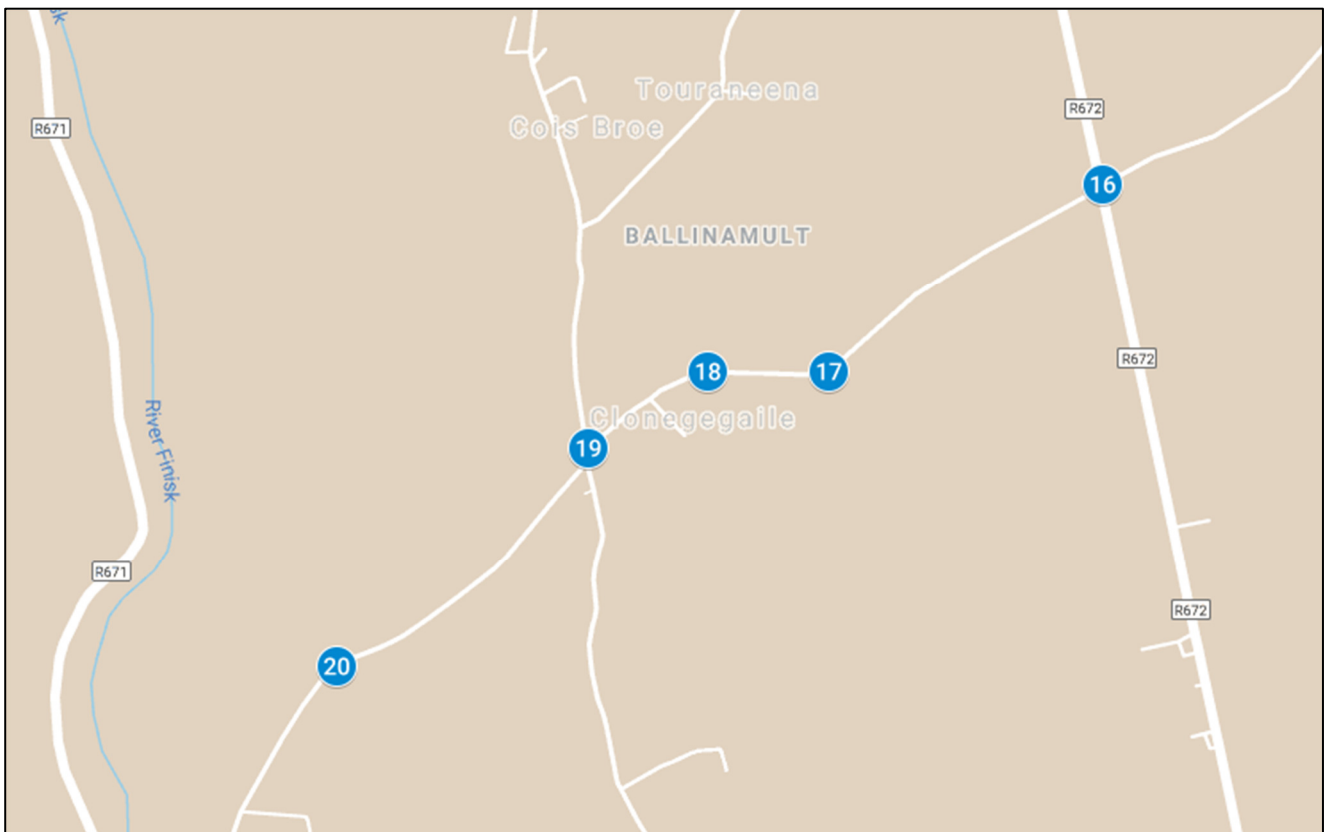
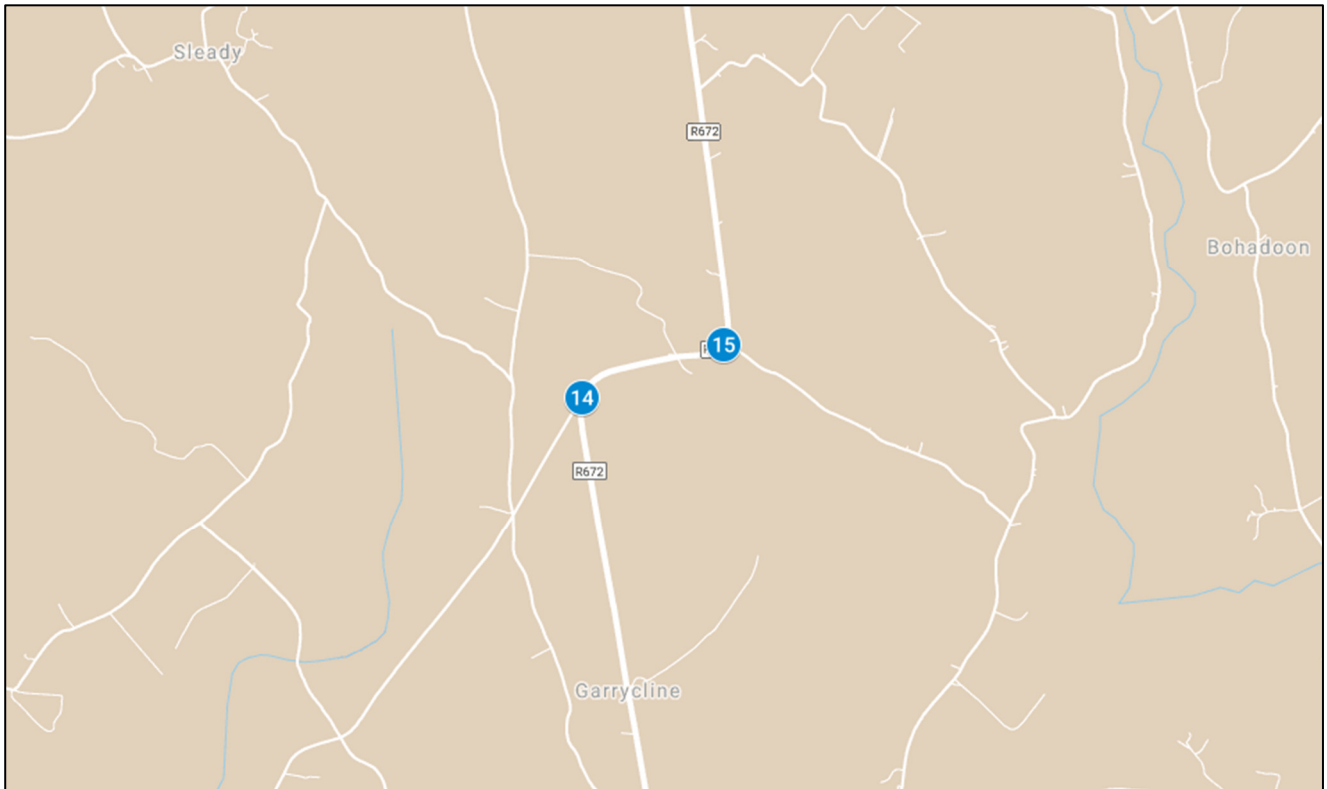
The following actions are recommended to pursue the transport and access issues further:

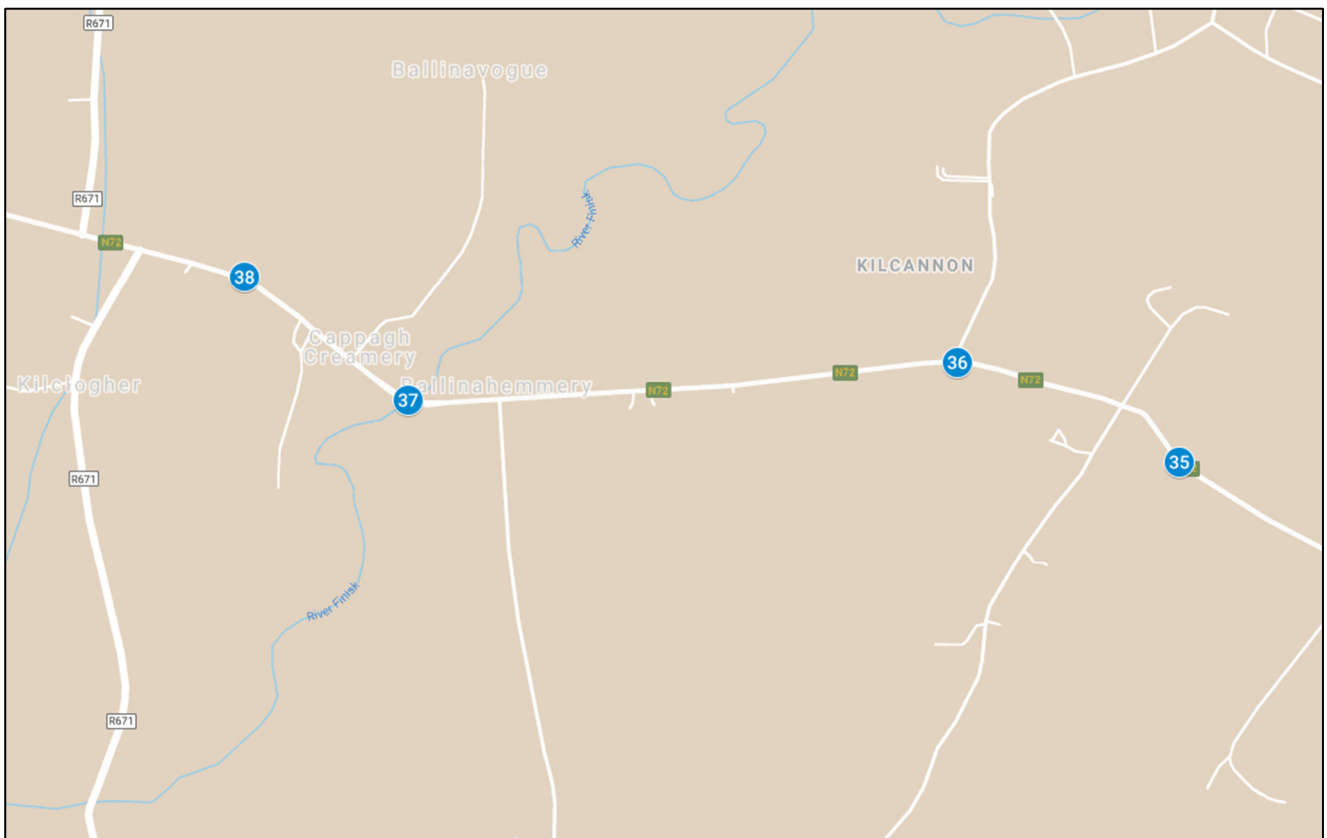
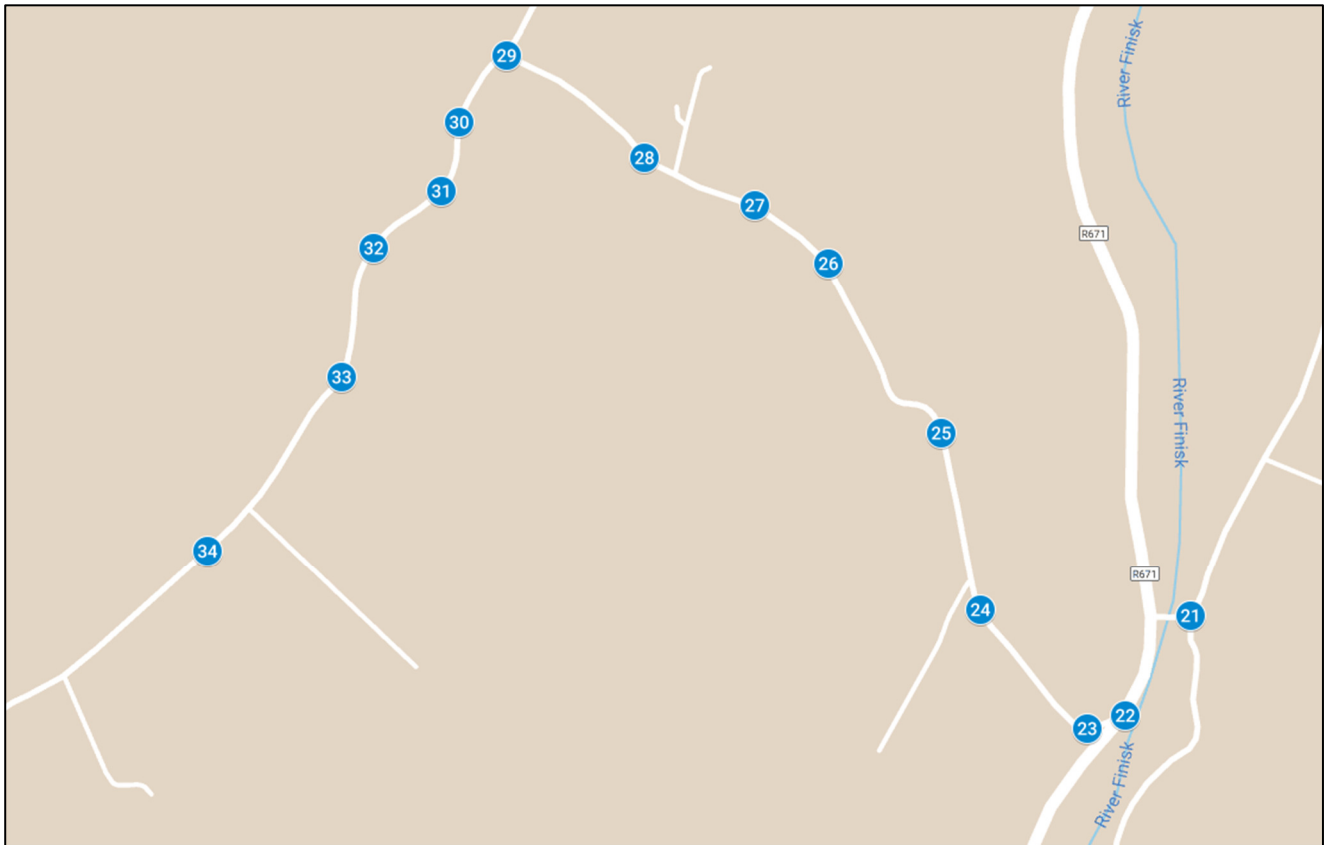
- Undertake a full site visit and update the route survey report for the proposed site;
- Prepare detailed mitigation design proposals to help inform the land option / consultee discussions;
- Obtain the necessary land options;
- Undertake discussion with the affected utility providers and roads agencies;
- Obtain the necessary statutory licences to enable the mitigation measures; and
- Develop a detailed operational Transport Management Plan to assist in transporting the proposed loads.

