



Technical Appendix 12.1: Abnormal Load Route Assessment

Windburn Wind Farm

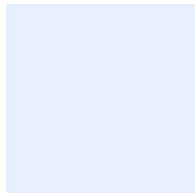
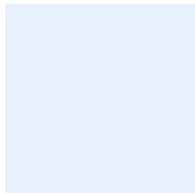
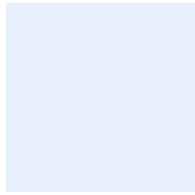
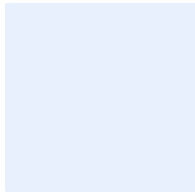
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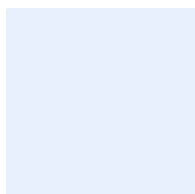
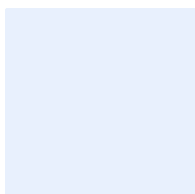
Windburn Windfarm

08/07/2024

Reference number GB01T24C69/ALA



ABNORMAL LOADS ASSESSMENT



SYSTRA

WINDBURN WINDFARM

ABNORMAL LOADS ASSESSMENT

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APPROVAL

Version	Name		Position	Date	Modifications
1	Author	T Foster	Consultant	31/05/2024	v1
	Checked by	Alan DeVenny	Projects Director	31/05/2024	
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2	Author	T Foster	Consultant	08/07/2024	Update to reflect client comments
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1. INTRODUCTION

1.1 General

- 1.1.1 SYSTRA has been commissioned by Windburn Wind Farm Limited to undertake an assessment of an identified abnormal loads route to the Windburn windfarm site, which is located within the Perth and Kinross Council (PKC) and Clackmannanshire Council (CC) administrative area. The approximate access site location is indicated by **Figure 1**.

Figure 1. Site Location



- 1.1.2 The nearest proposed turbine is approximately 3.3km to the north of the settlement of Alva, 5.2km south of Blackford and approximately 5.6km south-east of the settlement of Greenloaning. The site sits to the south of the A9 trunk road which runs locally between Stirling and Perth. The turbine components would be landed at the existing Rosyth Docks facility which has previously supported the development of onshore windfarms.

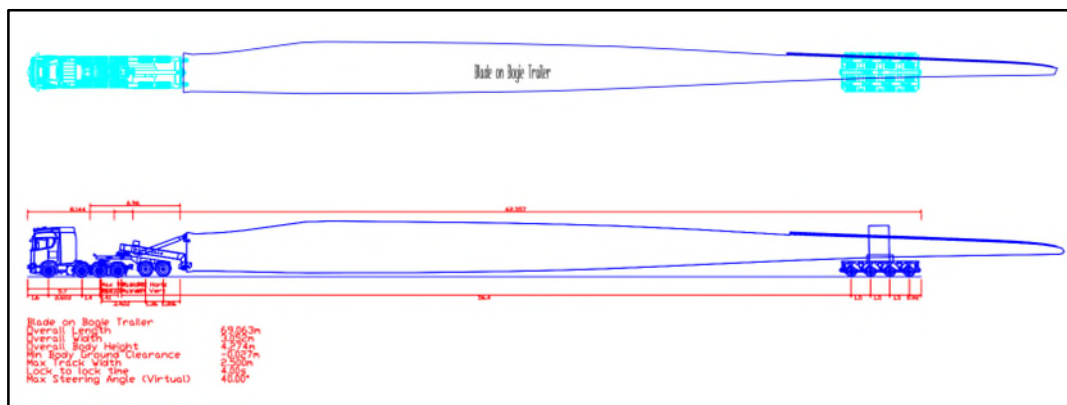
1.2 Turbine Transport Requirements

- 1.2.1 The candidate turbine for the Windburn windfarm is the Enercon E-138 turbine. For the purposes of this assessment the turbine blade and the longest turbine tower section have been assessed as the “worst-case” design components.

Blade Transporter

- 1.2.2 The turbine blade of the E-138 is 67.8m in length and would be loaded onto a specialised blade trailer. The Turbine Delivery Vehicle (TDV) uses a rear dolly which clamps onto the blade. The dolly is not rigidly linked to the tractor unit and can be steered independently.
- 1.2.3 The rear dolly incorporates pendle axles which allow for a secondary rear wheel angle of up to 40 degrees. The TDV is ~79.5m long in total and the dolly is located approximately 53.8m from the rear of the front tractor / trailer unit. The turbine blade would overhang the end of the dolly by ~11m.
- 1.2.4 A drawing of the TDV is provided in **Appendix A** and **Figure 2**.

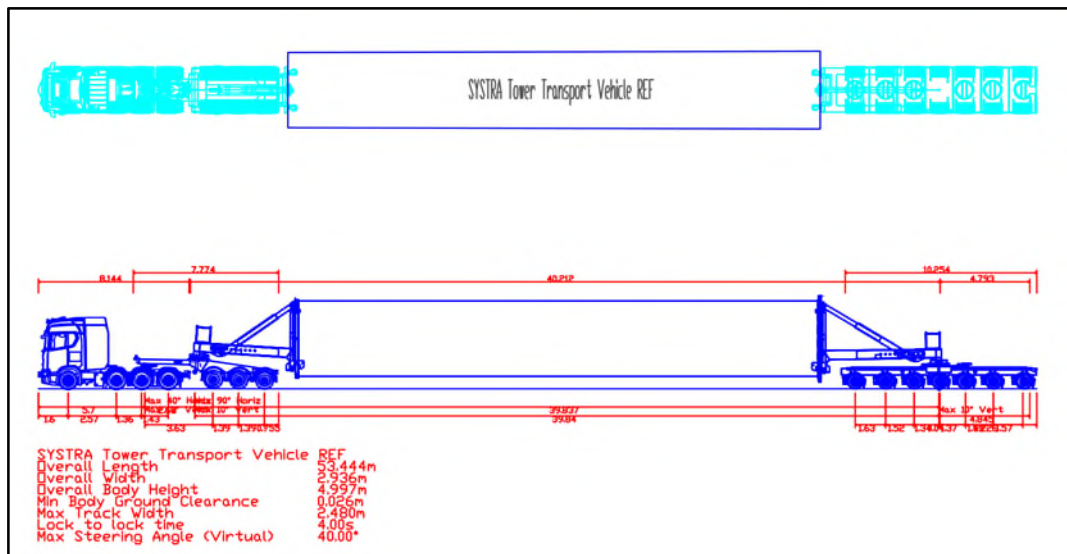
Figure 2. Turbine Delivery Vehicle



Tower Transporter

- 1.2.5 The “worst-case” tower component of the E-138 is Steel Section 2 which is 28.5m in length and has a tapering diameter from 4.02m at the top to 4.16m at the base. The tower sections would be loaded onto a specialised tower delivery trailer. The Tower Delivery Vehicle clamps the tower section at each end and features a tractor unit at the front and a pivotable dolly at the rear.
- 1.2.6 The Tower Delivery Vehicle is ~53.4m long in total. A drawing of the vehicle is provided in **Appendix A** and **Figure 3**.

Figure 3. Tower Delivery Vehicle



- 1.2.7 At this stage in the design process, the haulier of the wind turbine blades is not yet known, nor the exact specifics of the vehicles that they will use. However, from experience of previous developments, and from the details of the components to be moved, it is possible to estimate (with some degree of accuracy) the specifics of the design vehicles that will be used to allow a detailed and accurate route assessment to be undertaken.
- 1.2.8 SYSTRA has used the Autodesk (CAD) extension package AutoTrack to undertake swept path analysis (SPA) for the identified Pinch Points (PP) on the delivery route. The trailer units associated with the design vehicle for the transportation of the blades are extendable so on delivery of the abnormal load, the trailer can be reduced in length. In these circumstances, the Autotracking and route assessment has only been undertaken for the delivery route to the site.

1.3 Assessed Abnormal Loads Route

- 1.3.1 The Port of Entry (PoE) for the turbine components is Rosyth Docks. The docks have been frequently used for the transportation of large renewable components in the past. The assessed route to site is indicated by **Figure 4** below.

Figure 4. Assessed Abnormal Loads Route



- 1.3.2 The identified abnormal loads route is set out in **Table 1**.

Table 1. Abnormal Loads Route Sections

SECTION	CUMULATIVE DISTANCE (MILES)
Exit Rosyth Docks onto St Margaret Way	0.0
At the roundabout continue straight on St Margaret Way	0.3
At the roundabout continue straight onto Kind Malcolm Drive	0.6
At the Ferrytoll Junction take the first exit (left) onto the M90 northbound	1.0
At J10 of the M90 (Craigend Interchange) take the lefthand slip to join the M90 spur	28.7
At the Broxden Roundabout take the first exit (left) onto the A9	31.7
Approximately 1mi west of Blackford turn left onto the C468	47.8
At the Carim Lodge turn left onto the access track	50.5

2. SWEPT PATH ASSESSMENT

2.1 Pinch Points

2.1.1 In total, 6 Pinch Points have been identified on the route between the port and where the vehicles turn off the A9 trunk road. The route between the A9 and the Site Access has been subject to a continuous swept path assessment. The Pinch Points that have been assessed are indicated by **Figures 5 to 7** below.