## Appendix A Points of Interest

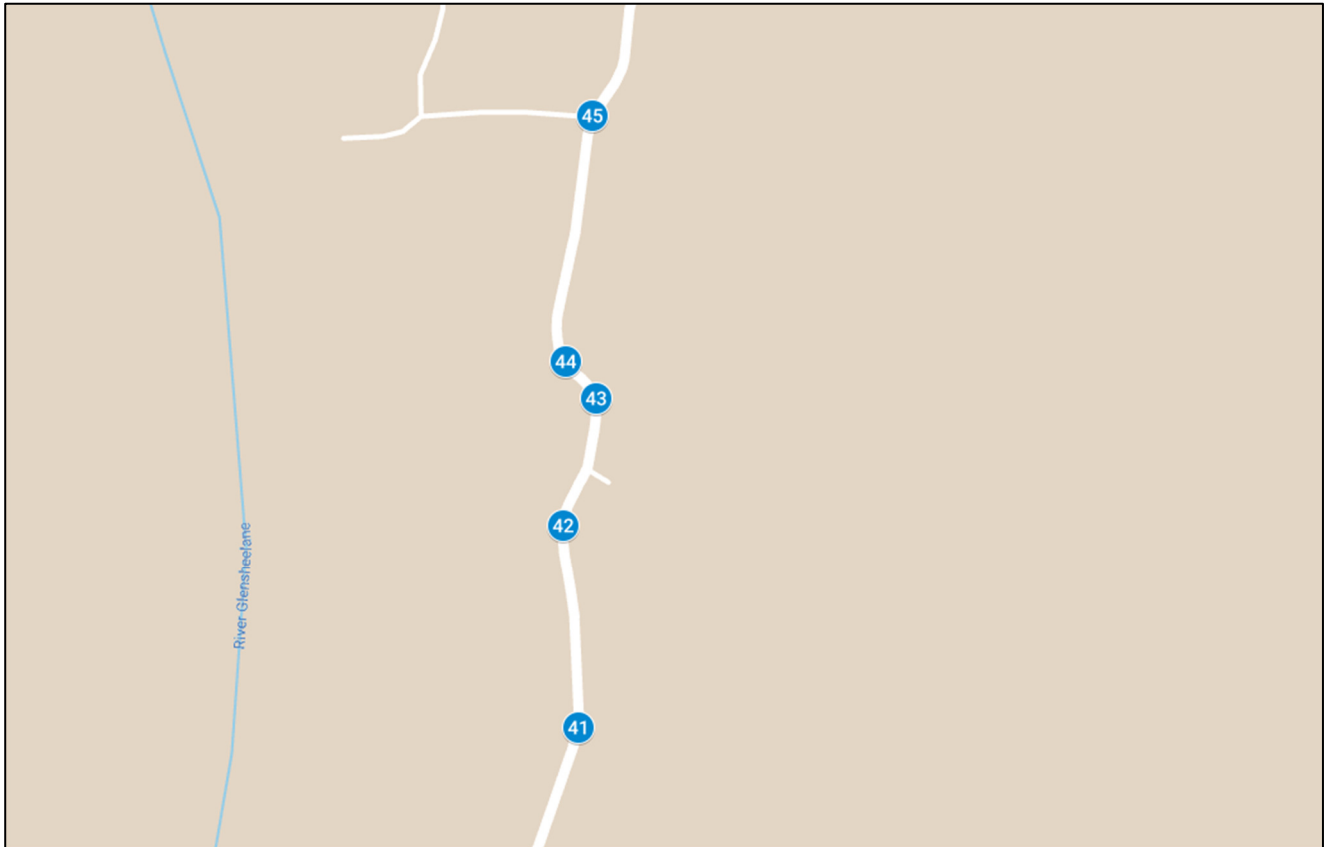
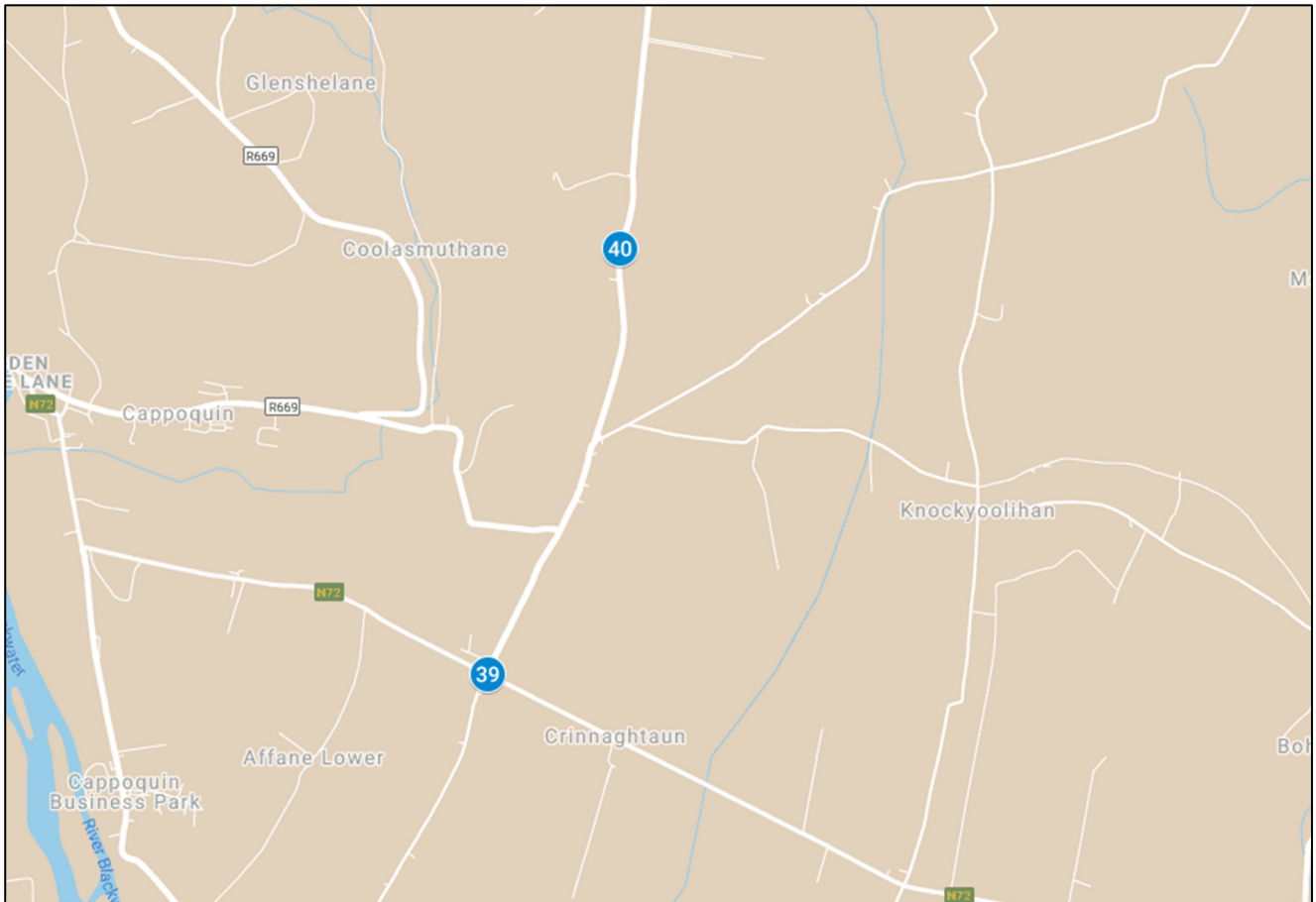
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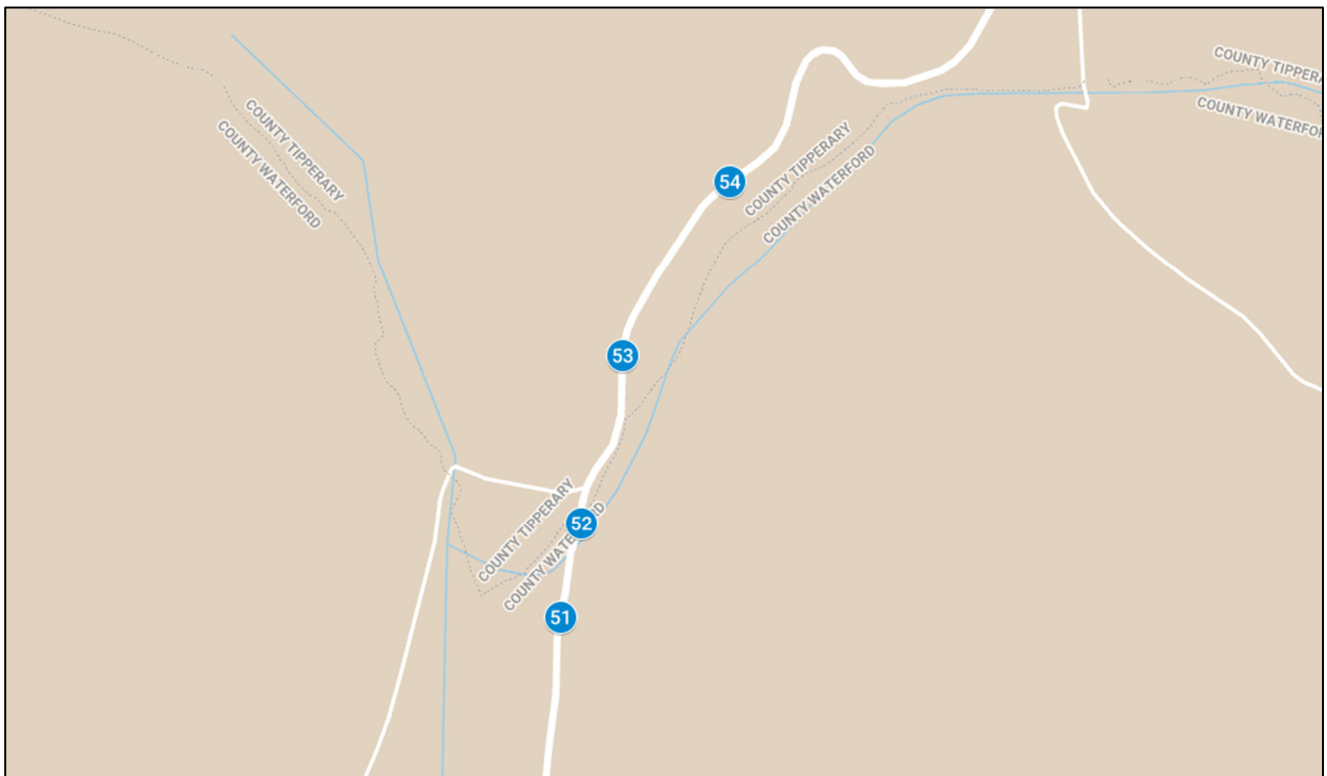
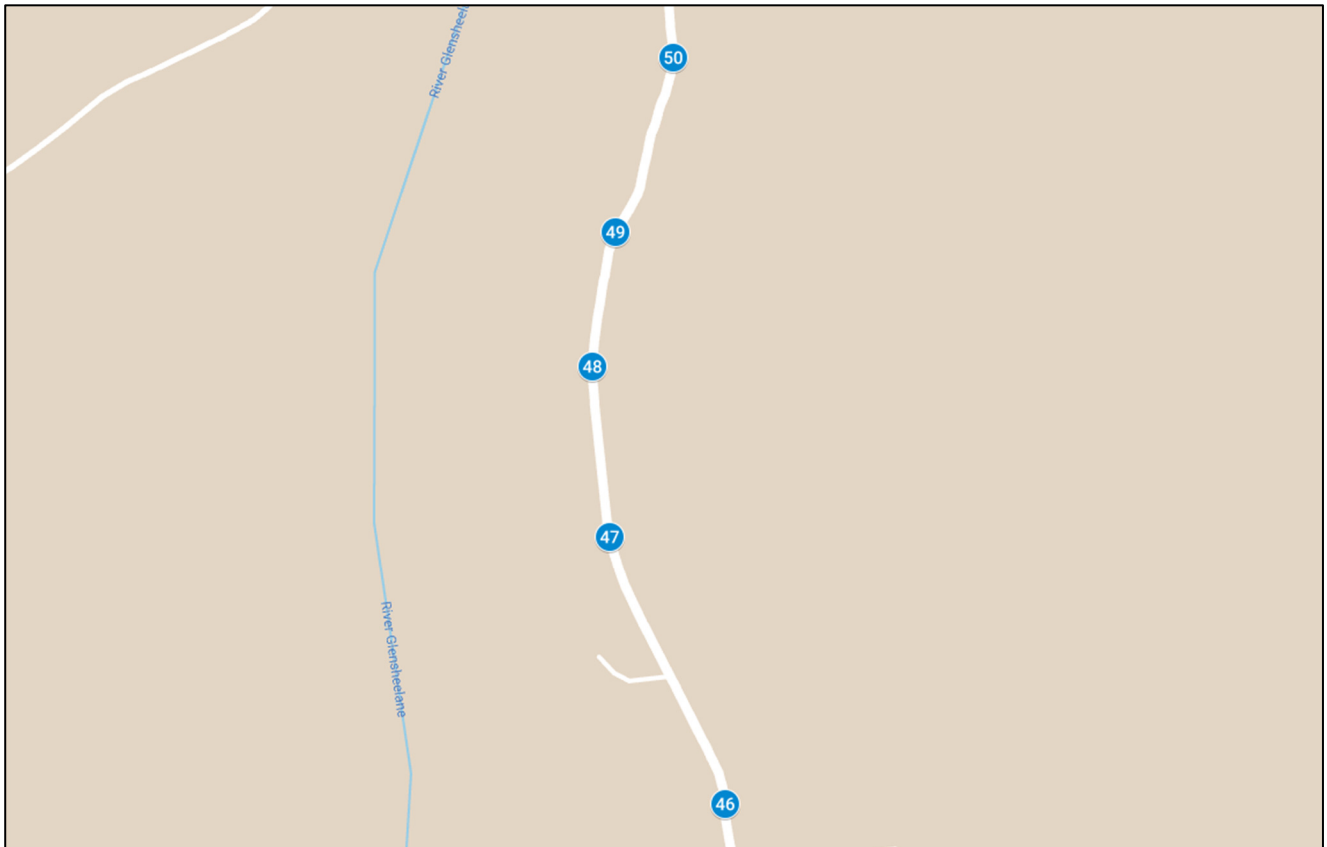












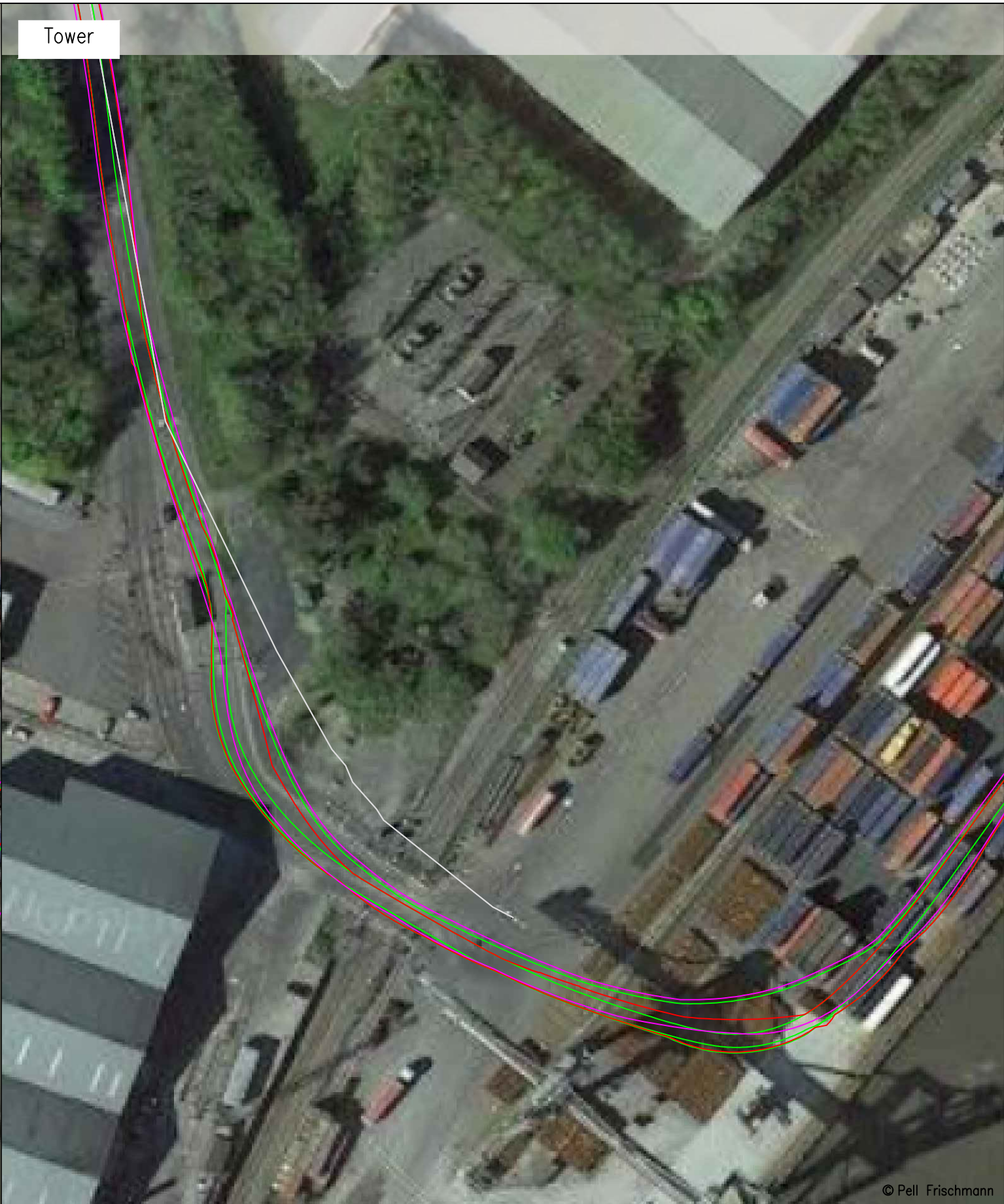
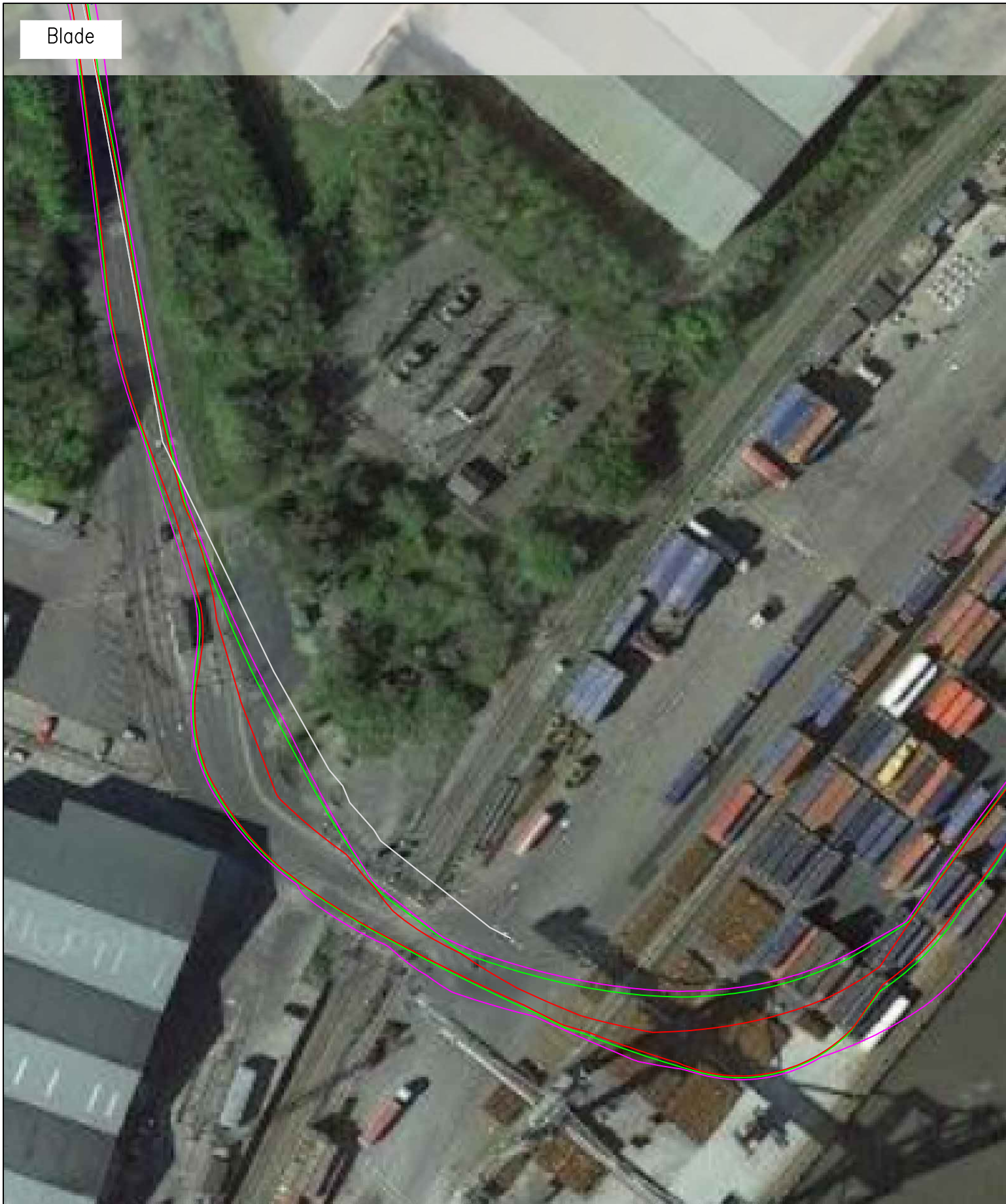


## Appendix B Swept Path Assessments



Blade

Tower



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 Email: pfe@pellfrischmann.com  
 www.pellfrischmann.com

Project

Dyrick Hill Wind Farm

Name

JS

Date

17/12/2021

Scale

1:1000 @ A3

Drawn

TL

13/04/2022

File No.

211215 Dyrick Hill Tracking [FINAL].dwg

Checked

GB

29/09/2022

Drawing Status

Draft

Point of Interest

1

Drawing No.

SK01

Notes:

1. All mitigation is subject to confirmation through a test run.  
 2. This is not a construction drawing and is intended for illustration purposes only.

Revision

1

Client

EMPower

Drawing Title

Vestas V162 Blade and Mid Tower

SPA Location

Belview Port Exit

Key

- Wheel SPA
- Body SPA
- Load SPA
- Indicative
- Over-run
- Over-sail





Load bearing surface to be laid. Gates, fence and posts to be removed. Existing utilities to be protected. Traffic islands to be cleared and provided with a load bearing surface.

Topographical survey required to ensure alterations to the level crossing are not required.

Load bearing surface to be provided to cross rail lines and crane running line. Area to be cleared of all obstacles. Early discussions with the port authority are recommended.

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	Client	EMPower	Designed	TL	13/04/2022	Checked	GB	29/09/2022
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	SPA Location	Belview Port Exit	Drawing No.	SK01A		Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	
			Revision				1	



Blade

Tower



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Project

Dyrick Hill Wind Farm

	Name	Date	Scale
Drawn	JS	17/12/2021	1:1000 @ A3
Designed	TL	13/04/2022	File No. 211215 Dyrick Hill Tracking [FINAL].dwg
Checked	GB	29/09/2022	
Point of Interest			Drawing Status
2			Draft
Drawing No.	Notes:		Revision
SK02	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		1

Client **EMPower**

Drawing Title

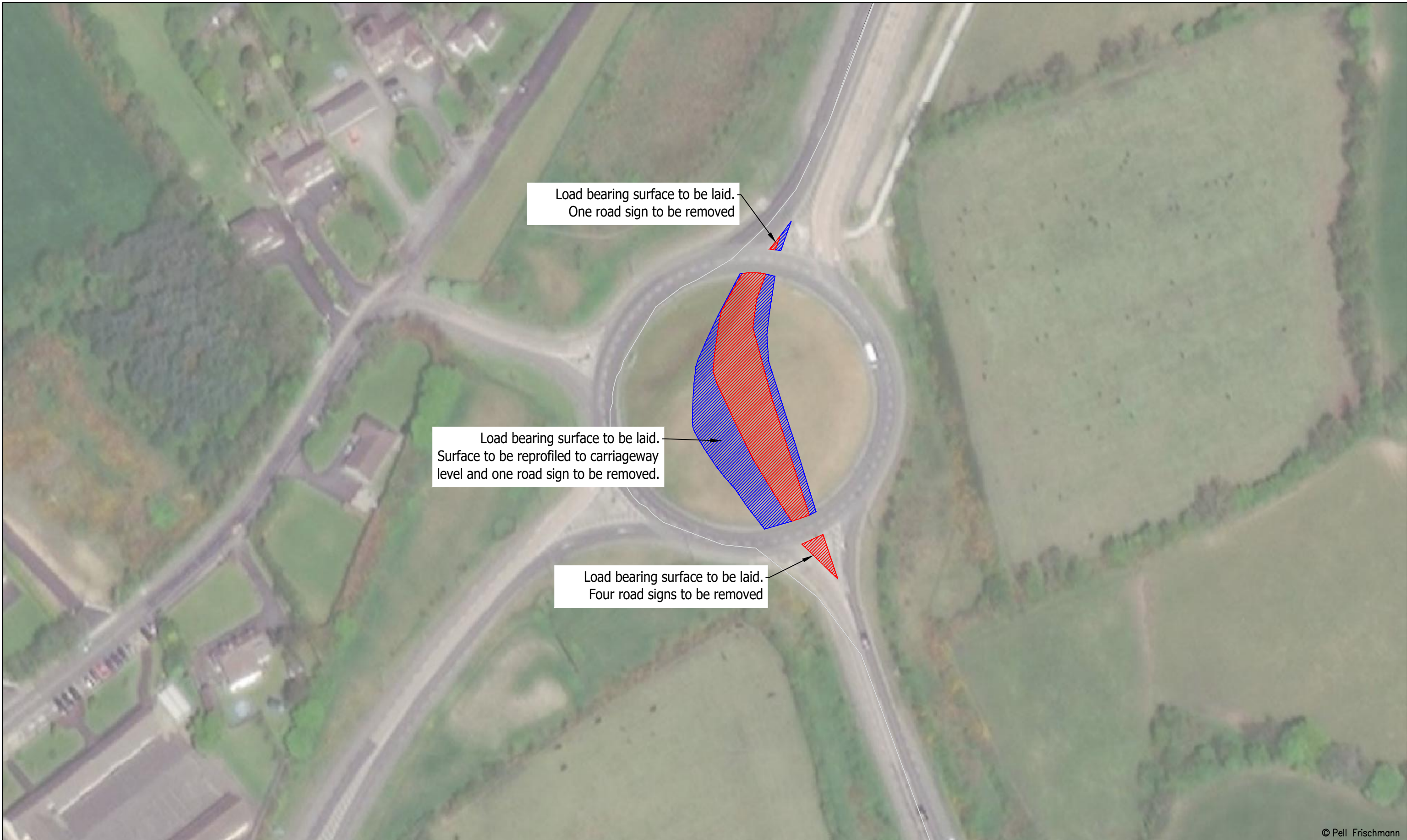
Vestas V162 Blade and Mid Tower

Key						
	Wheel SPA	Body SPA	Load SPA	Indicative	Over-run	Over-sail

SPA Location

N29 Slieverue Roundabout





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	Client	Drawing Title	SPA Location	Drawn	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg		
				Checked	GB	29/09/2022	Drawing Status	Draft		
				Point of Interest	2		Revision	1		
Key	Wheel SPA	Body SPA	Load SPA	Indicative	Over-run	Over-sail	Drawing No.	SK02A		
							Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		



Blade

Tower



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Client **EMPower**

Key	<span style="color: red;">—</span>	<span style="color: green;">—</span>	<span style="color: magenta;">—</span>	<span style="color: cyan;">—</span>		
	Wheel SPA	Body SPA	Load SPA	Indicative	Over-run	Over-sail

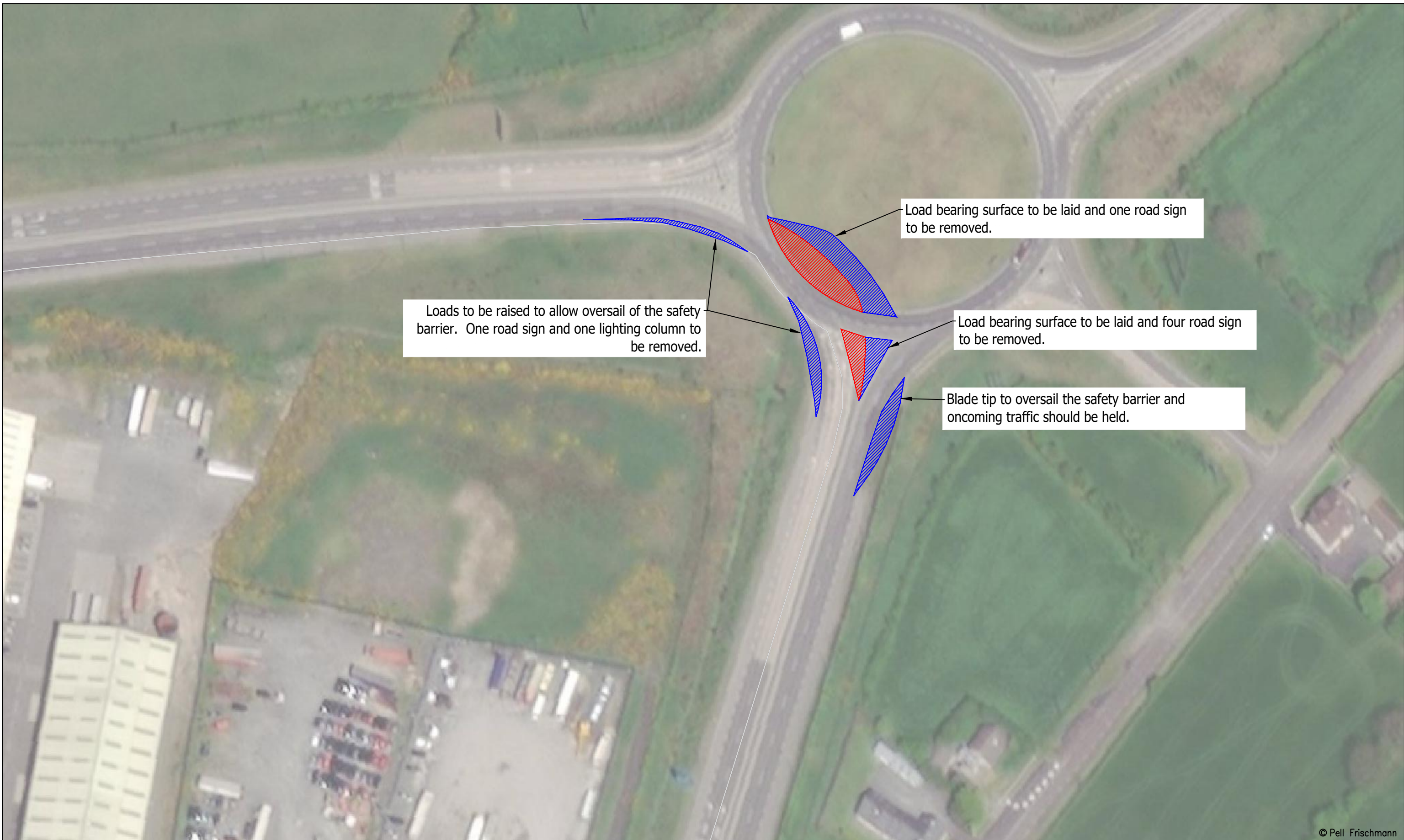
Project  
**Dyrick Hill Wind Farm**

Drawing Title  
**Vestas V162 Blade and Mid Tower**

SPA Location  
**N25 Luffany Roundabout**

	Name	Date	Scale
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Designed	TL	13/04/2022	File No. 211215 Dyrick Hill Tracking [FINAL].dwg
Checked	GB	29/09/2022	
Point of Interest			Drawing Status
3			Draft
Drawing No.	Notes:		Revision
SK03	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		1





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			Point of Interest		3	Drawing No.	SK03A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.



Blade

Tower



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Project

Dyrick Hill Wind Farm

Name

Date

Scale

1:500 @ A3

Drawn

JS

17/12/2021

File No.

211215 Dyrick Hill Tracking [FINAL].dwg

Designed

TL

13/04/2022

Checked

GB

29/09/2022

Drawing Status

Draft

Point of Interest

5

Drawing No.

SK04

Notes:

- All mitigation is subject to confirmation through a test run.
- This is not a construction drawing and is intended for illustration purposes only.

Revision

1

Client

EMPower

Drawing Title

Vestas V162 Blade and Mid Tower

SPA Location

N25 Carrick Road Roundabout

Key

- Wheel SPA
- Body SPA
- Load SPA
- Indicative
- Over-run
- Over-sail



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			Drawing No.	SK04A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1



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www.pellfrischmann.com

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Dyrick Hill Wind Farm

	Name	Date	Scale
Drawn	JS	17/12/2021	1:1000 @ A3
Designed	TL	13/04/2022	File No. 211215 Dyrick Hill Tracking [FINAL].dwg
Checked	GB	29/09/2022	
Point of Interest			Drawing Status
6			Draft
Drawing No.	Notes:		Revision
SK05	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		1

Client **EMPower**

Drawing Title

Vestas V162 Blade and Mid Tower

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	Wheel SPA	Body SPA	Load SPA	Indicative	Over-run	Over-sail

SPA Location

N25 / N72 Junction





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Blade

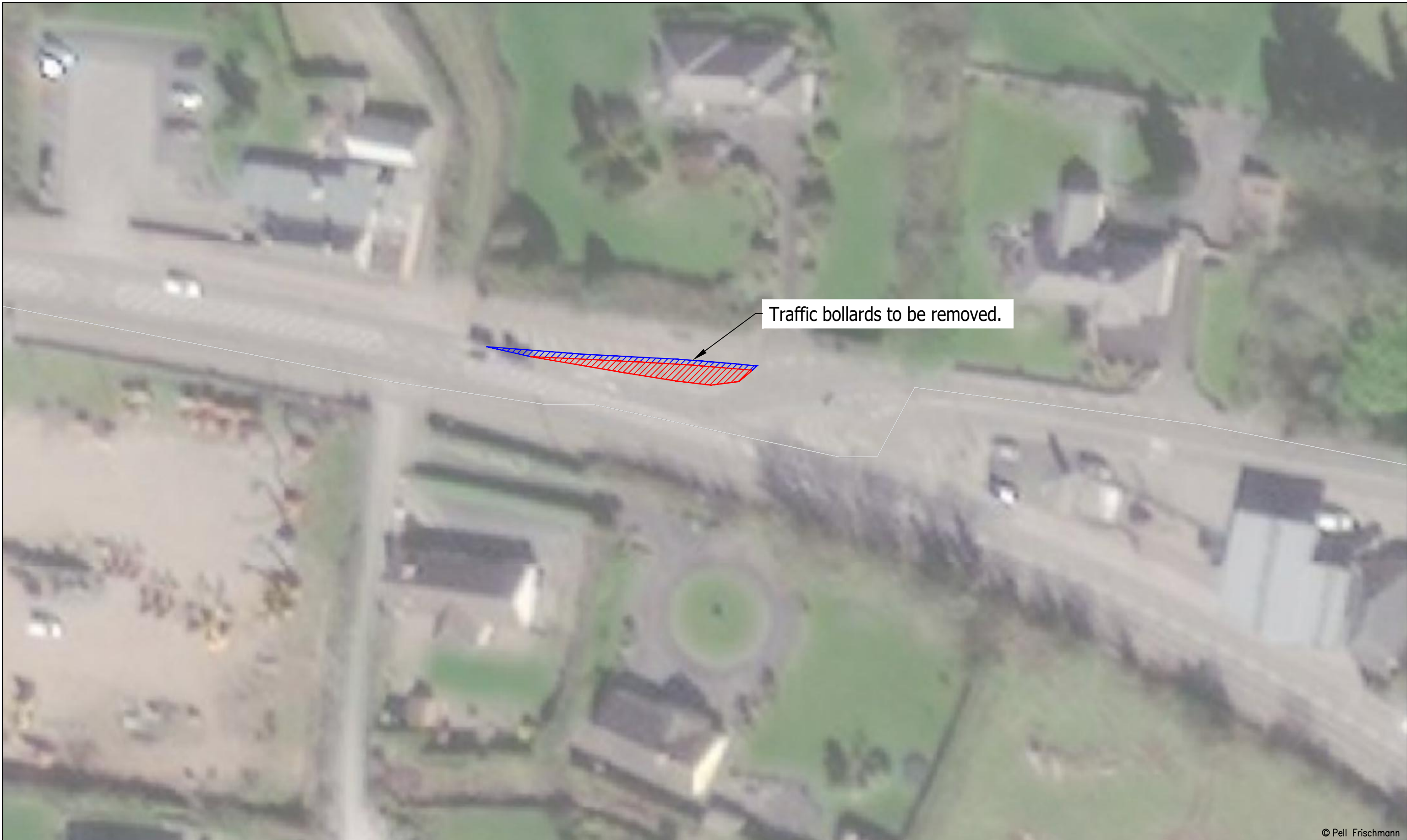
Tower



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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower		Designed	TL	13/04/2022	File No.
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, red 2px, red 4px); border: 1px solid red;"></span> Over-run <span style="border: 1px solid blue; display: inline-block; width: 10px; height: 10px; background: repeating-linear-gradient(-45deg, transparent, transparent 2px, blue 2px, blue 4px); border: 1px solid blue;"></span> Over-sail	SPA Location	N72 / R672 Junction	Checked	GB	29/09/2022	Drawing Status	Draft		
				Point of Interest	7		Drawing No.	SK06	Notes:
								1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	1





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<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	N72 / R672 Junction	Checked	GB	29/09/2022	Point of Interest	7	Drawing Status	Draft
			Drawing No.	SK06A	Notes:		1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	Revision	1

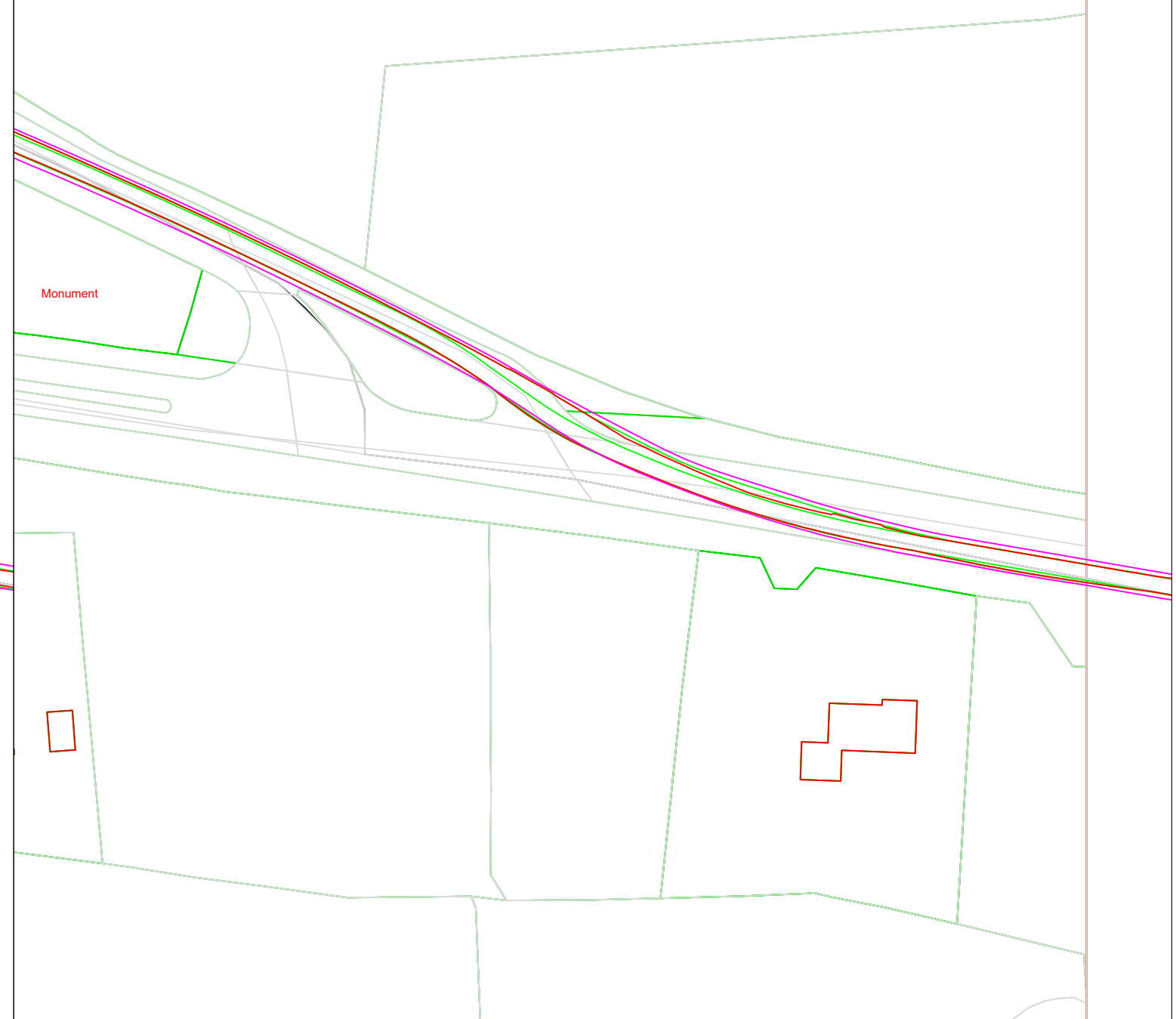


Blade

# Ballymacmague South

Tower

# Ballymacmague South



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93 GEORGE STREET, EDINBURGH, EH2 3ES  
 Tel: +44 (0)131 240 1270  
 Email: pfe@pellfrischmann.com  
 www.pellfrischmann.com