Figure 5. PPs at Rosyth



Figure 6. PP at Broxden Roundabout

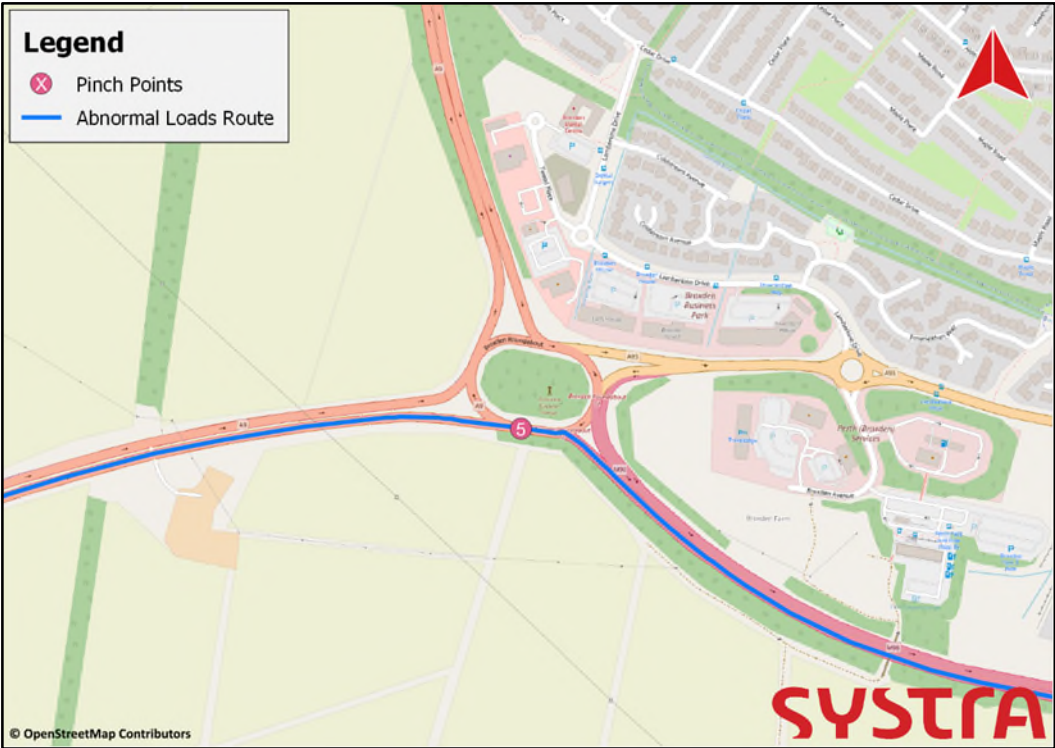


Figure 7. PP Leaving A9

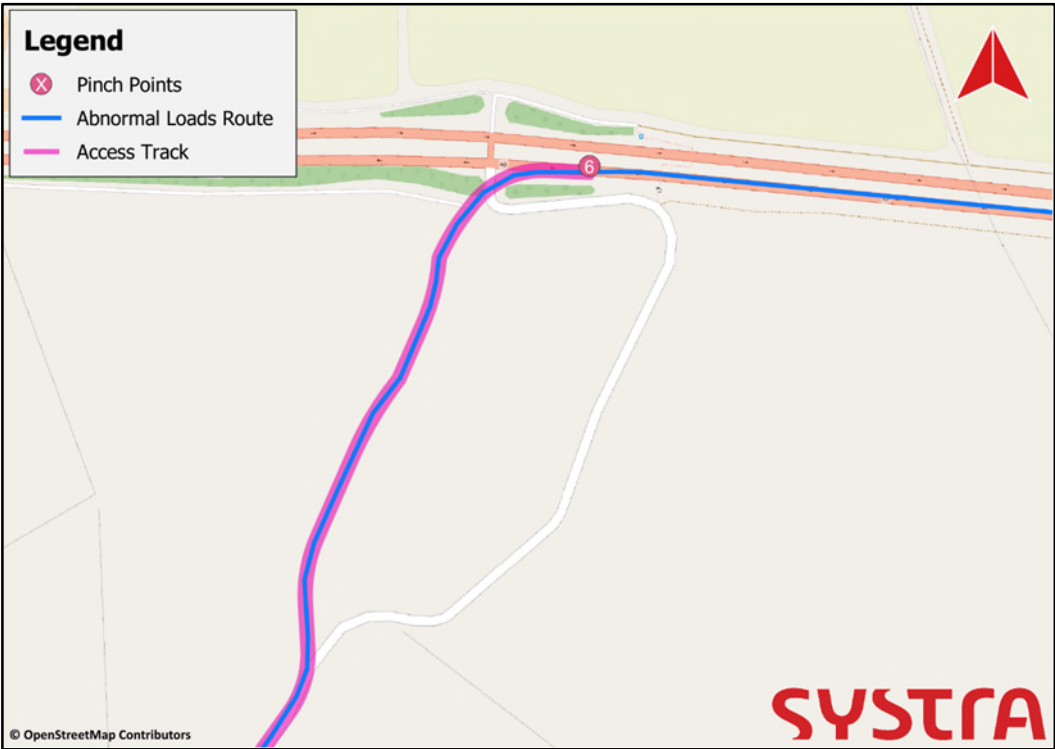


Figure 8. Continuous Section on C468



- 2.1.2 The swept path plans are contained within **Appendix A**. The plans indicate areas of overrun and over-sail, as well as highlighting potential clashes with street furniture and requirements for third-party land.
- 2.1.3 **Table 2 and 3** summarise the findings at each location for the transportation of the tower and blade components, respectively.

Table 2. Pinch Point Summary – Blade Delivery Vehicle

PP	LOCATION	LAT	LONG	STREET FURNITURE REMOVAL	TEMPORARY PAVING / GRADING WORKS	3RD PARTY LAND REQUIREMENTS
01	Roundabout at exit to Rosyth Docks	56.024069	-3.431622	<ul style="list-style-type: none">3no. chevron signs2no. bollardsFencing	<ul style="list-style-type: none">Hardstanding to be laid on roundabout central islandTransition ramps may be required to enable vehicle to mount footway and roundabout islands	<ul style="list-style-type: none">None
02	Roundabout on St Margaret Way (2 no. swept path plans)	56.021562	-3.424765	<ul style="list-style-type: none">1no. traffic sign1no. bollard	<ul style="list-style-type: none">Existing overrun area in roundabout may need to be enlarged.Transition ramps may be required to enable vehicle to mount roundabout islands.	<ul style="list-style-type: none">None
03	Roundabout at end of St Margaret Way	56.020994	-3.418218	<ul style="list-style-type: none">2no. chevron signs2no. bollards2no. traffic signs	<ul style="list-style-type: none">Existing overrun area in roundabout likely to be sufficient – extents to be checked on siteTransition ramps may be required to enable vehicle to mount roundabout islands	<ul style="list-style-type: none">None
04	Left turn onto M90 Slip at Ferrytoll Junction	56.021785	-3.408738	<ul style="list-style-type: none">2no. traffic signal headsShort section of railing	<ul style="list-style-type: none">None	<ul style="list-style-type: none">None
05	Left turn onto A9 at Broxden Roundabout	56.387783	-3.487060	<ul style="list-style-type: none">1no. lighting columnShort section of roundabout sight screens	<ul style="list-style-type: none">None	<ul style="list-style-type: none">None
06	Left turn onto C468	56.256138	-3.805208	<ul style="list-style-type: none">1no. traffic sign	<ul style="list-style-type: none">Transition ramp required to overrun splitter island	<ul style="list-style-type: none">Yes – over-sail of blade on inside of turn. Land Checks required.
Cont.	Continuous section between A9 and Site Access	n/a	n/a	<ul style="list-style-type: none">General vegetation clearing and trimming required along length2no. gate posts and 1no. property sign at site access	<ul style="list-style-type: none">New access track to be constructed at northern endWidening of bellmouth required at site accessOn-line widening required to ensure carriageway width of 5m	<ul style="list-style-type: none">Yes – third party land requirement for new access track at northern end and widening of bellmouth at site accessMay be required for on-line widening

Table 3. Pinch Point Summary – Tower Delivery Vehicle

PP	LOCATION	LAT	LONG	STREET FURNITURE REMOVAL	TEMPORARY PAVING / GRADING WORKS	3RD PARTY LAND REQUIREMENTS
01	Roundabout at exit to Rosyth Docks	56.024069	-3.431622	<ul style="list-style-type: none"> 2no. chevron signs 3no. bollards Fencing 	<ul style="list-style-type: none"> Hardstanding to be laid on roundabout island Transition ramps may be required to enable vehicle to mount footway and roundabout islands 	<ul style="list-style-type: none"> None
02	Roundabout on St Margaret Way (2 no. swept path plans)	56.021562	-3.424765	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Existing overrun area in roundabout may need to be enlarged. Transition ramps may be required to enable vehicle to mount roundabout islands 	<ul style="list-style-type: none"> None
03	Roundabout at end of St Margaret Way	56.020994	-3.418218	<ul style="list-style-type: none"> 1no. traffic signs 	<ul style="list-style-type: none"> Existing overrun area in roundabout likely sufficient – extents to be checked on site Transition ramps may be required to enable vehicle to mount roundabout islands 	<ul style="list-style-type: none"> None
04	Left turn onto M90 Slip at Ferrytoll Junction	56.021785	-3.408738	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None
05	Left turn onto A9 at Broxden Roundabout	56.387783	-3.487060	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None
06	Left turn onto C468	56.256138	-3.805208	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Transition ramp required to overrun splitter island 	<ul style="list-style-type: none"> None
Cont.	Continuous section between A9 and Site Access	n/a	n/a	<ul style="list-style-type: none"> General vegetation clearing and trimming required along length 2no. gate posts and 1no. property sign at site access 	<ul style="list-style-type: none"> New access track to be constructed at northern end Widening of bellmouth required at site access On-line widening required to ensure carriageway width of 5m 	<ul style="list-style-type: none"> Yes – third party land requirement for new access track at northern end and widening of bellmouth at site access May be required for on-line widening

3. SUMMARY AND CONCLUSION

- 3.1.1 The abnormal load assessment has identified a technically feasible route to the site (in terms of horizontal geometry), which is dependent upon third-party land agreements at two locations. It is noted that this report has focussed on the horizontal alignment of the route. No vertical checks have been undertaken at this point but no major impediments have been identified at this stage and no weight restrictions have been identified on the route at this stage.
- 3.1.2 The most challenging pinch point is departing the A9 onto the new access track, which is dependant on third party land agreements. On-line widening will be required along the length of the single-track C468. This road is typically 3.6m in width and will likely require the verges to be stoned up on both sides of the carriageway to achieve the 4.5m-5m minimum width that the turbine suppliers will generally look for on the delivery route. The adopted highway boundary including verges looks to be typically ~10m so it's likely that this widening could be achieved without third party land requirements.
- 3.1.3 There are also 18 passing places along the 4.4km section of the C468 to be utilised for the Abnormal Loads Route. This equates to one every 240m. The locations of these passing places are indicated by **Figure 9**.

Figure 9. Passing Places on the C468

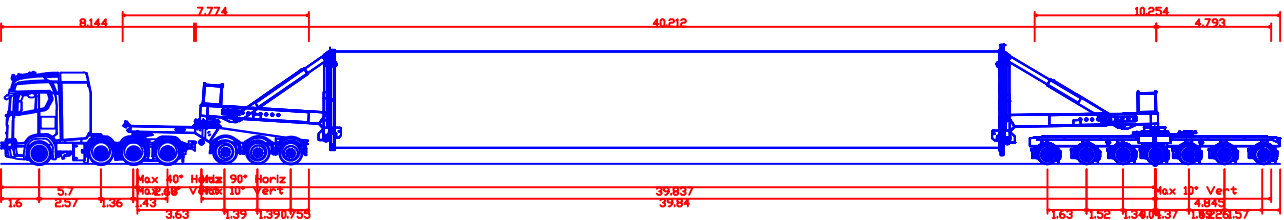


- 3.1.4 In the first instance, it is recommended that third-party land enquiries are made at the identified locations and it is also recommended that further engagement is undertaken with Perth and Kinross Council, Clackmannanshire Council and Transport Scotland in relation to the identified route.

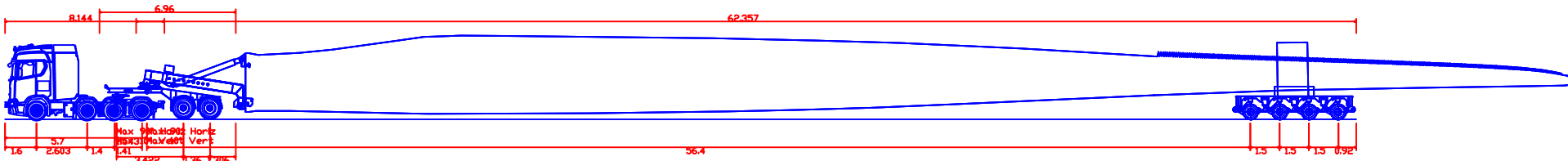
Summary

- If the necessary mitigation measures are made then the route can be navigated by vehicles carrying wind turbine components to the proposed site;
- Police escort or Pilot car will be required to accompany abnormal loads in order to assist with traffic control and the control of oncoming traffic;
- It is recommended to have adequate warning signs implemented to warn other road users at critical points along the route;
- All hedges, shrubs, bushes, trees and overhanging branches along the nominated routes must be trimmed from within carriageway verges;
- Specific street furniture has been nominated in this report for removal to facilitate over-sailed and 'swept' areas;
- Full carriageway widths must be available along the entirety of the route. Measures to remove parked vehicles must therefore be in place;
- Measures to assist the vehicle negotiating the kerbed changes in level at footways, roundabouts, pedestrian refuges etc. will be required; and
- Steel road plates may be required at locations where the vehicle overruns utility boxes or footways.

Appendix A – TDV Drawing and Swept Path Assessment



SYSTRA Tower Transport Vehicle REF
Overall Length 53.444m
Overall Width 2.936m
Overall Body Height 4.997m
Min Body Ground Clearance 0.026m
Max Track Width 2.480m
Lock to lock time 4.00s
Max Steering Angle (Virtual) 40.00°



Blade on Bogie Trailer
Overall Length 69.063m
Overall Width 3.092m
Overall Body Height 4.274m
Min Body Ground Clearance -0.027m
Max Track Width 2.500m
Lock to lock time 4.00s
Max Steering Angle (Virtual) 40.00°

- Notes:
- Do not scale from drawing.
 - All dimensions in metres unless otherwise stated.
 - Please note that marked service locations are indicative only and should be confirmed by topographical survey.