Project

Dyrick Hill Wind Farm

Drawn	Name	Date	Scale
Designed	TL	13/04/2022	1:1000 @ A3
Checked	GB	29/09/2022	File No. 211215 Dyrick Hill Tracking [FINAL].dwg
Point of Interest	8	Drawing Status	Draft

Client **EMPower**

Drawing Title

Vestas V162 Blade and Mid Tower

Key	<span style="color:red">—</span>	<span style="color:green">—</span>	<span style="color:magenta">—</span>	<span style="color:cyan">—</span>	<span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px;"></span>	<span style="border: 1px solid blue; display: inline-block; width: 10px; height: 10px;"></span>
	Wheel SPA	Body SPA	Load SPA	Indicative	Over-run	Over-sail

SPA Location

N72 / R672 Junction Master McGrath Monument

Drawing No.	Notes:	Revision
SK07	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	1



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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; padding: 2px;"> </span> Over-run <span style="border: 1px solid blue; padding: 2px;"> </span> Over-sail	SPA Location	N72 / R672 Junction Master McGrath Monument	Checked	GB	29/09/2022	Point of Interest	8	Drawing Status	Draft
			Drawing No.	SK07A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1



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**Pell Frischmann**  
 93 GEORGE STREET, EDINBURGH, EH2 3ES  
 Tel: +44 (0)131 240 1270  
 Email: pfe@pellfrischmann.com  
 www.pellfrischmann.com

Project  
 Dyrick Hill Wind Farm

Drawn	JS	17/12/2021	Scale	1:1000 @ A3
Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
Checked	GB	29/09/2022	Drawing Status	Draft
Point of Interest	9			

Client  
 EMPOWER

Key  
 Wheel SPA (Red line)  
 Body SPA (Green line)  
 Load SPA (Purple line)  
 Indicative (Cyan line)  
 Over-run (Red hatched box)  
 Over-sail (Blue hatched box)

Drawing Title  
 Vestas V162 Blade and Mid Tower

SPA Location  
 R672 East of Ballylemon Lower

Drawing No.	SK08	Notes:	Revision	1
		1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	R672 East of Ballylemon Lower	Checked	GB	29/09/2022	Drawing Status	Draft	Revision	1
			Point of Interest	9	Drawing No.	SK08A	Notes: 1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		

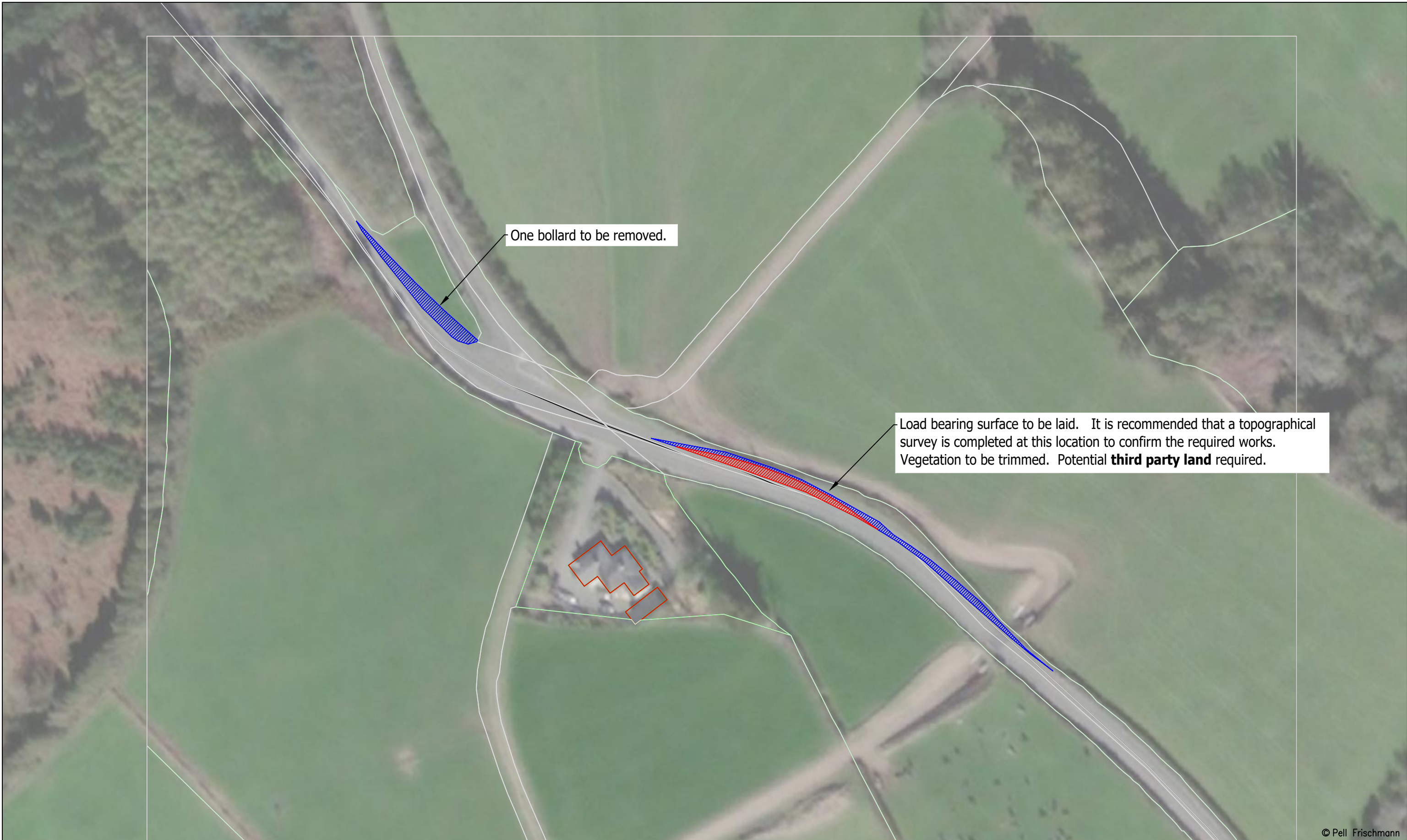




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	Client	EMPower	Designated	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg	
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:purple">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border:1px solid red; display:inline-block; width:10px; height:10px; transform:rotate(45deg);"></span> Over-run <span style="border:1px solid blue; display:inline-block; width:10px; height:10px; transform:rotate(45deg);"></span> Over-sail	Drawing Title	Vestas V162 Blade and Mid Tower	Checked	GB	29/09/2022	Drawing Status	Draft	
	SPA Location	R672 South of Colliganwood	Point of Interest	10		Drawing No.	SK09	
			Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.				Revision





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	R672 South of Colliganwood	Checked	GB	29/09/2022	Drawing Status	Draft	Revision	1
	Drawing No.	SK09A	Point of Interest	10	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.			



Blade

Tower



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93 GEORGE STREET, EDINBURGH, EH2 3ES  
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 Email: pfe@pellfrischmann.com  
 www.pellfrischmann.com

Client **EMPower**

Key	<span style="color:red">—</span>	<span style="color:green">—</span>	<span style="color:purple">—</span>	<span style="color:cyan">—</span>		
	Wheel SPA	Body SPA	Load SPA	Indicative	Over-run	Over-sail

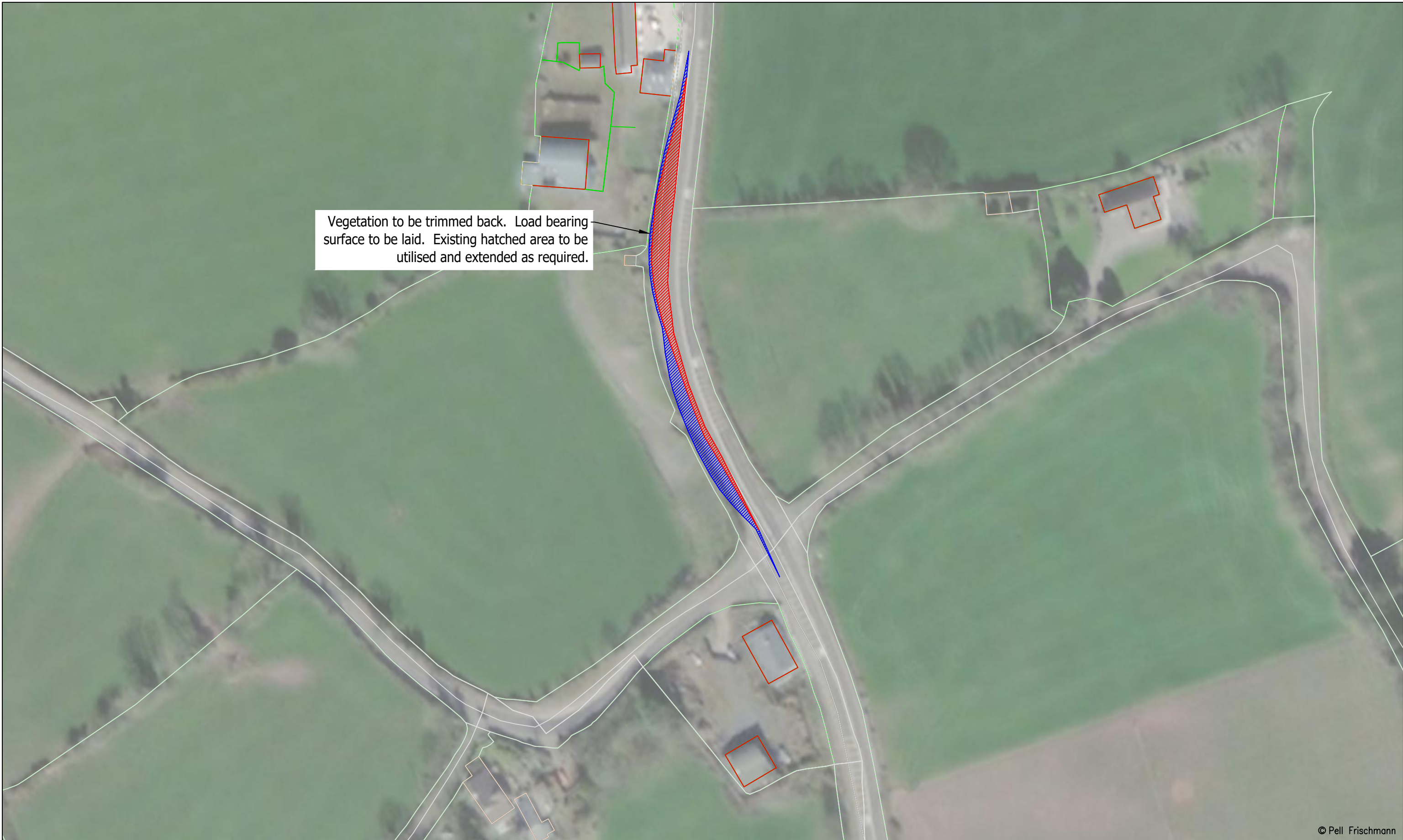
Project  
**Dyrick Hill Wind Farm**

Drawing Title  
**Vestas V162 Blade and Mid Tower**

SPA Location  
**R672 Colligan**

	Name	Date	Scale		
Drawn	JS	17/12/2021	1:1000 @ A3		
Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg	
Checked	GB	29/09/2022	Drawing Status	Draft	
Point of Interest	12				
Drawing No.	Notes:			Revision	
SK10	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.			1	





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; padding: 2px;"> </span> Over-run <span style="border: 1px solid blue; padding: 2px;"> </span> Over-sail	SPA Location	R672 Colligan	Checked	GB	29/09/2022	Drawing Status	Draft	
			Point of Interest	12		Drawing No.	SK10A	Notes:
							1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	1

Blade

Tower



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 Tel: +44 (0)131 240 1270  
 Email: pfe@pellfrischmann.com  
 www.pellfrischmann.com

Client **EMPower**

Key	<span style="color: red;">—</span>	<span style="color: green;">—</span>	<span style="color: purple;">—</span>	<span style="color: cyan;">—</span>		
	Wheel SPA	Body SPA	Load SPA	Indicative	Over-run	Over-sail

Project  
 Dyrick Hill Wind Farm

Drawing Title  
 Vestas V162 Blade and Mid Tower

SPA Location  
 R672 Colligan

	Name	Date	Scale	1:1000 @ A3
Drawn	JS	17/12/2021	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
Designed	TL	13/04/2022		
Checked	GB	29/09/2022		
Point of Interest			12	Drawing Status
Drawing No.				Revision
SK10B			Notes:	
			1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	
			1	





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; padding: 2px;"> </span> Over-run <span style="border: 1px solid blue; padding: 2px;"> </span> Over-sail	SPA Location	R672 Colligan	Checked	GB	29/09/2022	Drawing Status	Draft	
			Point of Interest	12		Drawing No.	SK10C	Notes:
							1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	1

Blade

Tower



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93 GEORGE STREET, EDINBURGH, EH2 3ES

Tel: +44 (0)131 240 1270

Email: pfe@pellfrischmann.com

www.pellfrischmann.com

Project

Dyrick Hill Wind Farm

Name

Date

Scale

1:1000 @ A3

Drawn

JS

17/12/2021

File No.

211215 Dyrick Hill Tracking [FINAL].dwg

Designed

TL

13/04/2022

Checked

GB

29/09/2022

Drawing Status

Draft

Point of Interest

13

Drawing No.

SK11

Notes:

1. All mitigation is subject to confirmation through a test run.  
2. This is not a construction drawing and is intended for illustration purposes only.

Revision

1

Client

EMPower

Drawing Title

Vestas V162 Blade and Mid Tower

SPA Location

R672 West of Colligan

Key

Wheel SPA

Body SPA

Load SPA

Indicative

Over-run

Over-sail

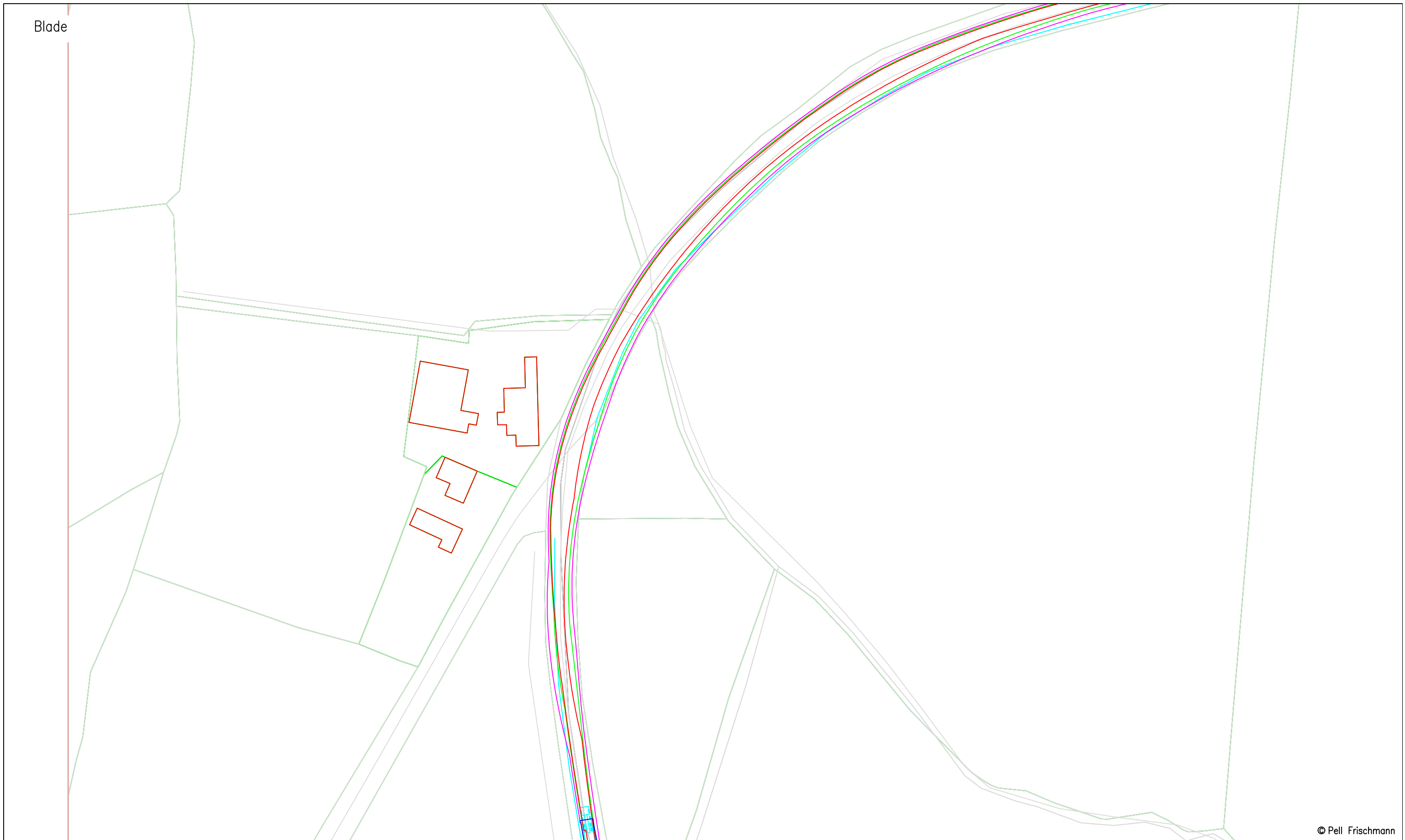




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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	R672 West of Colligan	Checked	GB	29/09/2022	Drawing Status	Draft	Revision	1
			Point of Interest	13	Drawing No.	SK11A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	

Blade

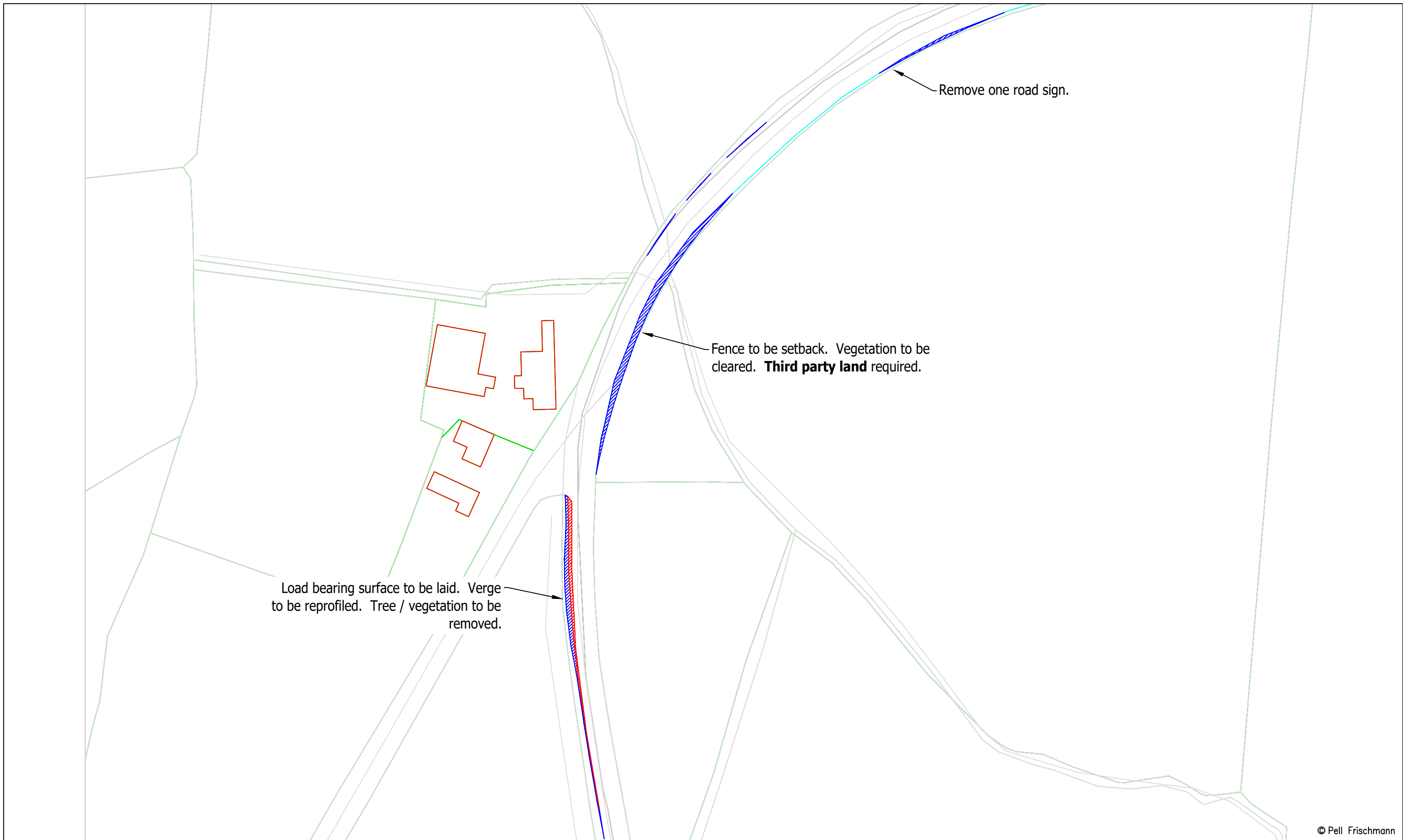


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	Client	EMPower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; padding: 2px;"> </span> Over-run <span style="border: 1px solid blue; padding: 2px;"> </span> Over-sail	Drawing Title	Vestas V162 Blade and Mid Tower	Checked	GB	29/09/2022	Drawing Status	Draft
	SPA Location	R672 North of Garrycline	Point of Interest	14		Notes:	Revision
			Drawing No.	SK12			







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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, red 2px, red 4px); border: 1px solid red;"></span> Over-run <span style="border: 1px solid blue; display: inline-block; width: 10px; height: 10px; background: repeating-linear-gradient(-45deg, transparent, transparent 2px, blue 2px, blue 4px); border: 1px solid blue;"></span> Over-sail	SPA Location	R672 North of Garrycline	Checked	GB	29/09/2022	Drawing Status	Draft	
			Point of Interest	14		Drawing No.	SK12B	Notes:
							1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	1



Blade

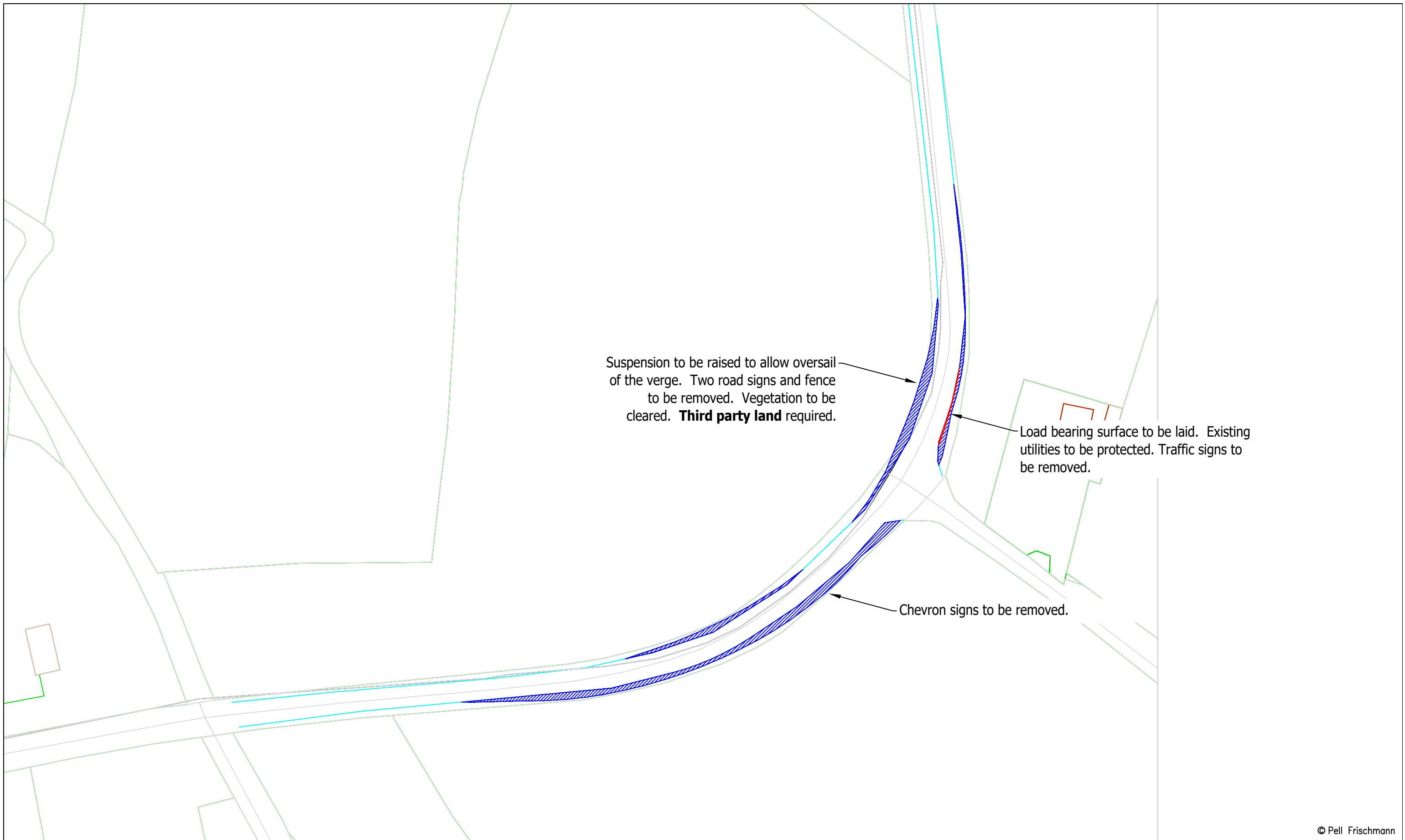


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	Client	EMPower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; padding: 2px;"> </span> Over-run <span style="border: 1px solid blue; padding: 2px;"> </span> Over-sail	Drawing Title	Vestas V162 Blade and Mid Tower	Checked	GB	29/09/2022	Drawing Status	Draft
	SPA Location	R672 North of Garrycline	Point of Interest	15		Drawing No.	SK13
			Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1







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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; padding: 2px;"> </span> Over-run <span style="border: 1px solid blue; padding: 2px;"> </span> Over-sail	SPA Location	R672 West of Colligan	Checked	GB	29/09/2022	Point of Interest	15	Drawing Status	Draft
			Drawing No.	SK13B	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1

Blade

Tower



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93 GEORGE STREET, EDINBURGH, EH2 3ES

Tel: +44 (0)131 240 1270  
Email: pfeinburgh@pellfrischmann.com  
www.pellfrischmann.com

Project

Dyrick Hill Wind Farm

Name

Date

Scale

1:1000 @ A3

Drawn

JS

17/12/2021

File No.

211215 Dyrick Hill Tracking [FINAL].dwg

Designed

TL

13/04/2022

Checked

GB

29/09/2022

Drawing Status

Draft

Point of Interest

16

Drawing No.

SK14

Notes:

- All mitigation is subject to confirmation through a test run.
- This is not a construction drawing and is intended for illustration purposes only.

Revision

1

Client

EMPower

Drawing Title

Vestas V162 Blade and Mid Tower

SPA Location

R672 / L5071 Junction

Key

- Wheel SPA
- Body SPA
- Load SPA
- Indicative
- Over-run
- Over-sail





Stone and wire fence to be removed.  
 Embankment to be reprofiled. Trees  
 to be removed. Load bearing surface  
 to be laid. Detailed design required.  
**Third party land** required.

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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	R672 / L5071 Junction	Checked	GB	29/09/2022	Drawing Status	Draft	Revision	1
			Point of Interest	16	Drawing No.	SK14A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	



Blade

Tower



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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px; transform: rotate(45deg);"></span> Over-run <span style="border: 1px solid blue; display: inline-block; width: 10px; height: 10px; transform: rotate(45deg);"></span> Over-sail	SPA Location	L5071 South East of Tooraneena	Checked	GB	29/09/2022	Drawing Status	Draft		
				Point of Interest	17		Drawing No.	SK15	Notes:
								1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	1





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="color:red">▨</span> Over-run <span style="color:blue">▨</span> Over-sail	SPA Location	L5071 South East of Tooraneena	Checked	GB	29/09/2022	Point of Interest	17	Drawing Status	Draft
			Drawing No.	SK15A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1



Blade

Tower



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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px; transform: rotate(45deg);"></span> Over-run <span style="border: 1px solid blue; display: inline-block; width: 10px; height: 10px; transform: rotate(45deg);"></span> Over-sail	SPA Location	L5071 South East of Tooraneena	Checked	GB	29/09/2022	Drawing Status	Draft		
				Point of Interest	18		Drawing No.	SK16	Notes:
								1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	1





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border:1px solid red; display:inline-block; width:10px; height:10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, red 2px, red 4px);"></span> Over-run <span style="border:1px solid blue; display:inline-block; width:10px; height:10px; background: repeating-linear-gradient(-45deg, transparent, transparent 2px, blue 2px, blue 4px);"></span> Over-sail	SPA Location	L5071 South East of Tooraneena	Checked	GB	29/09/2022	Point of Interest	18	Drawing Status	Draft
			Drawing No.	SK16A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1



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	Client	EMPower		Designed	TL	Date	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg		
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, red 2px, red 4px);"></span> Over-run <span style="border: 1px solid blue; display: inline-block; width: 10px; height: 10px; background: repeating-linear-gradient(-45deg, transparent, transparent 2px, blue 2px, blue 4px);"></span> Over-sail	Drawing Title	Vestas V162 Blade and Mid Tower		Checked	GB	Date	29/09/2022	Drawing Status	Draft		
	SPA Location	L5071 Crossroads South of Tooraneena		Point of Interest	19		Drawing No.	SK17		Revision	1
					Notes:		1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.				





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	L5071 Crossroads South of Tooraneena	Checked	GB	29/09/2022	Point of Interest	19	Drawing Status	Draft
			Drawing No.	SK17A	Notes:		1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	Revision	1

Blade

Tower



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93 GEORGE STREET, EDINBURGH, EH2 3ES  
 Tel: +44 (0)131 240 1270  
 Email: pfe@pellfrischmann.com  
 www.pellfrischmann.com

Project

Dyrick Hill Wind Farm

	Name	Date	Scale
Drawn	JS	17/12/2021	1:1000 @ A3
Designed	TL	13/04/2022	File No. 211215 Dyrick Hill Tracking [FINAL].dwg
Checked	GB	29/09/2022	
Point of Interest			Drawing Status
20			Draft

Client **EMPower**

Drawing Title

Vestas V162 Blade and Mid Tower

Drawing No.	Notes:	Revision
SK18	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	1

Key						
	Wheel SPA	Body SPA	Load SPA	Indicative	Over-run	Over-sail

SPA Location

L5071 North East of Clooncogaile










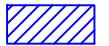
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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border:1px solid red; display:inline-block; width:10px; height:10px; transform: rotate(45deg);"></span> Over-run <span style="border:1px solid blue; display:inline-block; width:10px; height:10px; transform: rotate(45deg);"></span> Over-sail	SPA Location	L5071 North East of Clooncogaile	Checked	GB	29/09/2022	Drawing Status	Draft		
				Point of Interest	20		Drawing No.	SK18A	Notes:
								1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	1

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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b>  Wheel SPA  Body SPA  Load SPA  Indicative  Over-run  Over-sail	SPA Location	River Finisk Bridge to Ballynaguilkee Lower Right Bend	Checked	GB	29/09/2022	Drawing Status	Draft	Revision	1
				Point of Interest	21 - 24	Drawing No.	SK19	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.



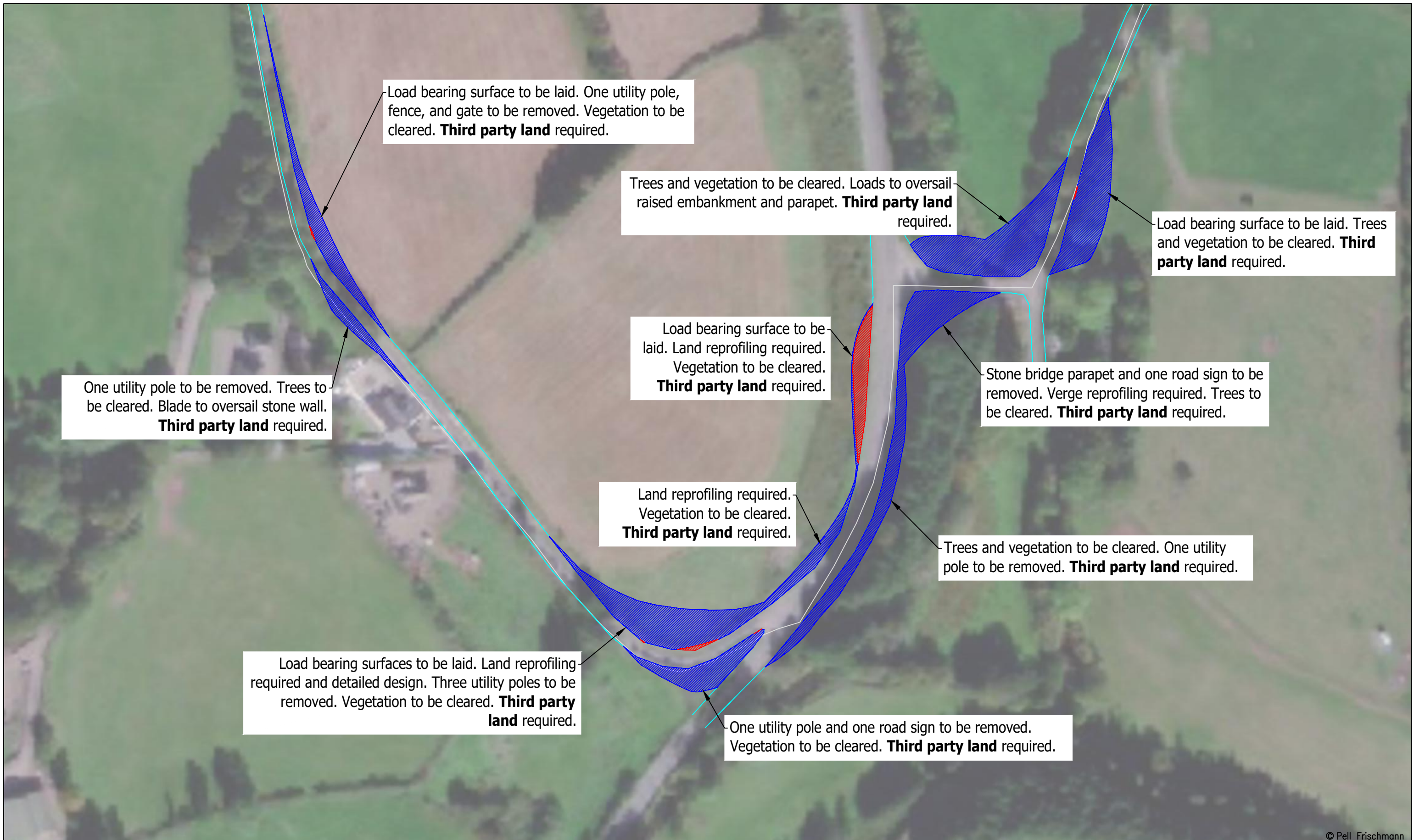
Tower



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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	River Finisk Bridge to Ballynaguilkee Lower Right Bend	Checked	GB	29/09/2022	Drawing Status	Draft	Revision	1
			Point of Interest	21 - 24	Drawing No.	SK19A	Notes: 1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; padding: 2px;"> </span> Over-run <span style="border: 1px solid blue; padding: 2px;"> </span> Over-sail	SPA Location	River Finisk Bridge to Ballynaguilkee Lower Right Bend	Checked	GB	29/09/2022	Point of Interest	21 - 24	Drawing Status	Draft
			Drawing No.	SK19B	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1



Blade

Tower



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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border:1px solid red; display:inline-block; width:10px; height:10px; transform: rotate(45deg);"></span> Over-run <span style="border:1px solid blue; display:inline-block; width:10px; height:10px; transform: rotate(45deg);"></span> Over-sail	SPA Location	Ballynaguilkee Lower Left / Right Bends	Checked	GB	29/09/2022	Drawing Status	Draft		
				Point of Interest	25		Drawing No.	SK20	Notes:
								1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	1



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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	Ballynaguilkee Lower Left / Right Bends	Checked	GB	29/09/2022	Drawing Status	Draft	Revision	1
			Point of Interest	25	Drawing No.	SK20A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	



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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:blue">—</span> Load SPA <span style="color:magenta">—</span> Indicative <span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px; transform: rotate(45deg);"></span> Over-run <span style="border: 1px solid blue; display: inline-block; width: 10px; height: 10px; transform: rotate(45deg);"></span> Over-sail	SPA Location	Ballynaguilkee Lower Left Bends to Lower Right Bend	Checked	GB	29/09/2022	Point of Interest	26 - 28	Drawing Status	Draft
				Drawing No.	SK21	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision