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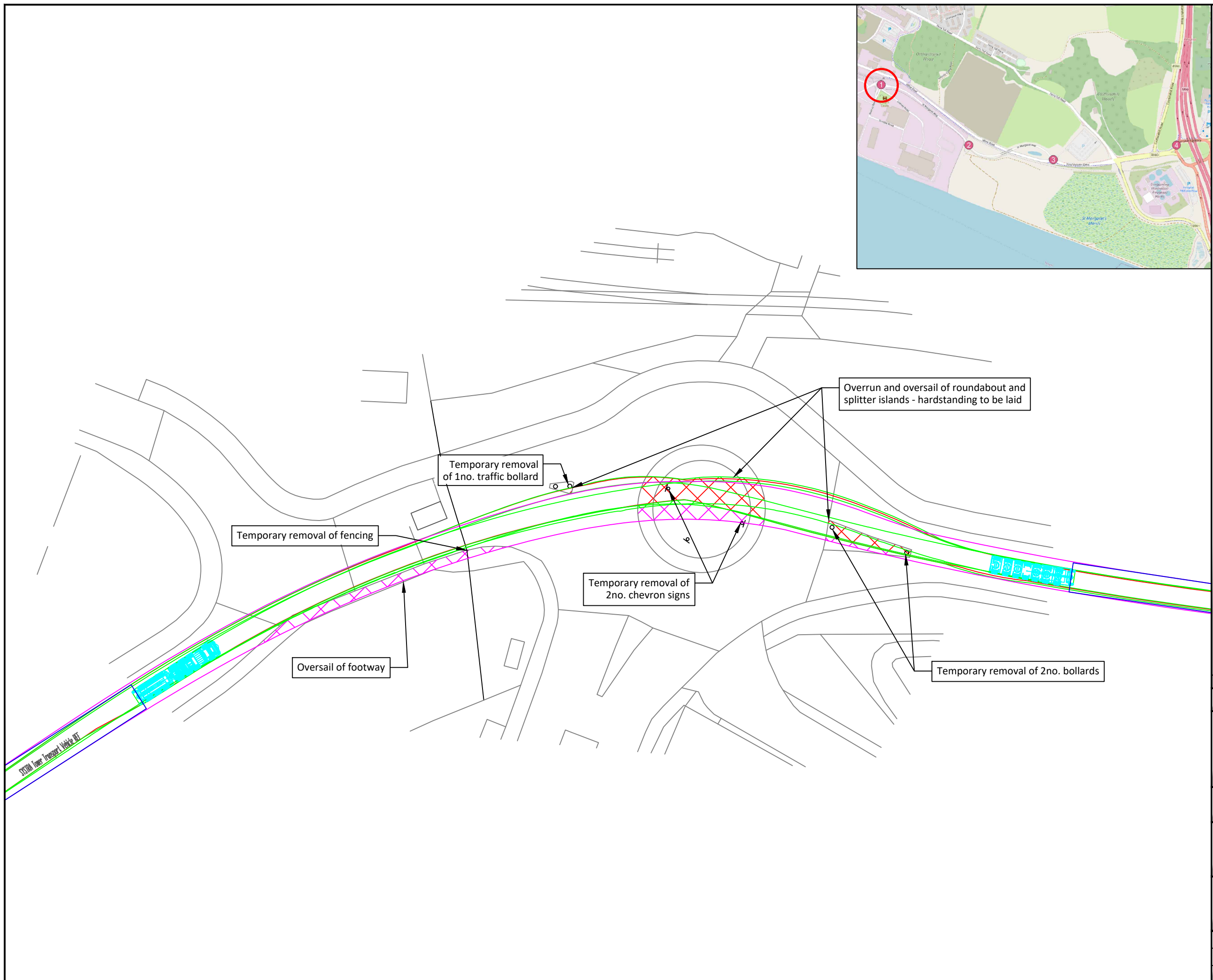
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

Project
Windburn Windfarm
Swept Path Assessment

Title
Tower and Blade Transport Vehicles

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale NTS
Drawing Status Information	Drawing Number GB01T24C69/VEH001	Rev. -



- Notes:**
1. Do not scale from drawing.
 2. All dimensions in metres unless otherwise stated.
 3. Please note that marked service locations are indicative only and should be confirmed by topographical survey.

-  Transporter Vehicle
-  Load Outline
-  Over-run envelope of tractor and trailer wheels
-  Over-sail envelope being swept by tractor and trailer bed
-  Over-sail envelope being swept by load path
-  Over-run area of tractor and trailer wheels out with carriageway
-  Over-sail area of tractor and trailer bed out with carriageway
-  Over-sail area of load out with carriageway

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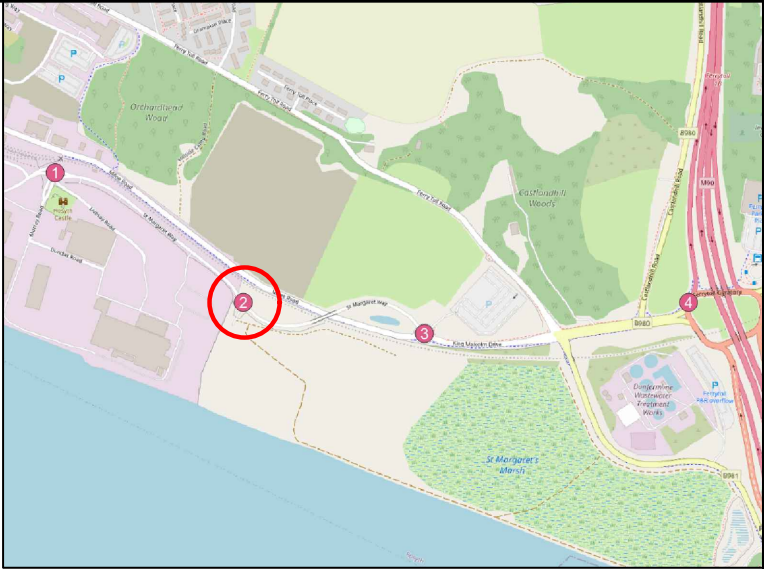
Windburn Windfarm
Swept Path Assessment

28.5m Tower Section (E138 Steel Section 2)
Pinch Point 1

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Windburn Windfarm
Swept Path Assessment

Title

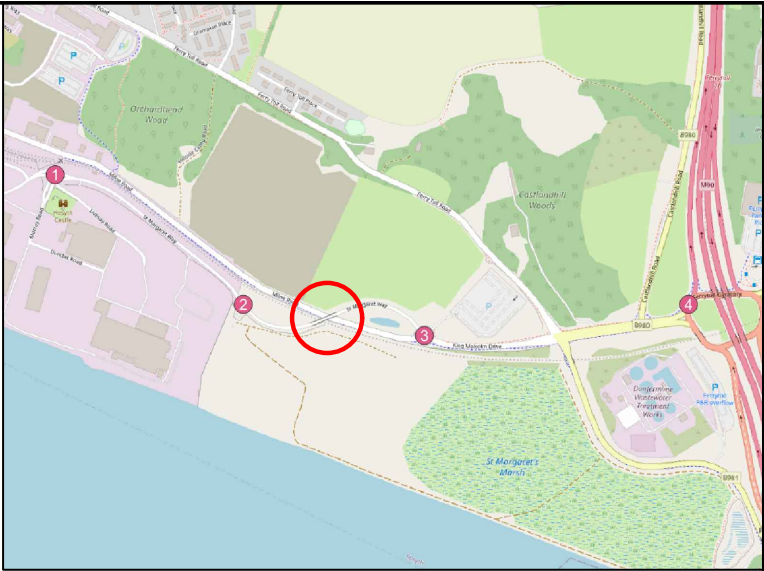
28.5m Tower Section (E138 Steel Section 2)
Pinch Point 2
Sheet 1 of 2

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Swept path of vehicle accommodated within extents of carriageway



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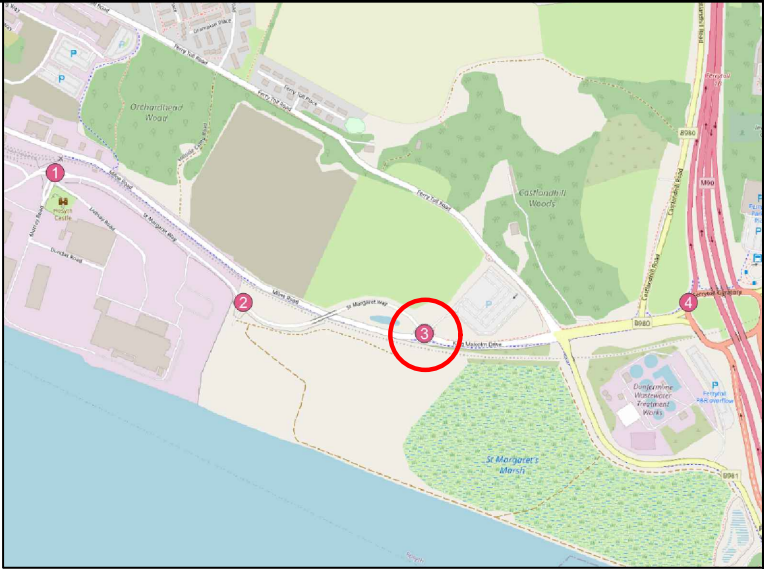
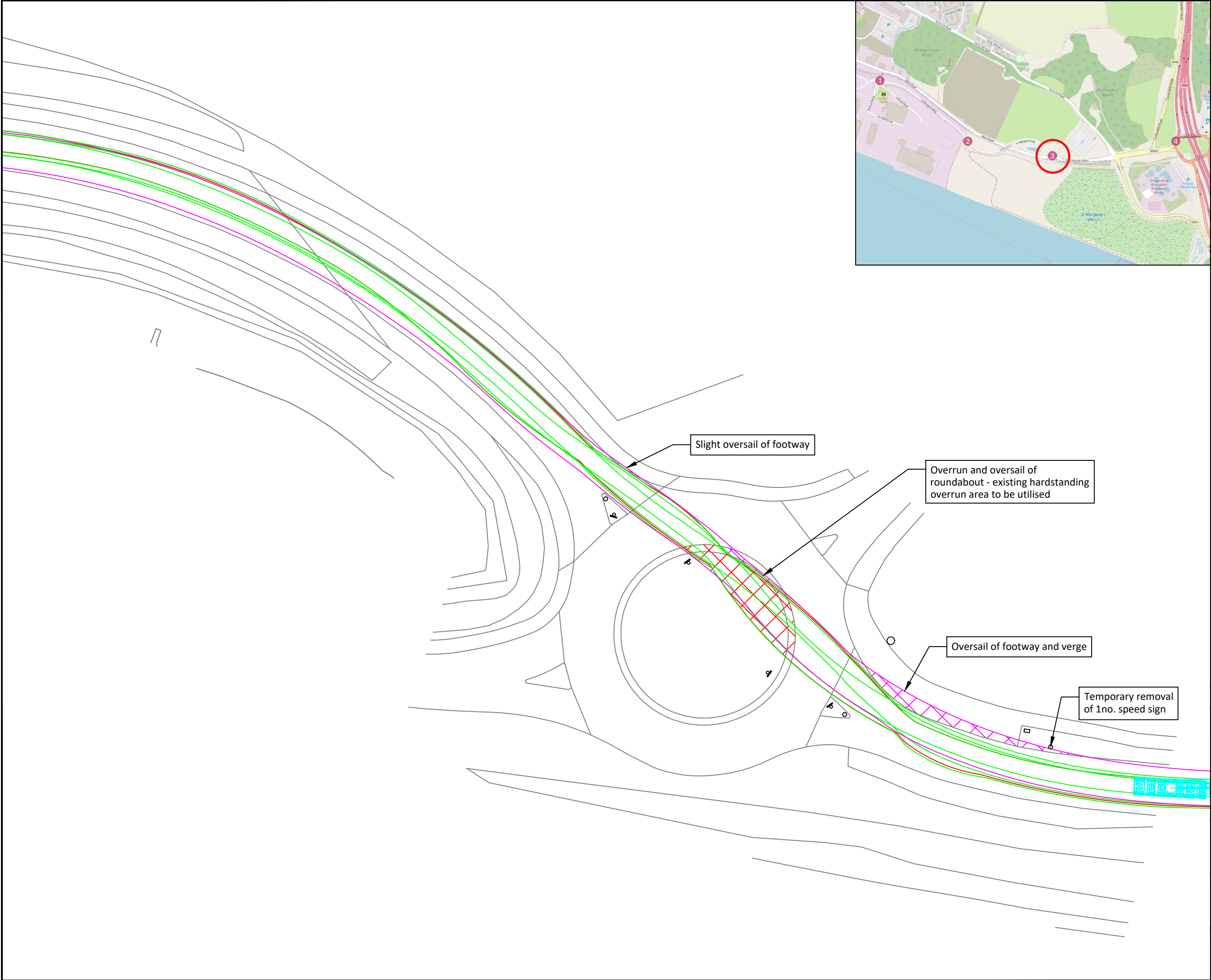
Title

28.5m Tower Section (E138 Steel Section 2)
Pinch Point 2
Sheet 2 of 2

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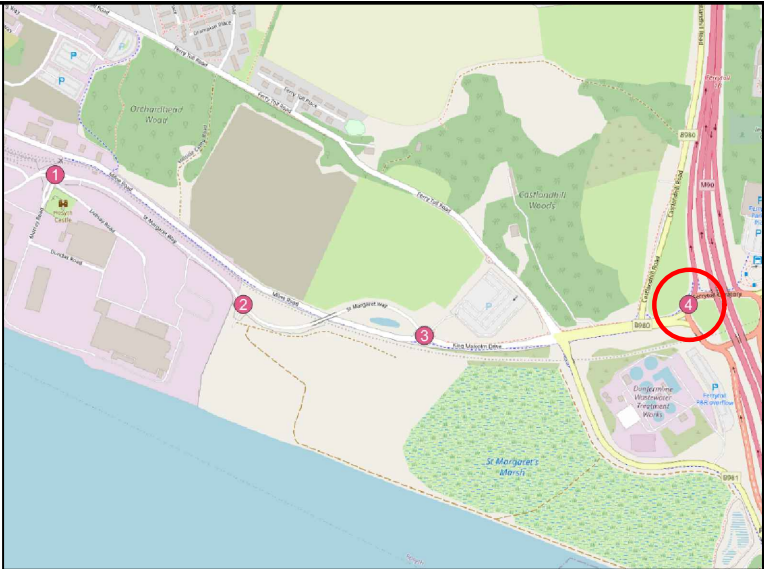
Windburn Windfarm
Swept Path Assessment