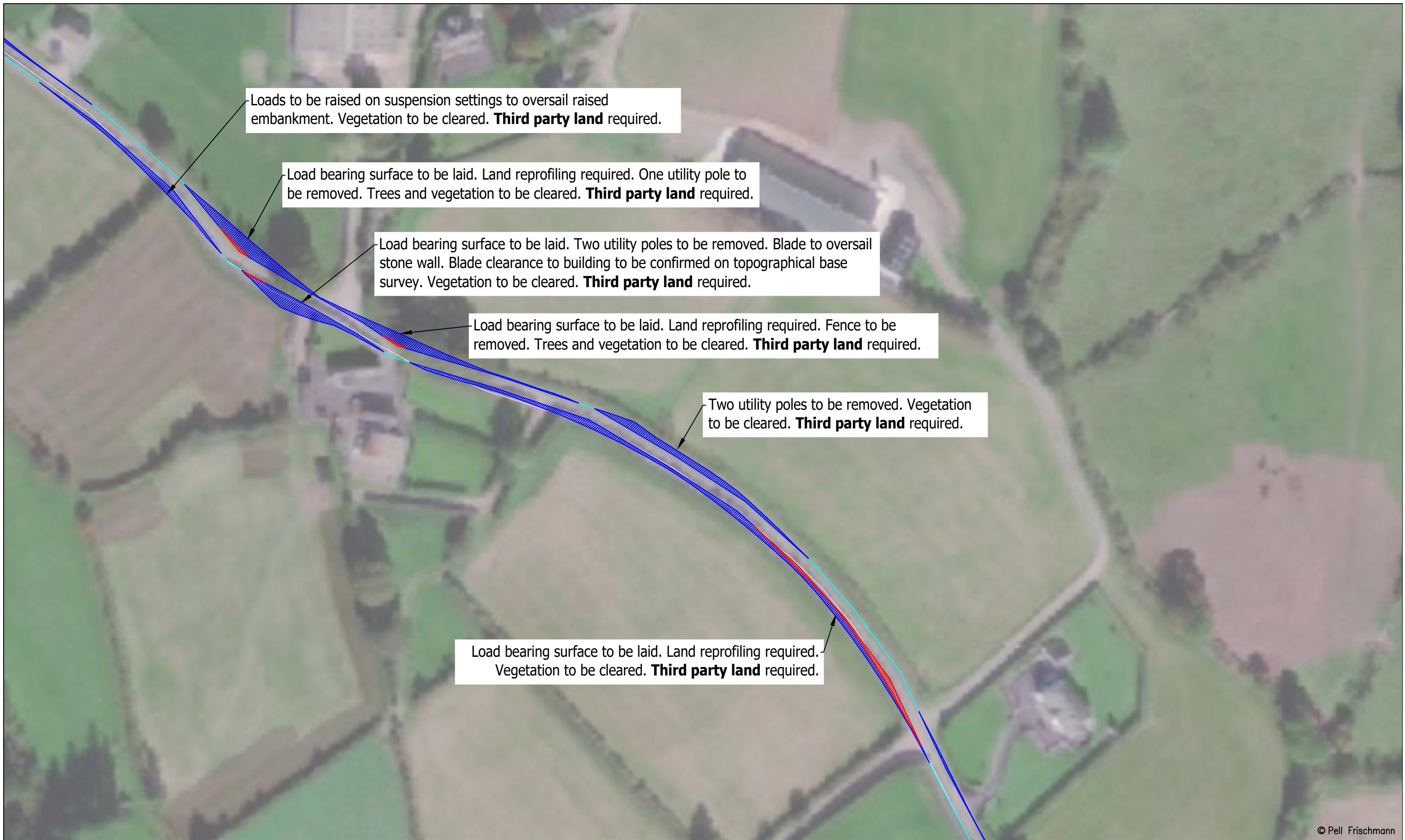




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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b>  Wheel SPA  Body SPA  Load SPA  Indicative  Over-run  Over-sail	SPA Location	Ballynaguilkee Lower Left Bends to Lower Right Bend	Checked	GB	29/09/2022	Drawing Status	Draft	Revision	1
				Point of Interest	26 - 28	Drawing No.	SK21A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.





Loads to be raised on suspension settings to oversail raised embankment. Vegetation to be cleared. **Third party land** required.

Load bearing surface to be laid. Land reprofiling required. One utility pole to be removed. Trees and vegetation to be cleared. **Third party land** required.

Load bearing surface to be laid. Two utility poles to be removed. Blade to oversail stone wall. Blade clearance to building to be confirmed on topographical base survey. Vegetation to be cleared. **Third party land** required.

Load bearing surface to be laid. Land reprofiling required. Fence to be removed. Trees and vegetation to be cleared. **Third party land** required.

Two utility poles to be removed. Vegetation to be cleared. **Third party land** required.

Load bearing surface to be laid. Land reprofiling required. Vegetation to be cleared. **Third party land** required.

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	Client	EMPower			Designed	TL	13/04/2022	Checked	GB	29/09/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg	
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	Drawing Title	Vestas V162 Blade and Mid Tower			Point of Interest		26 - 28		Drawing Status			Draft	
	SPA Location	Ballynaguilkee Lower Left Bends to Lower Right Bend			Drawing No.	SK21B			Notes:		Revision		1
											1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		



Blade



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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; padding: 2px;"> </span> Over-run <span style="border: 1px solid blue; padding: 2px;"> </span> Over-sail	SPA Location	Ballynaguilkee Upper Junction to Upper Left / Right Bends	Checked	GB	29/09/2022	Point of Interest	29 - 31	Drawing Status	Draft
			Drawing No.	SK22	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1



Tower



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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px; transform: rotate(45deg);"></span> Over-run <span style="border: 1px solid blue; display: inline-block; width: 10px; height: 10px; transform: rotate(45deg);"></span> Over-sail	SPA Location	Ballynaguilkee Upper Junction to Upper Left / Right Bends	Checked	GB	29/09/2022	Point of Interest	29 - 31	Drawing Status	Draft
			Drawing No.	SK22A	Notes:		1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	Revision	1



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	Client	EMPower	Designed	TL	13/04/2022	Checked	GB	29/09/2022
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	Drawing Title	Vestas V162 Blade and Mid Tower	Point of Interest	29 - 31		Drawing Status	Draft	
	SPA Location	Ballynaguilkee Upper Junction to Upper Left / Right Bends	Drawing No.	SK22B	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision



Blade



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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:blue">—</span> Load SPA <span style="color:magenta">—</span> Indicative <span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px; transform: rotate(45deg);"></span> Over-run <span style="border: 1px solid blue; display: inline-block; width: 10px; height: 10px; transform: rotate(45deg);"></span> Over-sail	SPA Location	Ballynaguilkee Upper Left Bend to Upper Right Bend	Checked	GB	29/09/2022	Point of Interest	32, 33	Drawing Status	Draft
			Drawing No.	SK23	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1



Tower



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 www.pellfrischmann.com

Client **EMPower**

Key	<span style="color: red;">—</span>	<span style="color: green;">—</span>	<span style="color: magenta;">—</span>	<span style="color: cyan;">—</span>		
	Wheel SPA	Body SPA	Load SPA	Indicative	Over-run	Over-sail

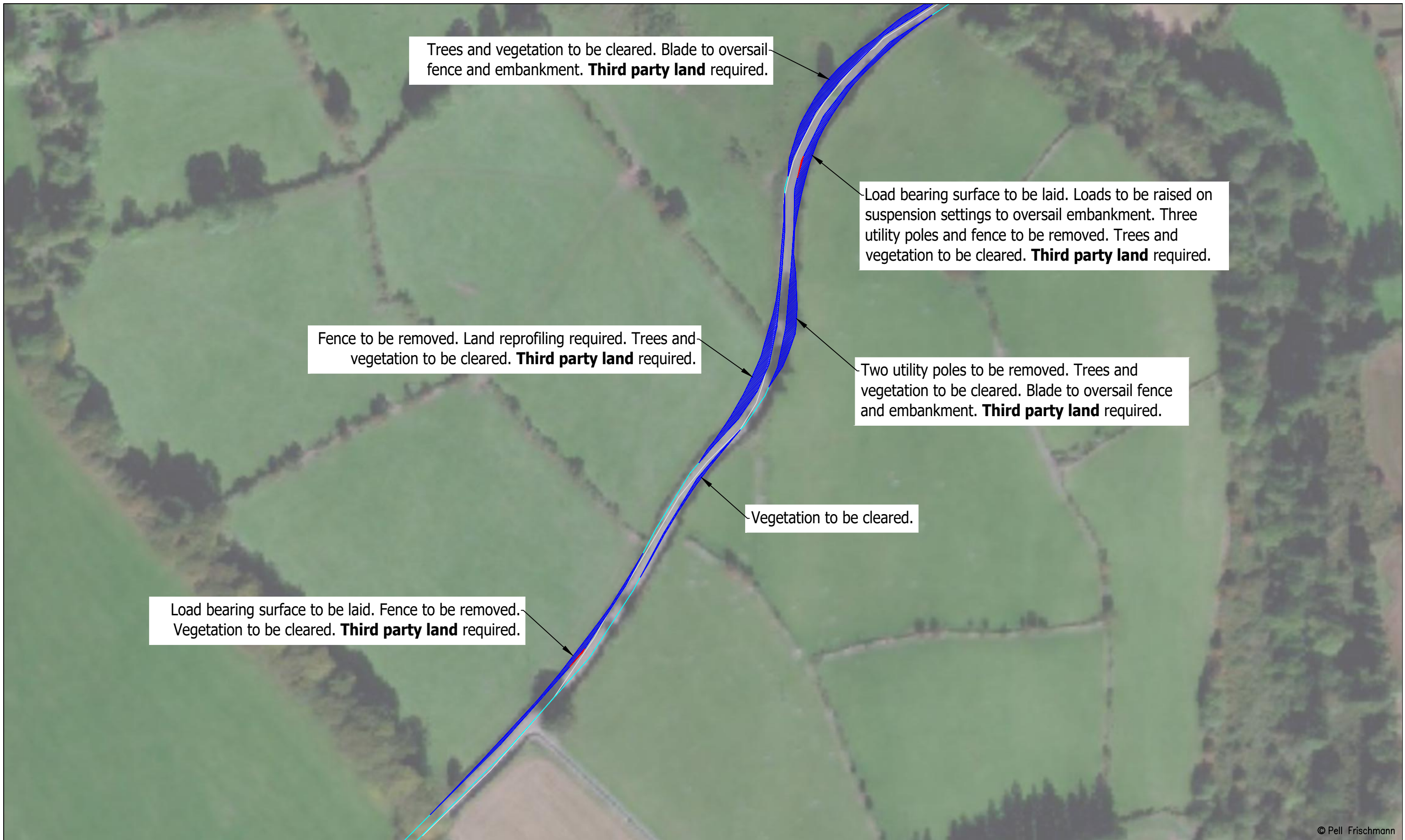
Project  
 Dyrick Hill Wind Farm

Drawing Title  
 Vestas V162 Blade and Mid Tower

SPA Location  
 Ballynaguilkee Upper Left Bend to Upper Right Bend

	Name	Date	Scale
Drawn	JS	17/12/2021	1:1750 @ A3
Designed	TL	13/04/2022	File No. 211215 Dyrick Hill Tracking [FINAL].dwg
Checked	GB	29/09/2022	
Point of Interest		32, 33	Drawing Status Draft
Drawing No.	Notes:		Revision
SK23A	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		1





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA (Red line) Body SPA (Green line) Load SPA (Magenta line) Indicative (Cyan line) Over-run (Red hatched) Over-sail (Blue hatched)	SPA Location	Ballynaguilkee Upper Left Bend to Upper Right Bend	Checked	GB	29/09/2022	Point of Interest	32, 33	Drawing Status	Draft
			Drawing No.	SK23B	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1



Blade









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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px; transform: rotate(45deg);"></span> Over-run <span style="border: 1px solid blue; display: inline-block; width: 10px; height: 10px; transform: rotate(45deg);"></span> Over-sail	SPA Location	N72 Ballinahemery	Checked	GB	29/09/2022	Point of Interest	37, 38	Drawing Status	Draft
			Drawing No.	SK24	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b>  Wheel SPA  Body SPA  Load SPA  Indicative  Over-run  Over-sail	SPA Location	N72 Ballinahemery	Checked	GB	29/09/2022	Point of Interest	37, 38	Drawing Status	Draft
				Drawing No.	SK24A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision





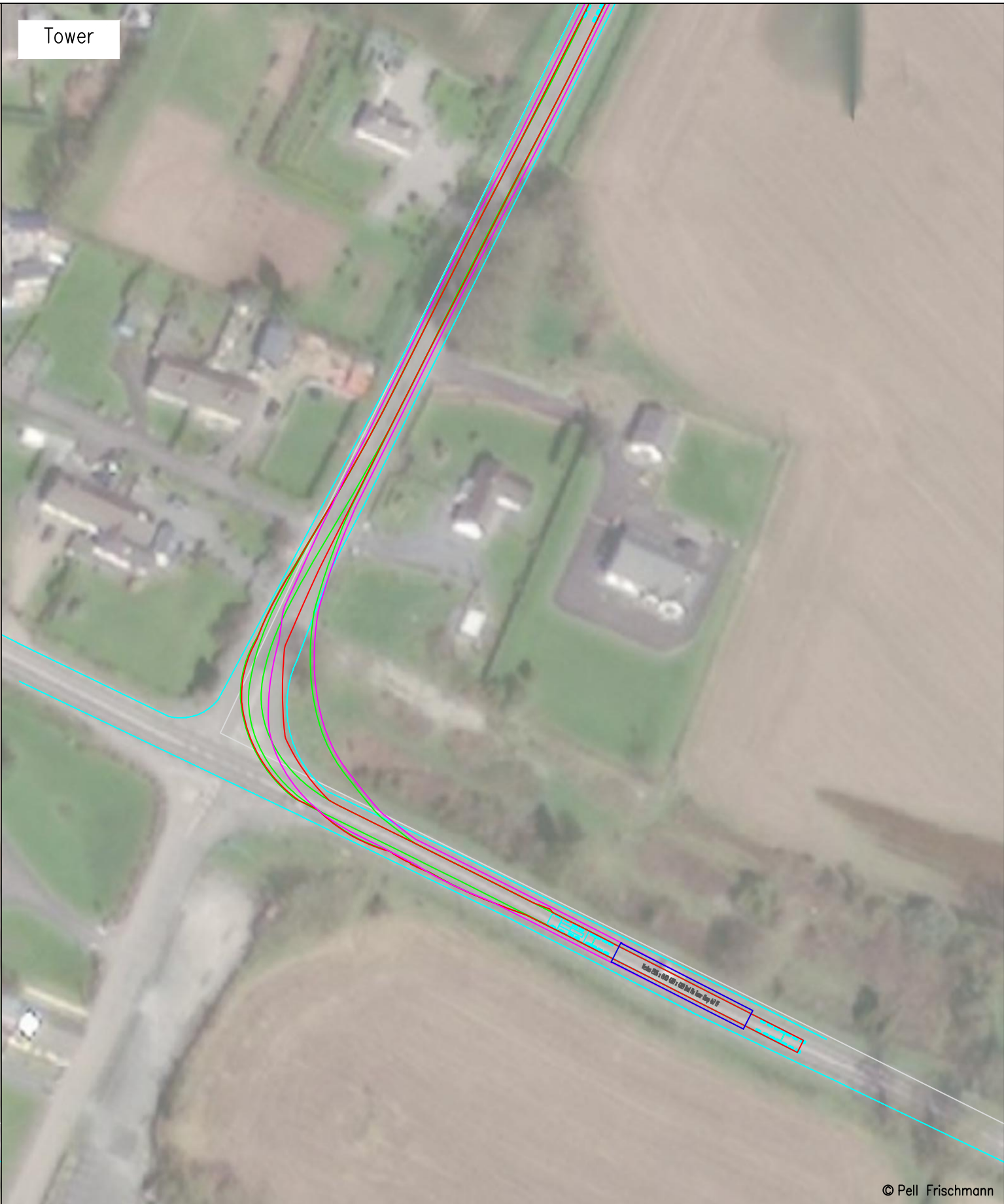
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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; padding: 2px;"> </span> Over-run <span style="border: 1px solid blue; padding: 2px;"> </span> Over-sail	SPA Location	N72 Ballinahemery	Checked	GB	29/09/2022	Point of Interest	37, 38	Drawing Status	Draft
			Drawing No.	SK24B	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1



Blade

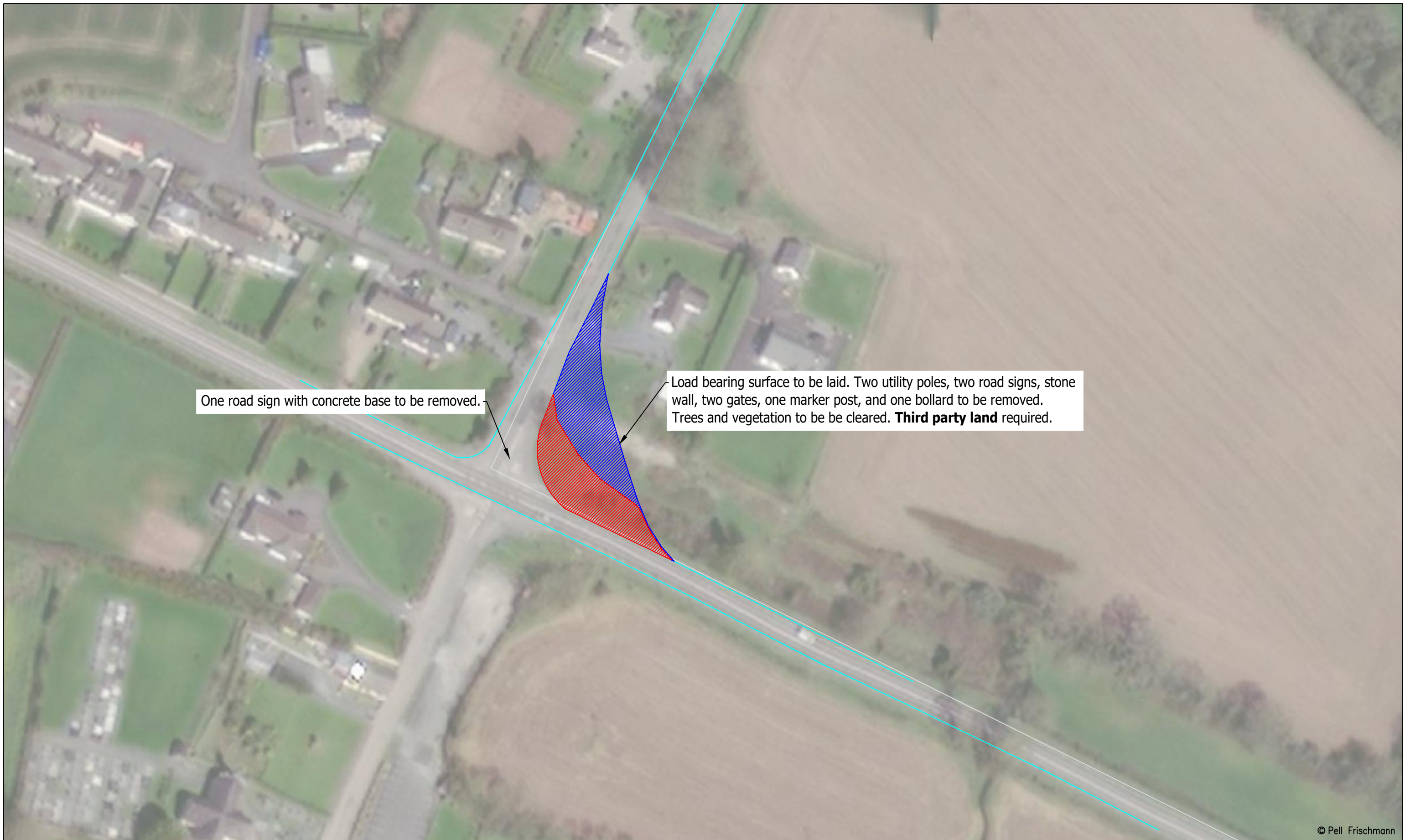
Tower



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	Client	EMPower			Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg	
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	Drawing Title	Vestas V162 Blade and Mid Tower			Checked	GB	29/09/2022	Drawing Status	Draft	
	SPA Location	N72 / L1027 Junction			Point of Interest	39		Drawing No.	Notes:	Revision
					SK25	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.			1	





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="color:red">▨</span> Over-run <span style="color:blue">▨</span> Over-sail	SPA Location	N72 / L1027 Junction	Checked	GB	29/09/2022	Point of Interest	39	Drawing Status	Draft
			Drawing No.	SK25A	Notes:			Revision	1



Blade

Tower



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www.pellfrischmann.com

Project  
Dyrick Hill Wind Farm

	Name	Date	Scale
Drawn	JS	17/12/2021	1:1250 @ A3
Designed	TL	13/04/2022	File No. 211215 Dyrick Hill Tracking [FINAL].dwg
Checked	GB	29/09/2022	
Point of Interest			Drawing Status
40			Draft

Client  
EMPower

Drawing Title  
Vestas V162 Blade and Mid Tower

Drawing No.	Notes:	Revision
SK26	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	1

Key						
	Wheel SPA	Body SPA	Load SPA	Indicative	Over-run	Over-sail

SPA Location  
L1027 Turbeha





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px; transform: rotate(45deg);"></span> Over-run <span style="border: 1px solid blue; display: inline-block; width: 10px; height: 10px; transform: rotate(45deg);"></span> Over-sail	SPA Location	L1027 Turbeha	Checked	GB	29/09/2022	Point of Interest	40	Drawing Status	Draft
			Drawing No.	SK26A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1



Blade

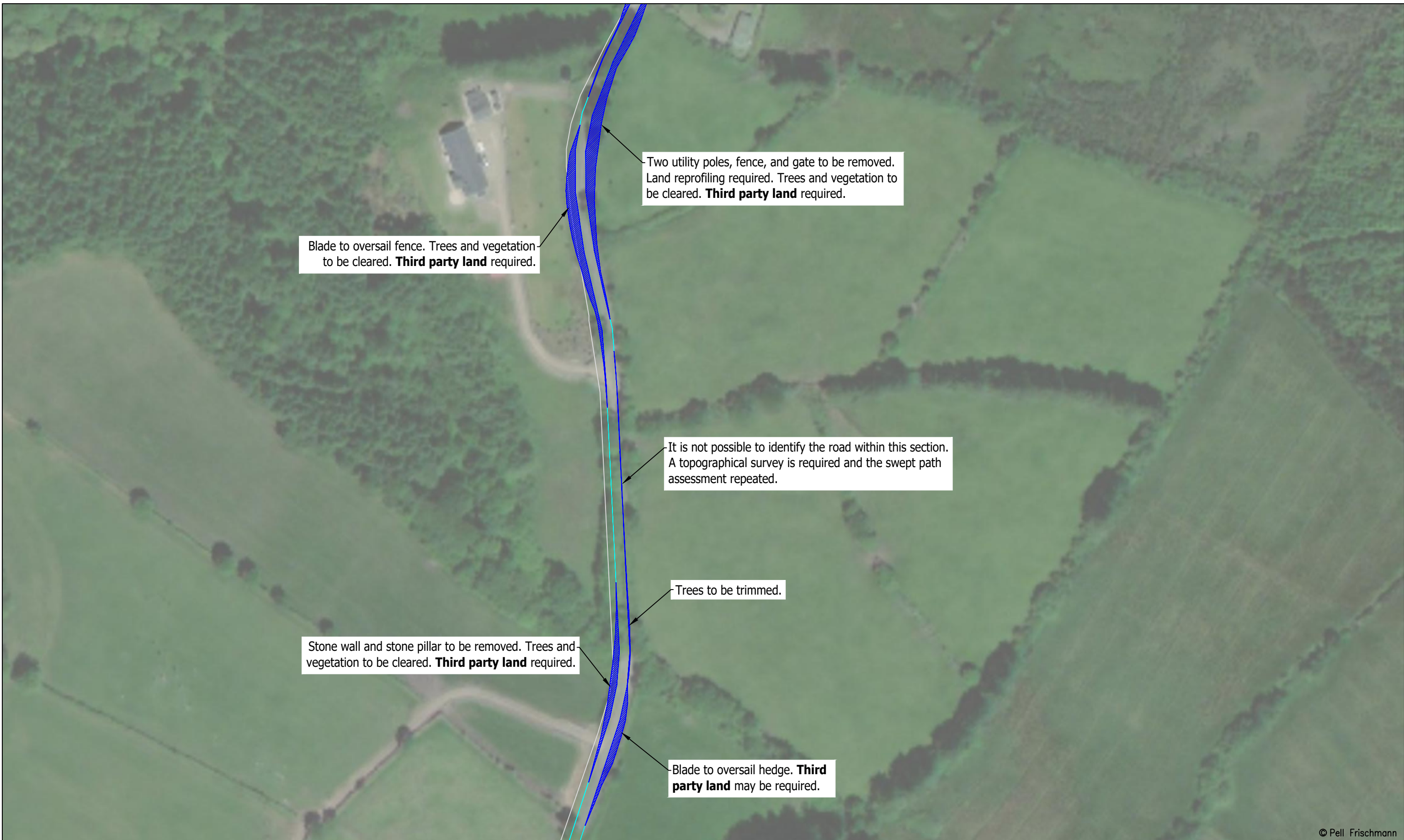
Tower



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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	L1027 North of Ardaguna	Checked	GB	29/09/2022	Drawing Status	Draft	Revision	1
	Drawing No.	SK27	Point of Interest	41, 42	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.			





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	L1027 North of Ardaguna	Checked	GB	29/09/2022	Point of Interest	41, 42	Drawing Status	Draft
			Drawing No.	SK27A	Notes:			Revision	1



Blade

Tower



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www.pellfrischmann.com

Project

Dyrick Hill Wind Farm

Name

Date

Scale

1:1500 @ A3

Drawn

JS

17/12/2021

File No.

211215 Dyrick Hill Tracking [FINAL].dwg

Designed

TL

13/04/2022

Checked

GB

29/09/2022

Drawing Status

Draft

Point of Interest

43, 44

Drawing No.

SK28

Notes:

- 1. All mitigation is subject to confirmation through a test run.
- 2. This is not a construction drawing and is intended for illustration purposes only.

Revision

1

Client

EMPower

Drawing Title

Vestas V162 Blade and Mid Tower

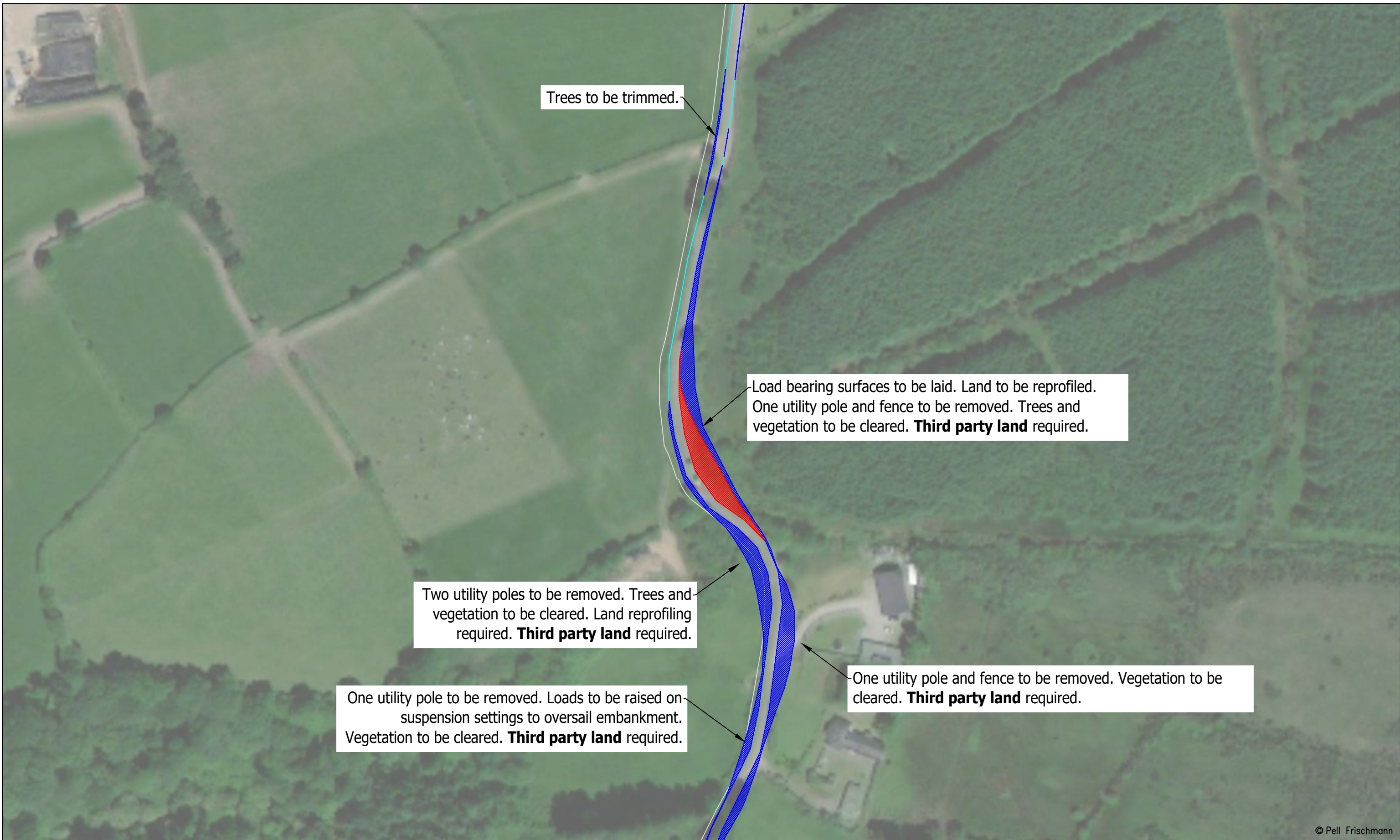
SPA Location

L1027 North East of Glenshelane Woods

Key

- Wheel SPA
- Body SPA
- Load SPA
- Indicative
- Over-run
- Over-sail





Trees to be trimmed.

Load bearing surfaces to be laid. Land to be reprofiled. One utility pole and fence to be removed. Trees and vegetation to be cleared. **Third party land** required.

Two utility poles to be removed. Trees and vegetation to be cleared. Land reprofiling required. **Third party land** required.

One utility pole to be removed. Loads to be raised on suspension settings to oversail embankment. Vegetation to be cleared. **Third party land** required.

One utility pole and fence to be removed. Vegetation to be cleared. **Third party land** required.

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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	L1027 North East of Glenshelane Woods	Checked	GB	29/09/2022	Point of Interest	43, 44	Drawing Status	Draft
			Drawing No.	SK28A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1



Blade

Tower



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www.pellfrischmann.com

Project

Dyrick Hill Wind Farm

	Name	Date	Scale
Drawn	JS	17/12/2021	1:1250 @ A3
Designed	TL	13/04/2022	File No. 211215 Dyrick Hill Tracking [FINAL].dwg
Checked	GB	29/09/2022	Drawing Status Draft
Point of Interest		45	
Drawing No.	Notes:		Revision
SK29	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		1

Client **EMPower**

Drawing Title

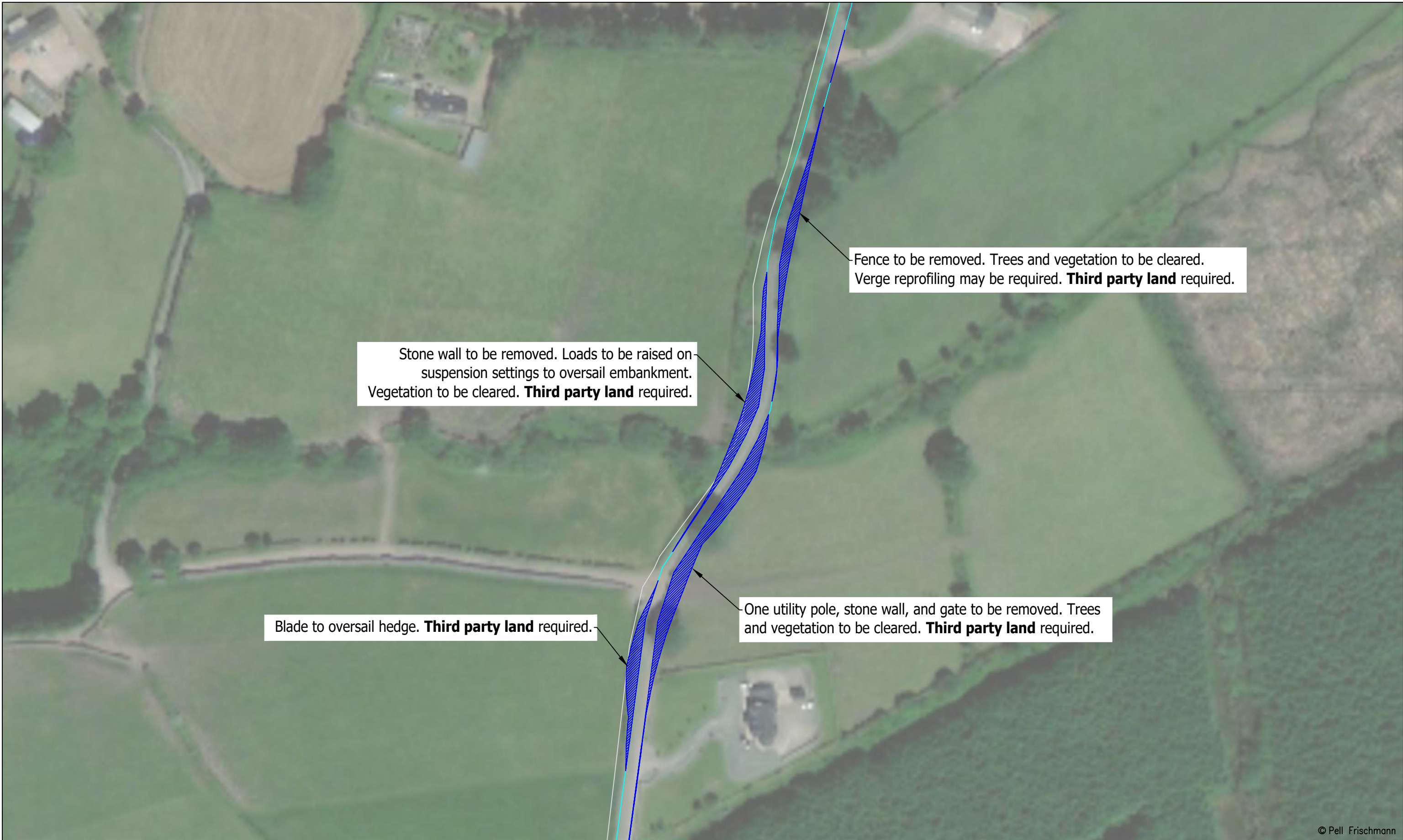
Vestas V162 Blade and Mid Tower

Key					
	Wheel SPA	Body SPA	Load SPA	Over-run	Over-sail

SPA Location

L1027 Coolagurtwoe





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	L1027 Coolagurtwee	Checked	GB	29/09/2022	Drawing Status	Draft	Revision	1
			Point of Interest	45	Drawing No.	SK29A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	





Blade

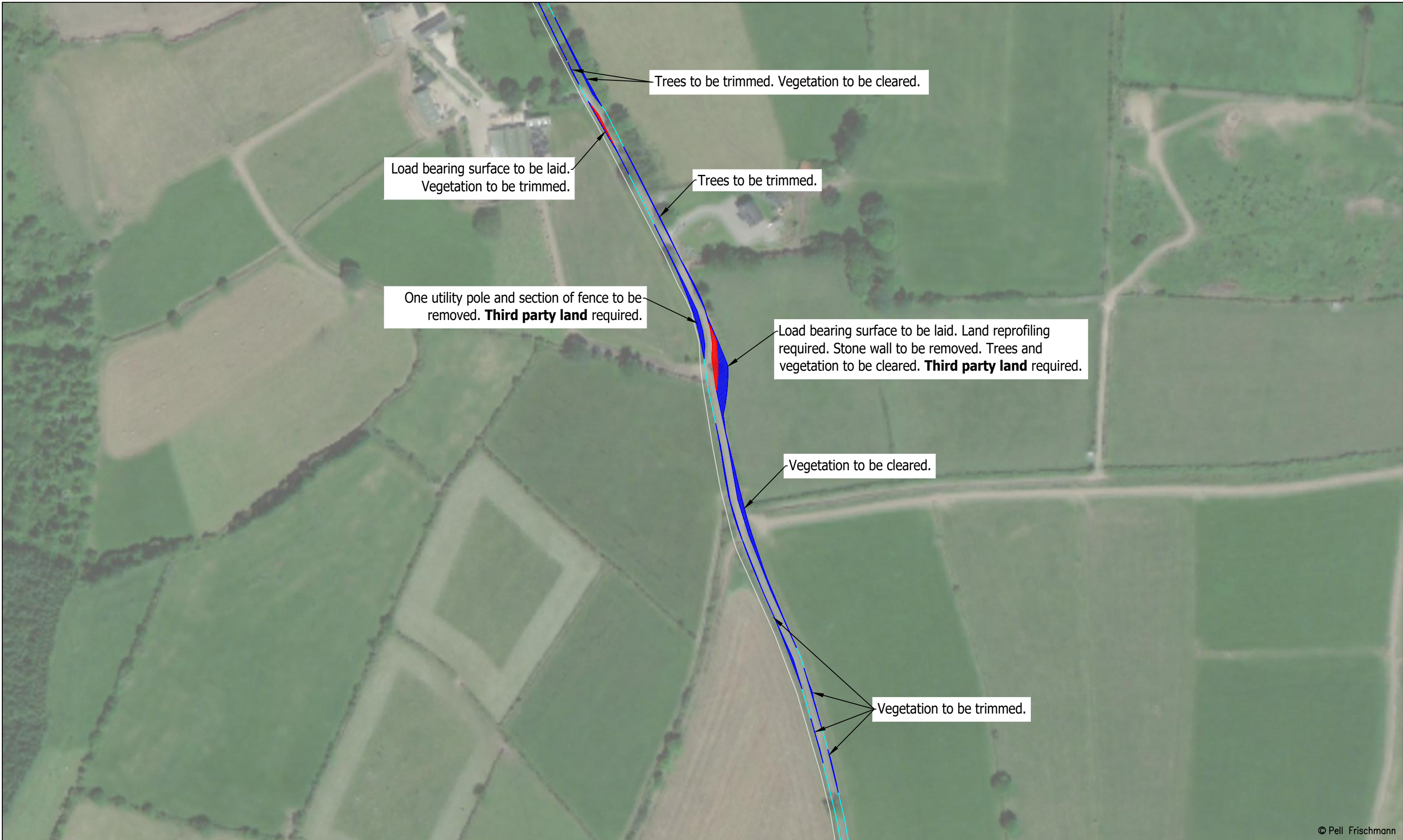


Tower

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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	L1027 North of Coolagurtee	Checked	GB	29/09/2022	Drawing Status	Draft	
			Point of Interest	46		Drawing No.	SK30	
				Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	L1027 North of Coolagurtee	Checked	GB	29/09/2022	Drawing Status	Draft	Revision	1
			Point of Interest	46	Drawing No.	SK30A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	