Title

28.5m Tower Section (E138 Steel Section 2)
Pinch Point 3

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Original dtp. size	A3	Date	08/07/2024	Scale	1:500
Drawing Status	Information	Drawing Number	GB01T24C69/SPA004T	Rev.	-

Swept path of vehicle
accommodated within
extents of carriageway



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Swept Path Assessment

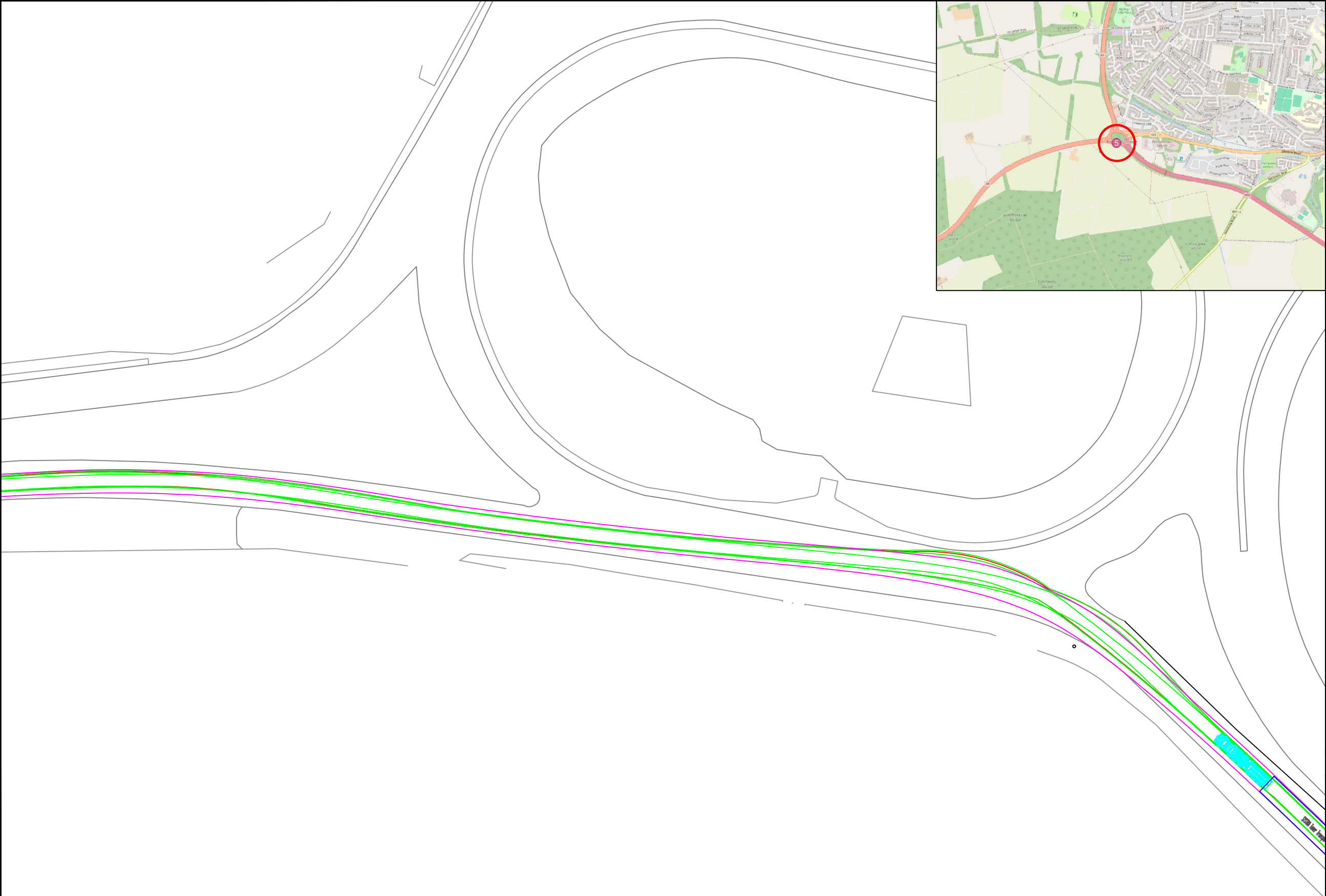
Title

28.5m Tower Section (E138 Steel Section 2)
Pinch Point 4

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Original dtp. size	Date	Scale
A3	08/07/2024	1:500
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Information	GB01T24C69/SPA005T	-

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- Key:**
- Transporter Vehicle
 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

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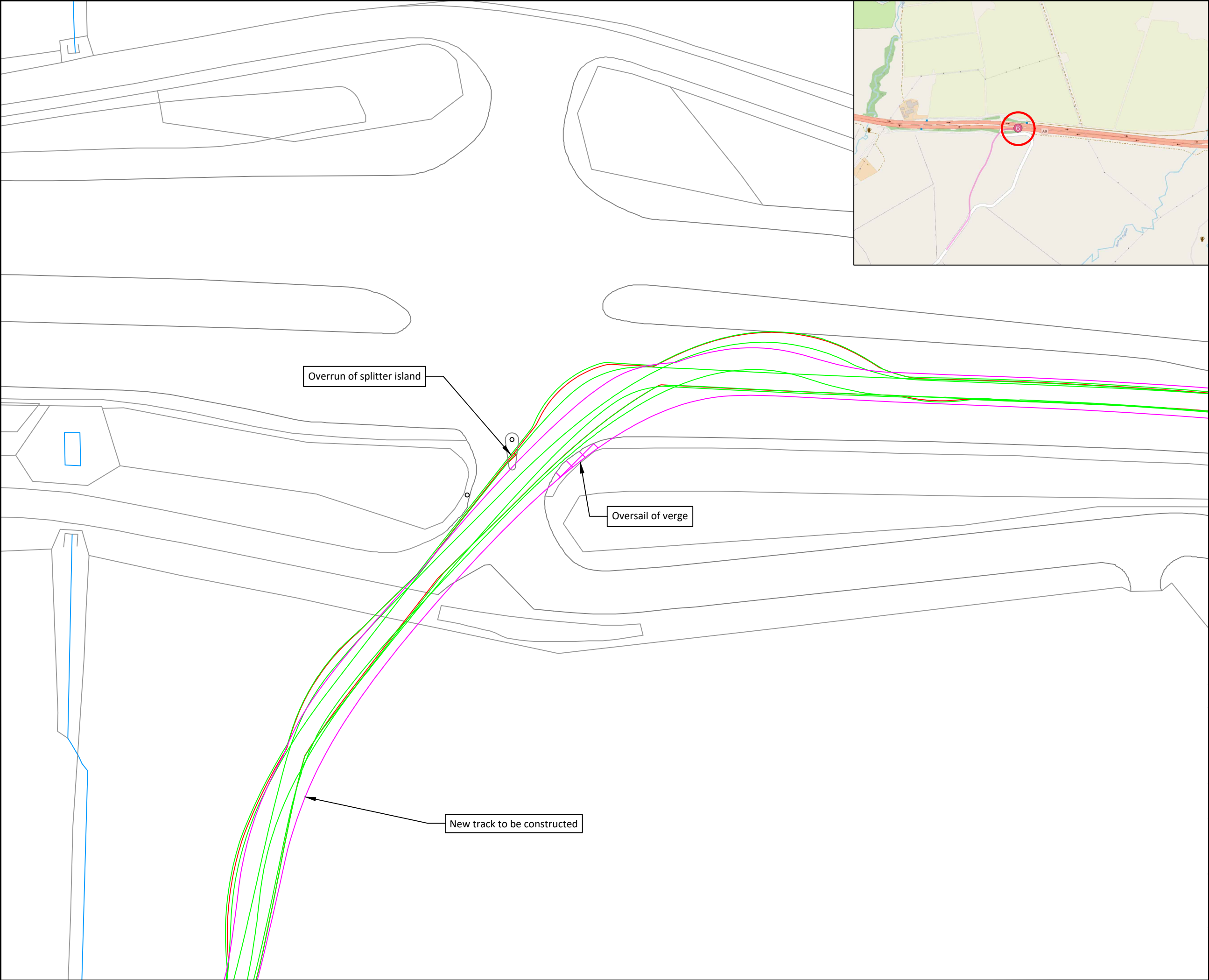
Client
Windburn Wind Farm Limited

Project
Windburn Windfarm
Swept Path Assessment

Title
28.5m Tower Section (E138 Steel Section 2)
Pinch Point 5

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:750
Drawing Status Information	Drawing Number GB01T24C69/SPA006T	Rev. -

Swept path of vehicle
accommodated within
extents of carriageway



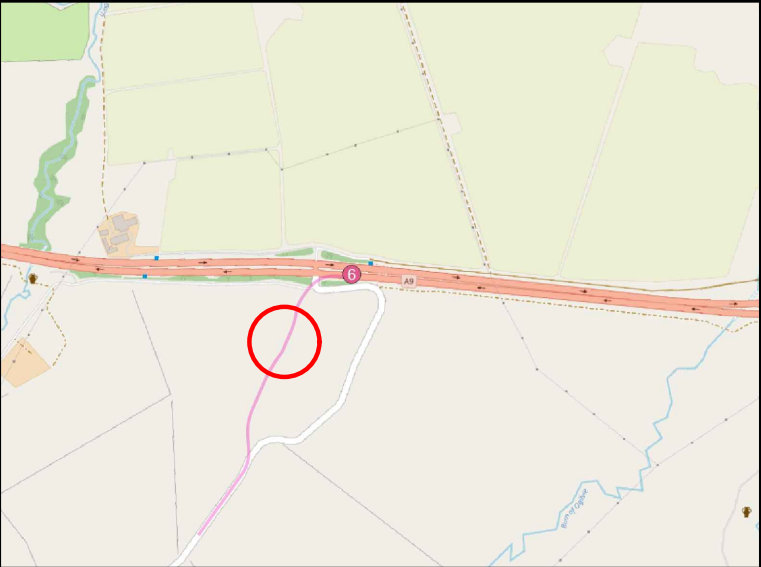
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Client Windburn Wind Farm Limited					
Project Windburn Windfarm Swept Path Assessment					
Title 28.5m Tower Section (E138 Steel Section 2) Pinch Point 6					
Drawn TF		Checked ADV		Approved ADV	
Original dtp. size A3		Date 08/07/2024		Scale 1:500	
Drawing Status Information		Drawing Number GB01T24C69/SPA007T		Rev. -	



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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Client

Windburn Wind Farm Limited

Project

Windburn Windfarm
Swept Path Assessment

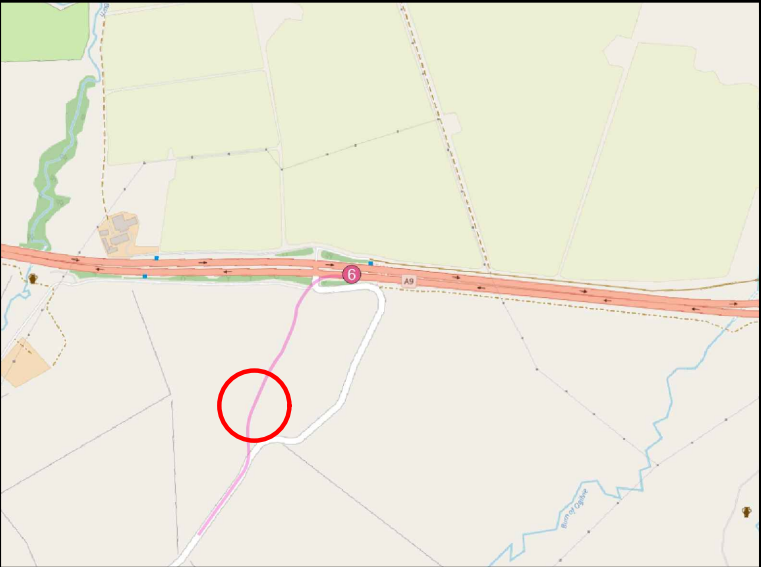
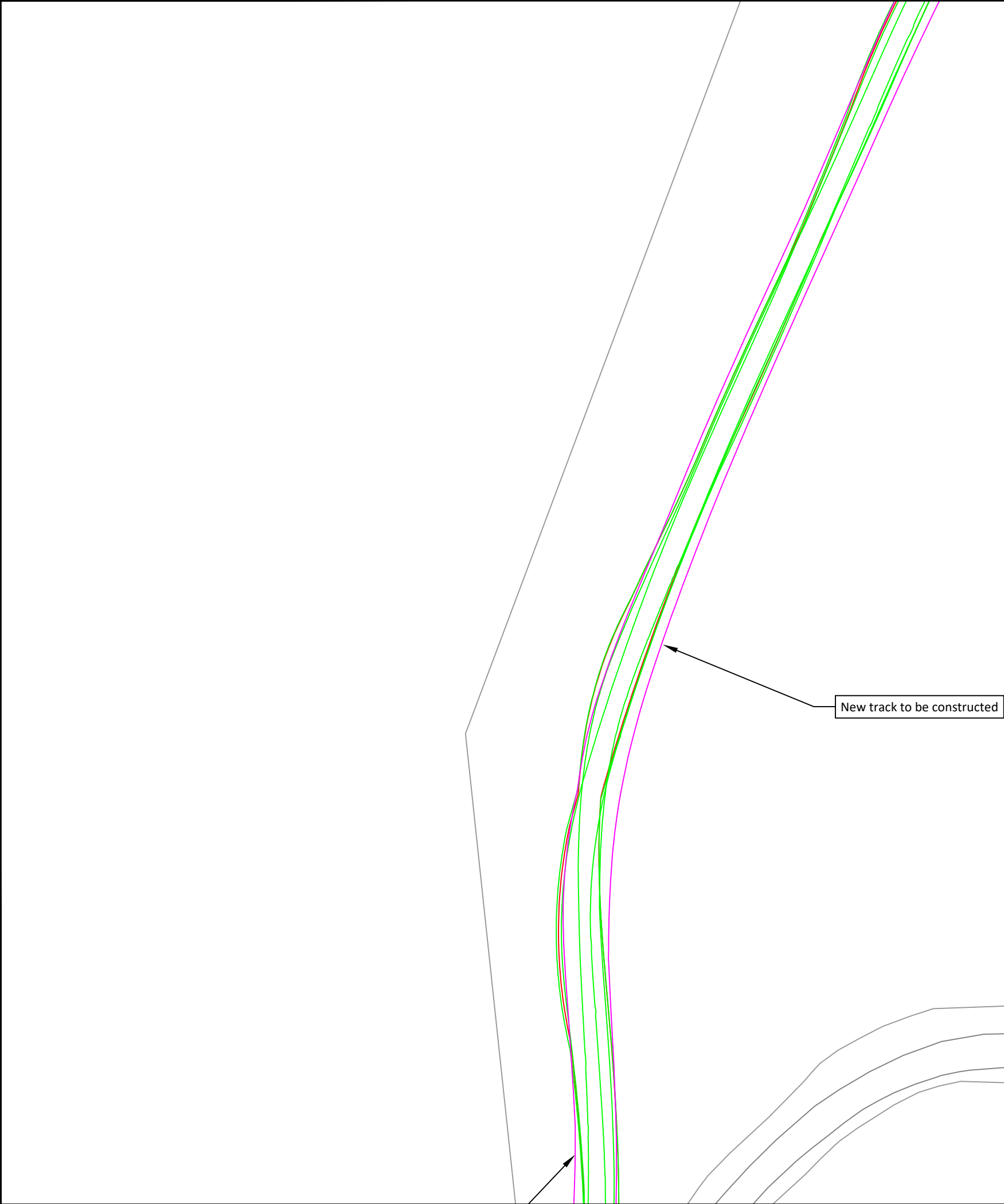
Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 1 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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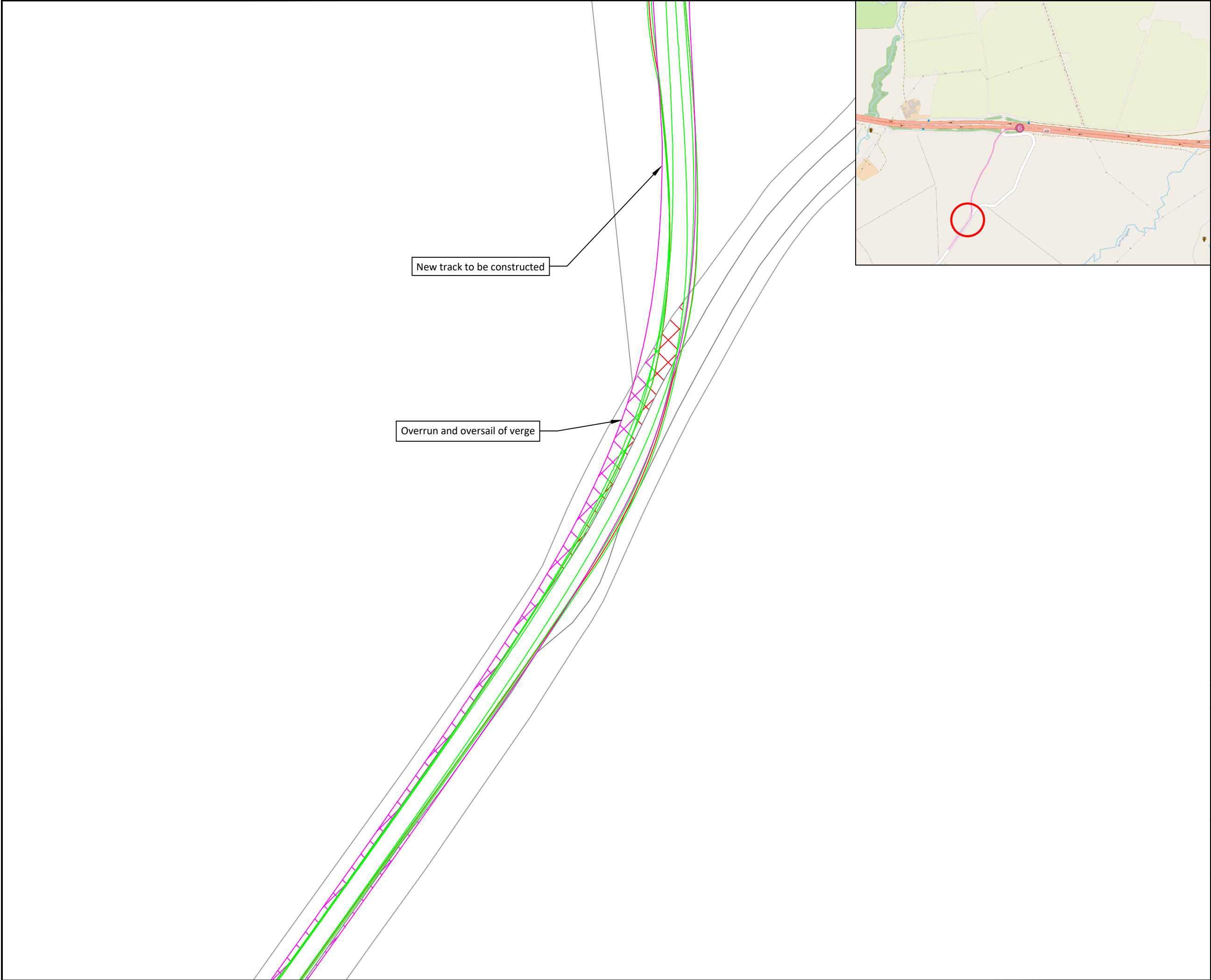
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Client
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Project
Windburn Windfarm
Swept Path Assessment

Title
28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 2 of 27

Drawn	Checked	Approved
TF	ADV	ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information	Drawing Number GB01T24C69/SPA009T	Rev. -



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Key:

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- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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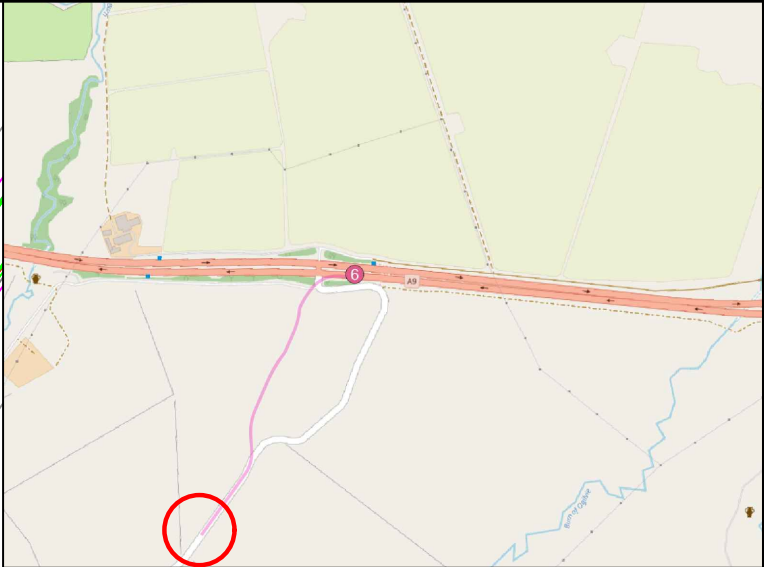
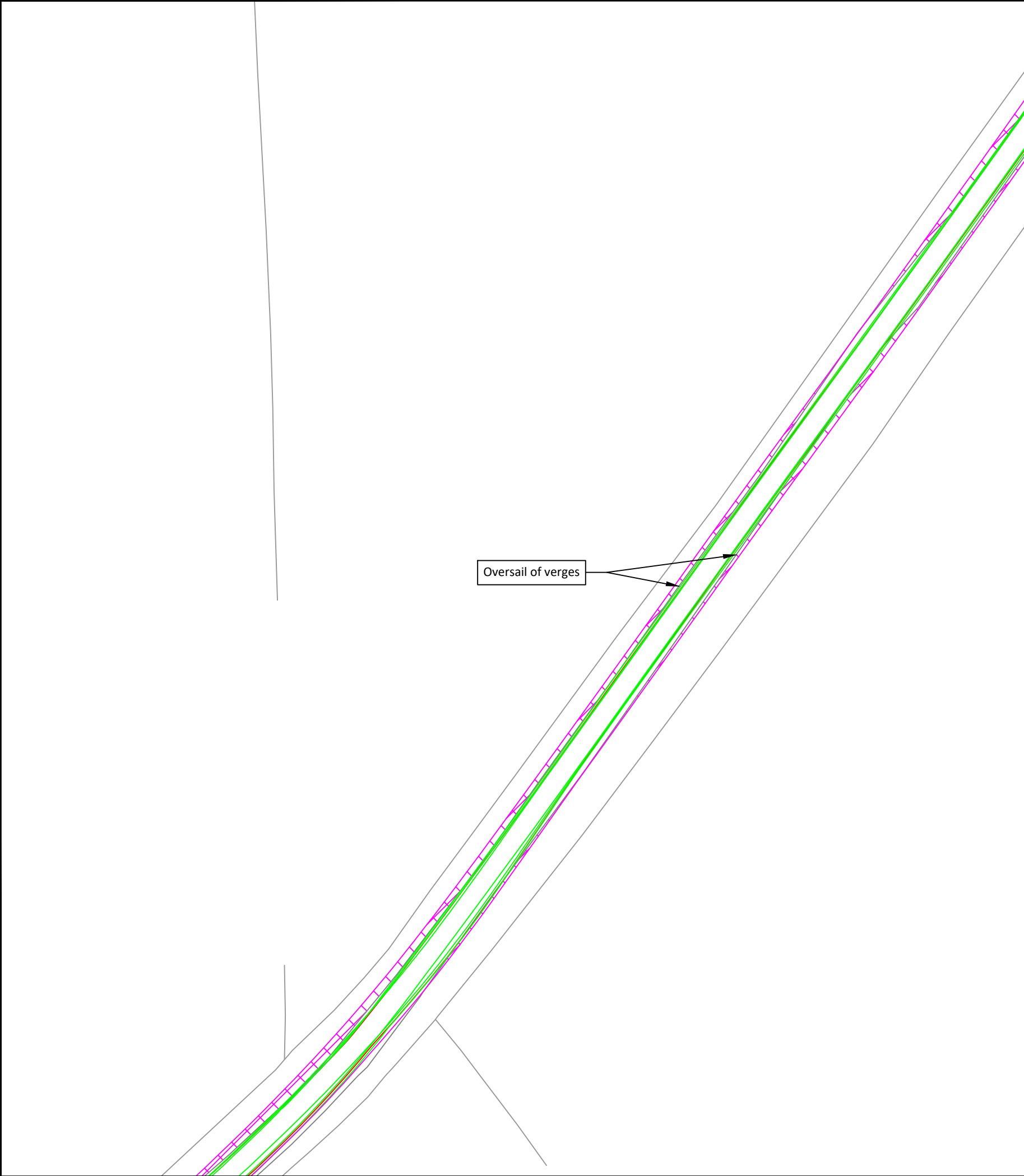
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Client
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Project
Windburn Windfarm
Swept Path Assessment