Blade

Tower



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www.pellfrischmann.com

Client **EMPower**

Key	<span style="color: red;">—</span>	<span style="color: green;">—</span>	<span style="color: magenta;">—</span>	<span style="color: cyan;">—</span>		
	Wheel SPA	Body SPA	Load SPA	Indicative	Over-run	Over-sail

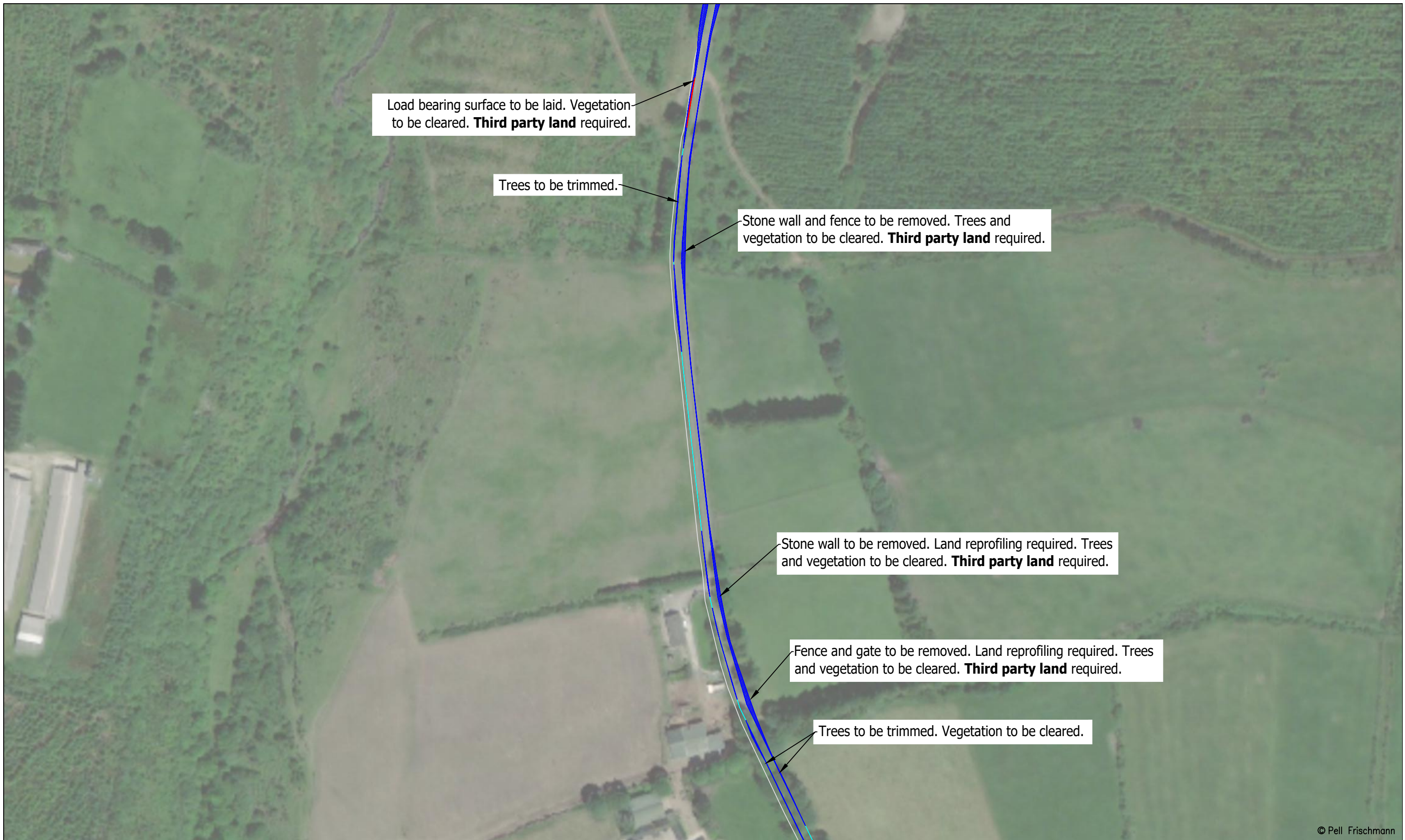
Project  
**Dyrick Hill Wind Farm**

Drawing Title  
**Vestas V162 Blade and Mid Tower**

SPA Location  
**L1027 Coolagurtwee**

	Name	Date	Scale
Drawn	JS	17/12/2021	1:2000 @ A3
Designed	TL	13/04/2022	File No. 211215 Dyrick Hill Tracking [FINAL].dwg
Checked	GB	29/09/2022	
Point of Interest			Drawing Status
47, 48			Draft
Drawing No.	Notes:		Revision
SK31	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		1





Load bearing surface to be laid. Vegetation to be cleared. **Third party land** required.

Trees to be trimmed.

Stone wall and fence to be removed. Trees and vegetation to be cleared. **Third party land** required.

Stone wall to be removed. Land reprofiling required. Trees and vegetation to be cleared. **Third party land** required.

Fence and gate to be removed. Land reprofiling required. Trees and vegetation to be cleared. **Third party land** required.

Trees to be trimmed. Vegetation to be cleared.

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	Client	EMPower		Designed	TL	Date	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg	
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	Drawing Title	Vestas V162 Blade and Mid Tower		Checked	GB	Date	29/09/2022	Drawing Status	Draft	
	SPA Location	L1027 Coolagurtwee		Point of Interest			47, 48	Drawing No.	SK31A	
					Notes:		1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1



Blade

Tower



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93 GEORGE STREET, EDINBURGH, EH2 3ES

Tel: +44 (0)131 240 1270  
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www.pellfrischmann.com

Project

Dyrick Hill Wind Farm

Name

Date

Scale

1:2000 @ A3

Drawn

JS

17/12/2021

File No.

211215 Dyrick Hill Tracking [FINAL].dwg

Designed

TL

13/04/2022

Checked

GB

29/09/2022

Drawing Status

Draft

Client

EMPower

Drawing Title

Vestas V162 Blade and Mid Tower

Point of Interest

49, 50

Drawing No.

SK32

Notes:

1. All mitigation is subject to confirmation through a test run.  
2. This is not a construction drawing and is intended for illustration purposes only.

Revision

1

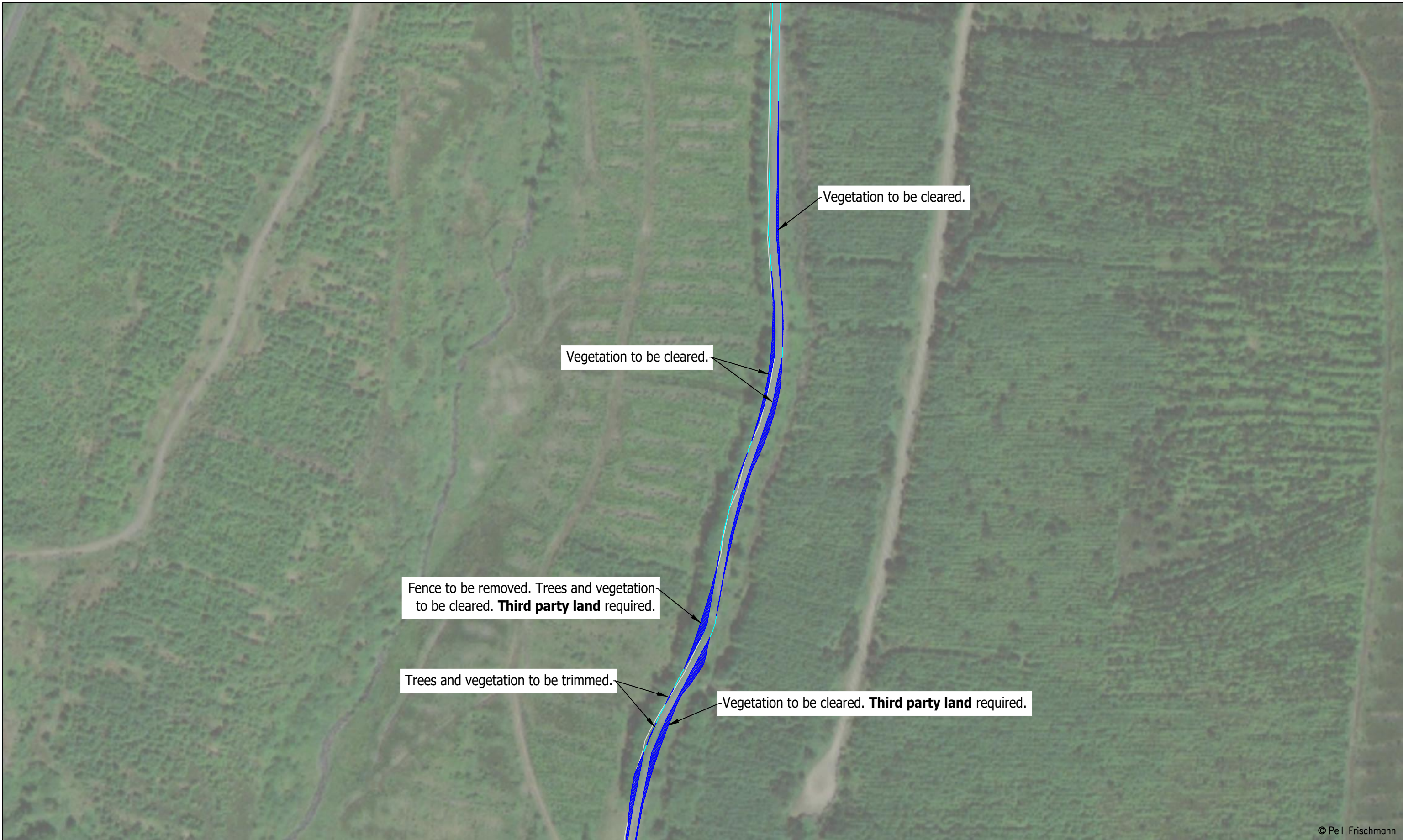
Key

- Wheel SPA
- Body SPA
- Load SPA
- Indicative
- Over-run
- Over-sail

SPA Location

L1027 Coolagurttwee





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	L1027 Coolagurttwee	Checked	GB	29/09/2022	Drawing Status	Draft	Revision	1
			Point of Interest	49, 50	Drawing No.	SK32A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.	



Blade

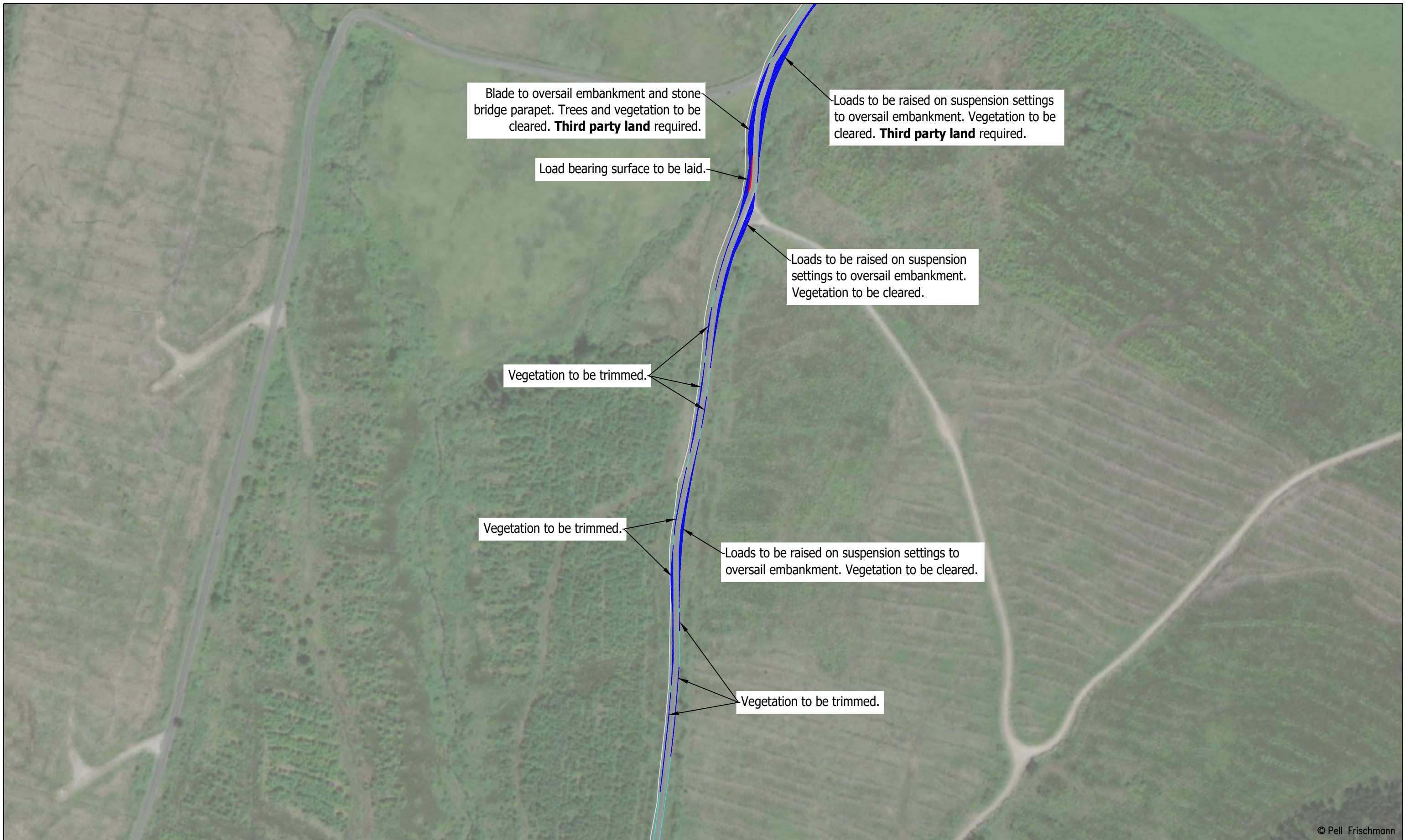
Tower



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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA (Red line) Body SPA (Green line) Load SPA (Magenta line) Indicative (Cyan line) Over-run (Red hatched box) Over-sail (Blue hatched box)	SPA Location	L1027 South East of Knockscullage	Checked	GB	29/09/2022	Point of Interest	51, 52	Drawing Status	Draft
			Drawing No.	SK33	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1





Blade to oversail embankment and stone bridge parapet. Trees and vegetation to be cleared. **Third party land** required.

Loads to be raised on suspension settings to oversail embankment. Vegetation to be cleared. **Third party land** required.

Load bearing surface to be laid.

Loads to be raised on suspension settings to oversail embankment. Vegetation to be cleared.

Vegetation to be trimmed.

Vegetation to be trimmed.

Loads to be raised on suspension settings to oversail embankment. Vegetation to be cleared.

Vegetation to be trimmed.

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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	L1027 South East of Knockscullage	Checked	GB	29/09/2022	Point of Interest	51, 52	Drawing Status	Draft
			Drawing No.	SK33B	Notes:			Revision	1
						1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.			



Blade

Tower



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93 GEORGE STREET, EDINBURGH, EH2 3ES  
Tel: +44 (0)131 240 1270  
Email: pfe@pellfrischmann.com  
www.pellfrischmann.com

Project

Dyrick Hill Wind Farm

Name

Date

Scale

1:2000 @ A3

Drawn

JS

17/12/2021

File No.

211215 Dyrick Hill Tracking [FINAL].dwg

Designed

TL

13/04/2022

Checked

GB

29/09/2022

Drawing Status

Draft

Point of Interest

53

Drawing No.

SK34

Notes:

- 1. All mitigation is subject to confirmation through a test run.
- 2. This is not a construction drawing and is intended for illustration purposes only.

Revision

1

Client

EMPower

Drawing Title

Vestas V162 Blade and Mid Tower

Key

- Wheel SPA
- Body SPA
- Load SPA
- Indicative
- Over-run
- Over-sail

SPA Location

L1027 South East of Knockscullage





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	Client	EMPower	Drawing Title	Vestas V162 Blade and Mid Tower	Designed	TL	13/04/2022	File No.	211215 Dyrick Hill Tracking [FINAL].dwg
<b>Key</b> <span style="color:red">—</span> Wheel SPA <span style="color:green">—</span> Body SPA <span style="color:magenta">—</span> Load SPA <span style="color:cyan">—</span> Indicative <span style="border:1px solid red; display:inline-block; width:10px; height:10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, red 2px, red 4px);"></span> Over-run <span style="border:1px solid blue; display:inline-block; width:10px; height:10px; background: repeating-linear-gradient(-45deg, transparent, transparent 2px, blue 2px, blue 4px);"></span> Over-sail	SPA Location	L1027 South East of Knockscullage	Checked	GB	29/09/2022	Point of Interest	53	Drawing Status	Draft
			Drawing No.	SK34A	Notes:	1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only.		Revision	1