Title
28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 3 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information	Drawing Number GB01T24C69/SPA010T	Rev. -



Notes:

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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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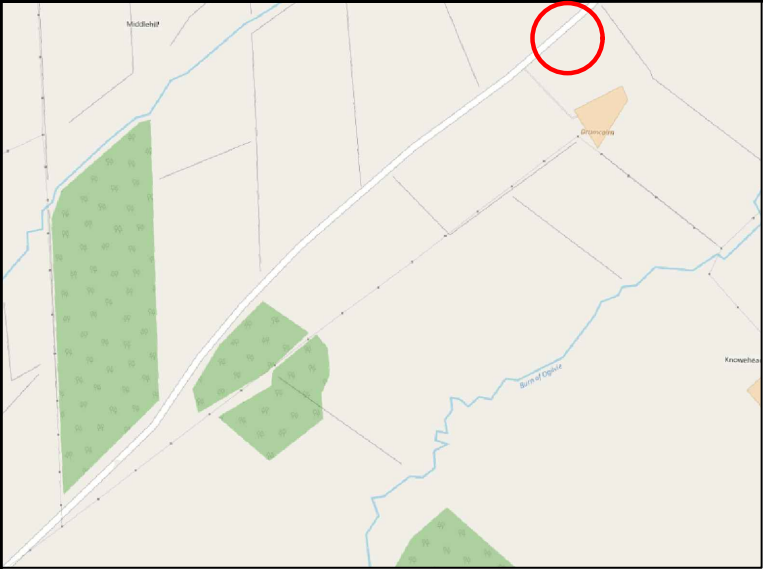
Project
Windburn Windfarm
Swept Path Assessment

Title
28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 4 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information		Rev. -

Drawing Number
GB01T24C69/SPA011T

Drawing Status
Information



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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Project

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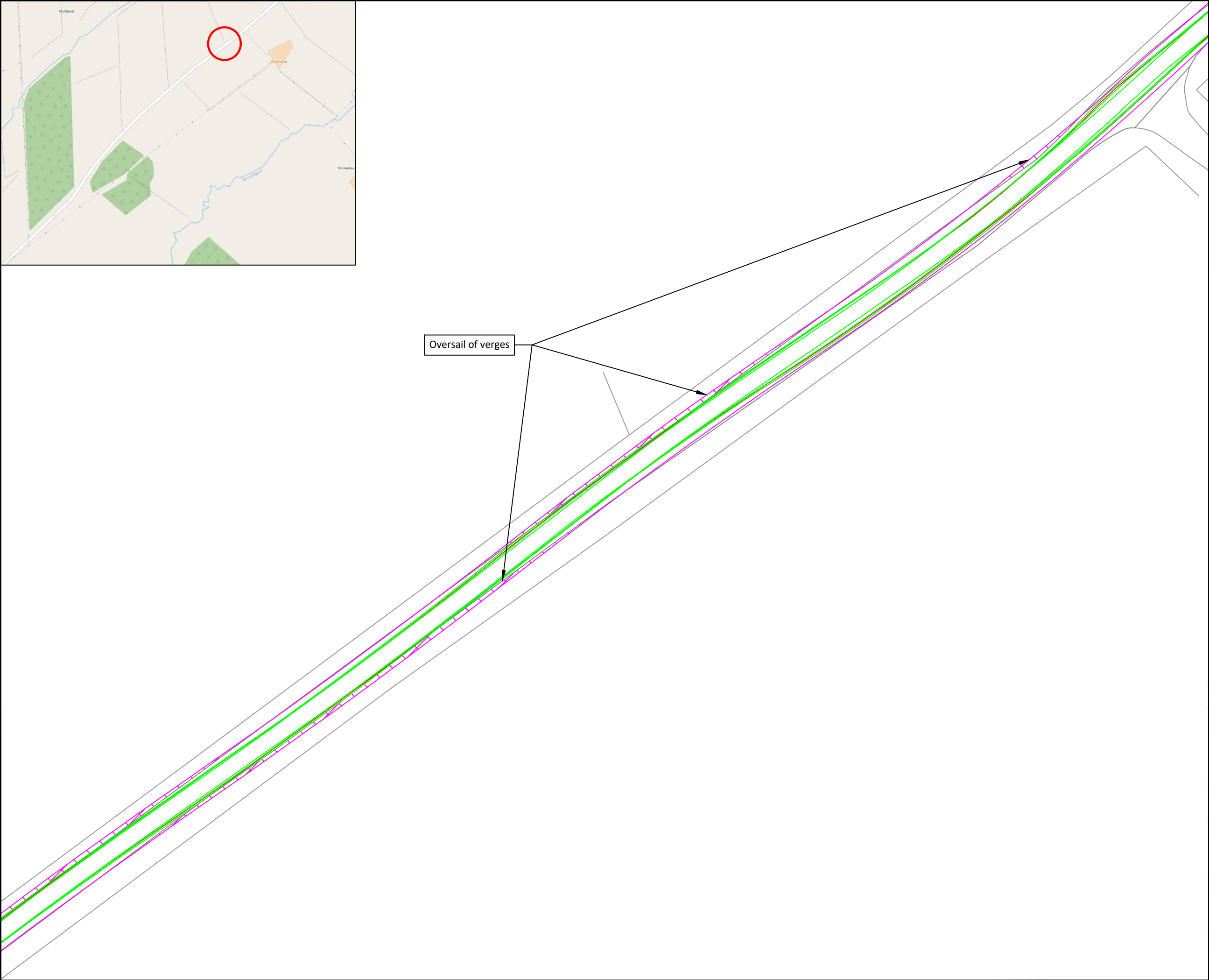
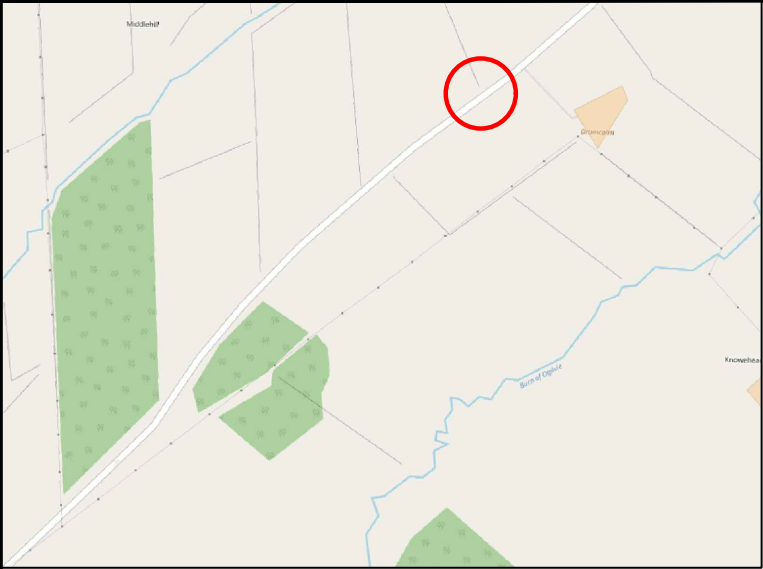
Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 5 of 27

Drawn	Checked	Approved
TF	ADV	ADV
Original dtp. size	Date	Scale
A3	08/07/2024	1:500
Drawing Status	Drawing Number	Rev.
Information	GB01T24C69/SPA012T	-

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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Client

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Project

Windburn Windfarm
Swept Path Assessment

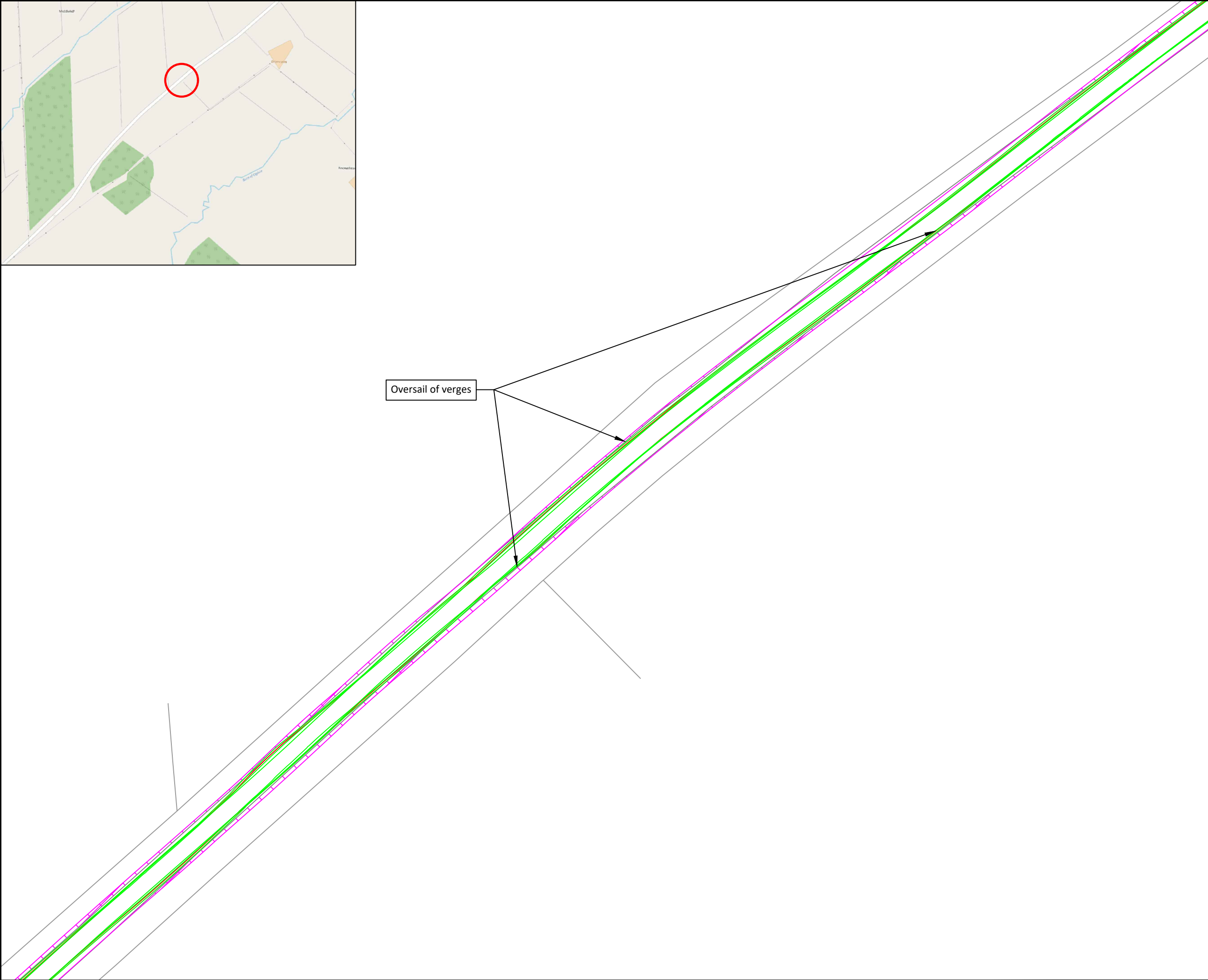
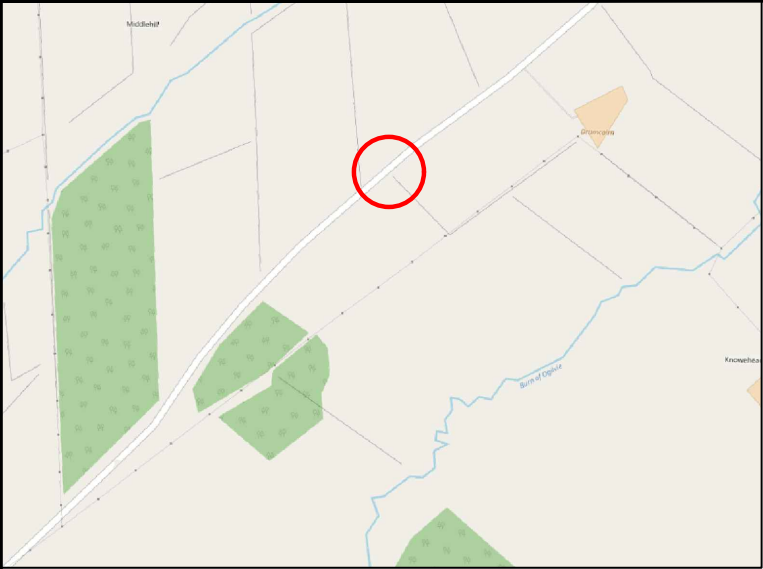
Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 6 of 27

Drawn	TF	Checked	ADV	Approved	ADV
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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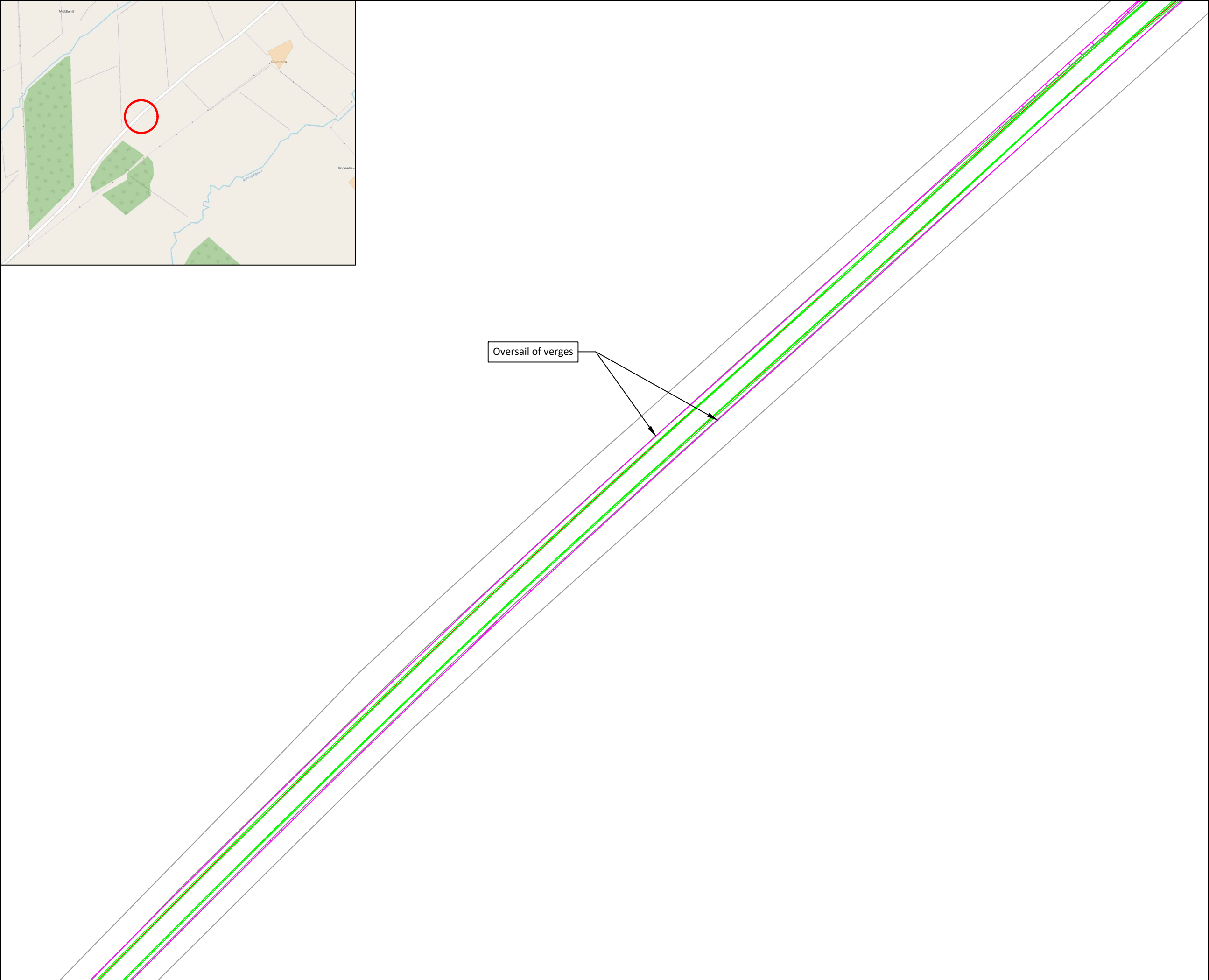
Project

Windburn Windfarm
Swept Path Assessment

Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 7 of 27

Drawn	TF	Checked	ADV	Approved	ADV
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Client

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Project

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Swept Path Assessment

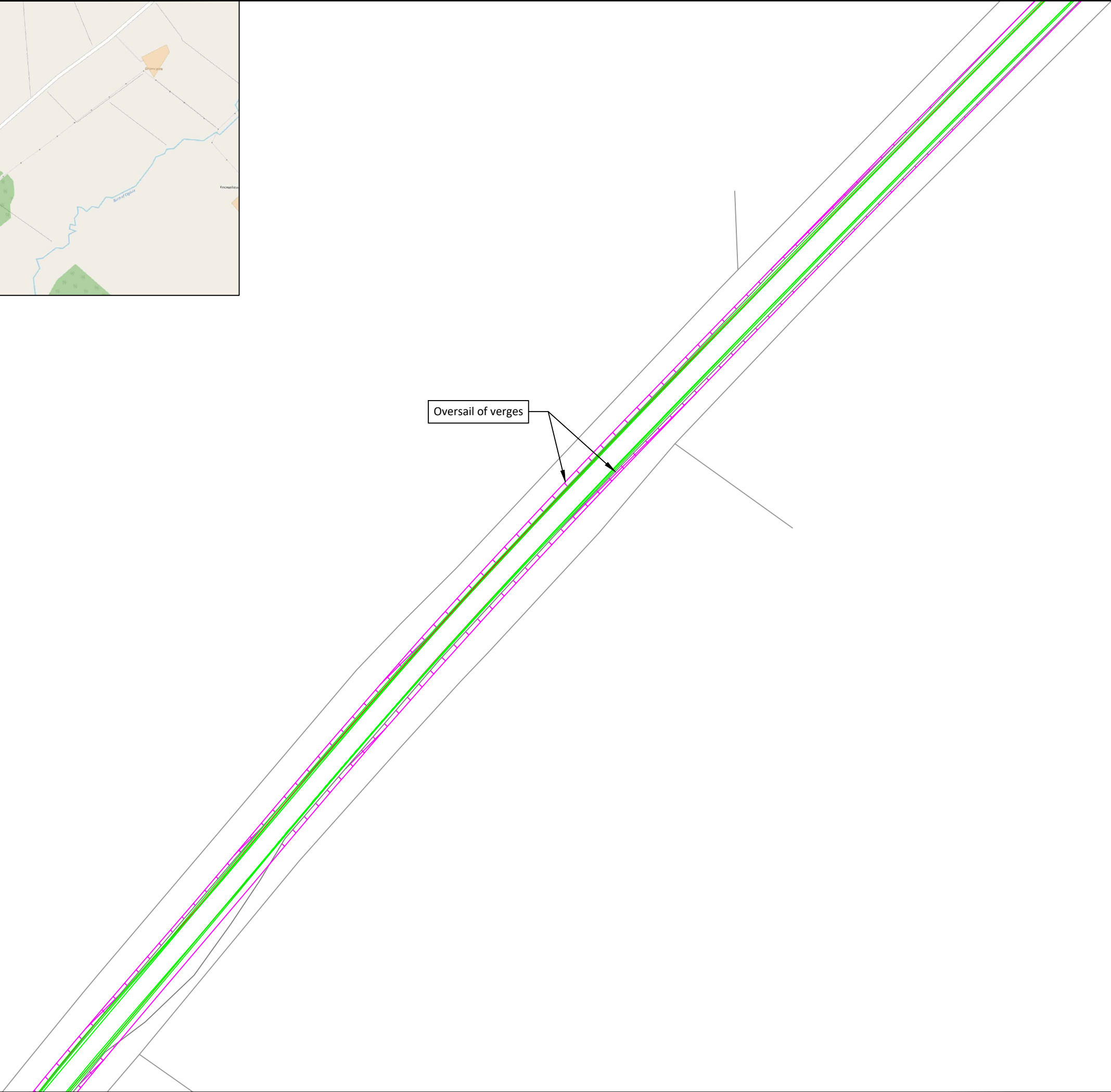
Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 8 of 27

Drawn	TF	Checked	ADV	Approved	ADV
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Project
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Swept Path Assessment

Title
28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 9 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information		Rev. -

Drawing Number GB01T24C69/SPA016T	Rev. -
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- Key:**
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 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

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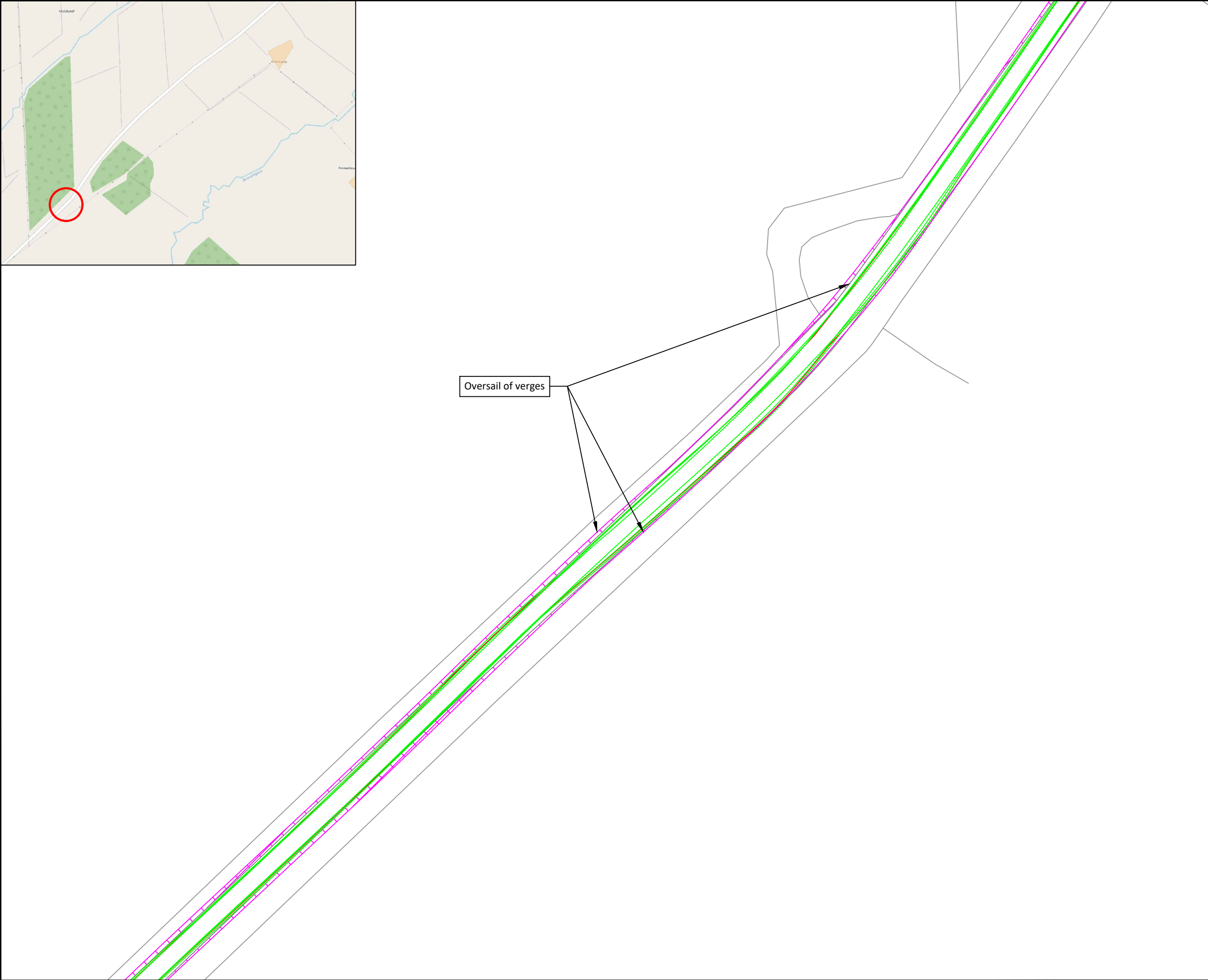
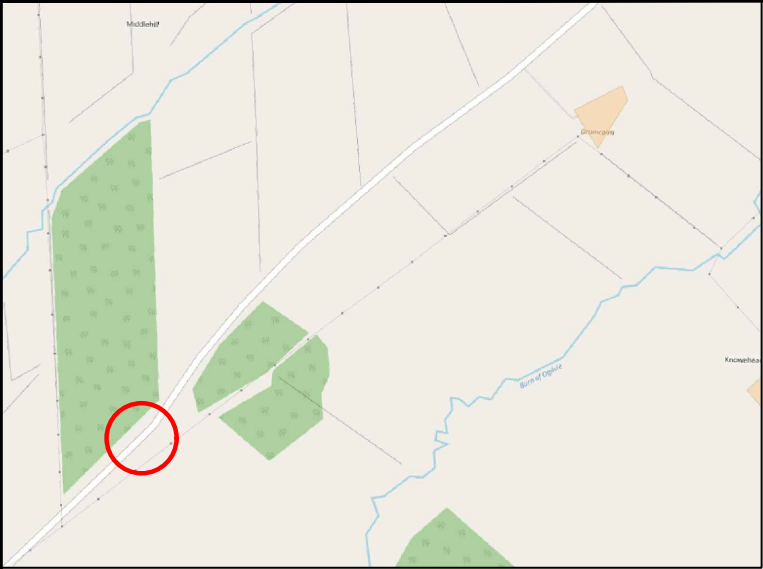
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Project
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Swept Path Assessment

Title
28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 10 of 27

Drawn TF	Checked ADV	Approved ADV
Original dpg. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information	Drawing Number GB01T24C69/SPA017T	Rev. -



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- Please note that marked service locations are indicative only and should be confirmed by topographical survey.

Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Project

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Swept Path Assessment

Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 11 of 27

Drawn	TF	Checked	ADV	Approved	ADV
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Oversail of verges

Verge boundaries unavailable beyond this point

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 3. Please note that marked service locations are indicative only and should be confirmed by topographical survey.

- Key:**
- Transporter Vehicle
 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

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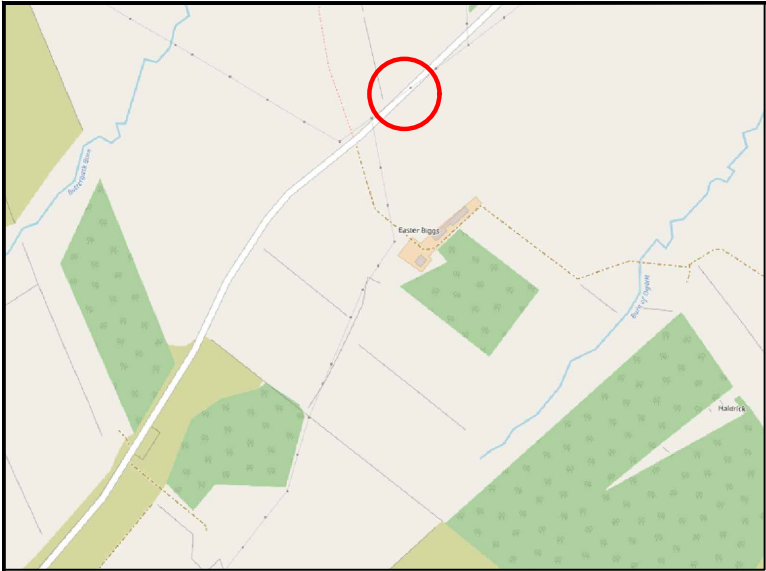
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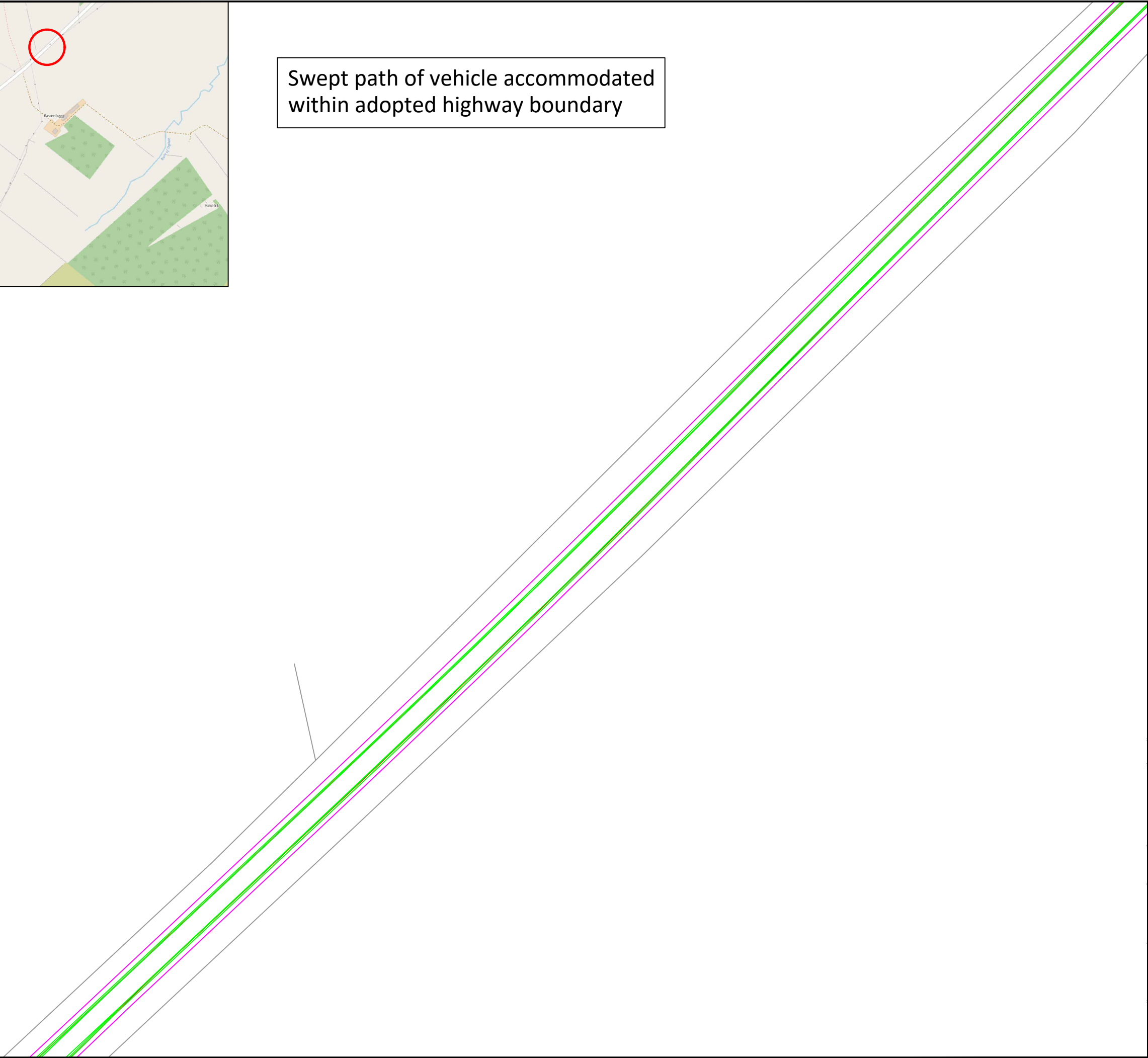
Project
Windburn Windfarm
Swept Path Assessment

Title
28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 12 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information	Drawing Number GB01T24C69/SPA019T	Rev. -



Swept path of vehicle accommodated within adopted highway boundary



Notes:

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- All dimensions in metres unless otherwise stated.
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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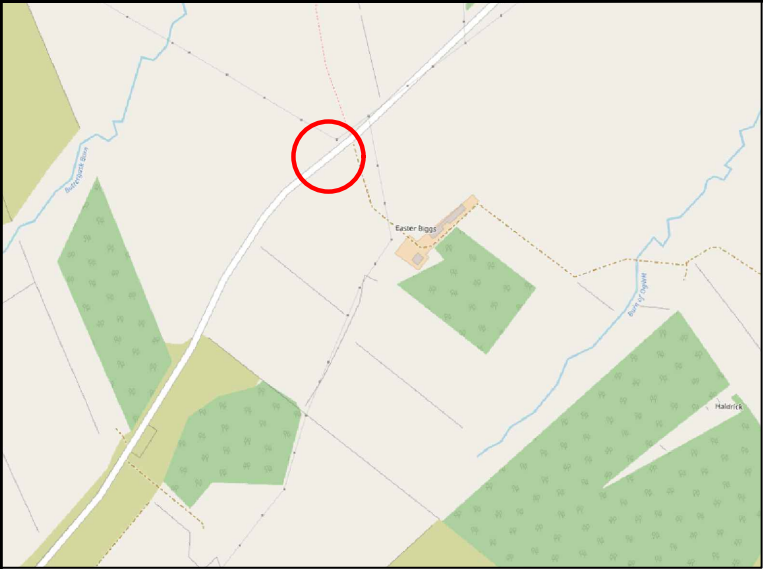
Project

Windburn Windfarm
Swept Path Assessment

Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 13 of 27

Drawn	Checked	Approved
TF	ADV	ADV
Original dtp. size	Date	Scale
A3	08/07/2024	1:500
Drawing Status	Drawing Number	Rev.
Information	GB01T24C69/SPA020T	-



Swept path of vehicle accommodated within adopted highway boundary



Notes:

- Do not scale from drawing.
- All dimensions in metres unless otherwise stated.
- Please note that marked service locations are indicative only and should be confirmed by topographical survey.

Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

Rev.	Date	Revision details	Drawn	Checked	Approved

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Project

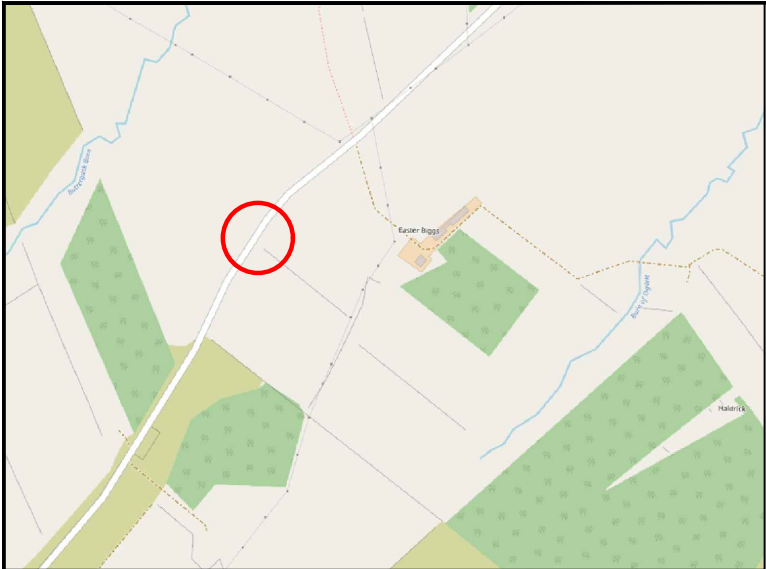
Windburn Windfarm
Swept Path Assessment

Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 14 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
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Swept path of vehicle accommodated within adopted highway boundary



Notes:


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- Please note that marked service locations are indicative only and should be confirmed by topographical survey.

Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Windburn Wind Farm Limited

Project

Windburn Windfarm
Swept Path Assessment

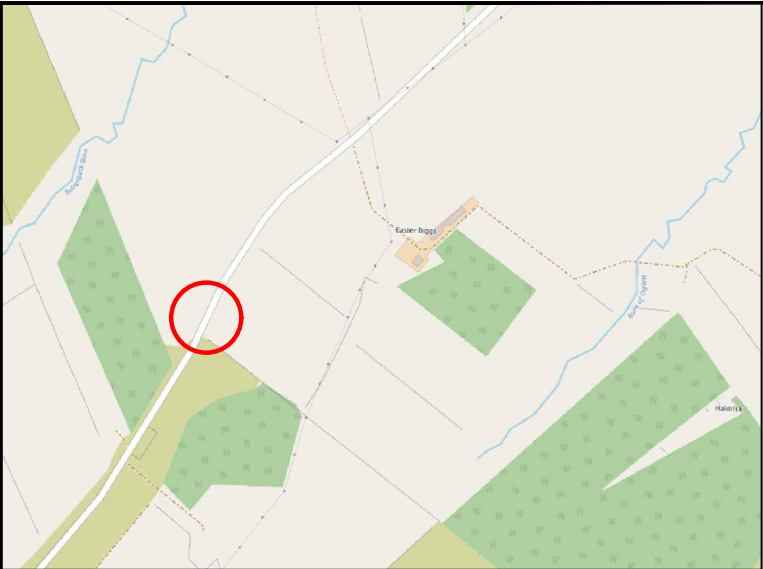
Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 15 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
Drawing Status	Information		Drawing Number	GB01T24C69/SPA022T	Rev. -

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Swept path of vehicle accommodated within adopted highway boundary



Notes:

- Do not scale from drawing.
- All dimensions in metres unless otherwise stated.
- Please note that marked service locations are indicative only and should be confirmed by topographical survey.

Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

Rev.	Date	Revision details	Drawn	Checked	Approved

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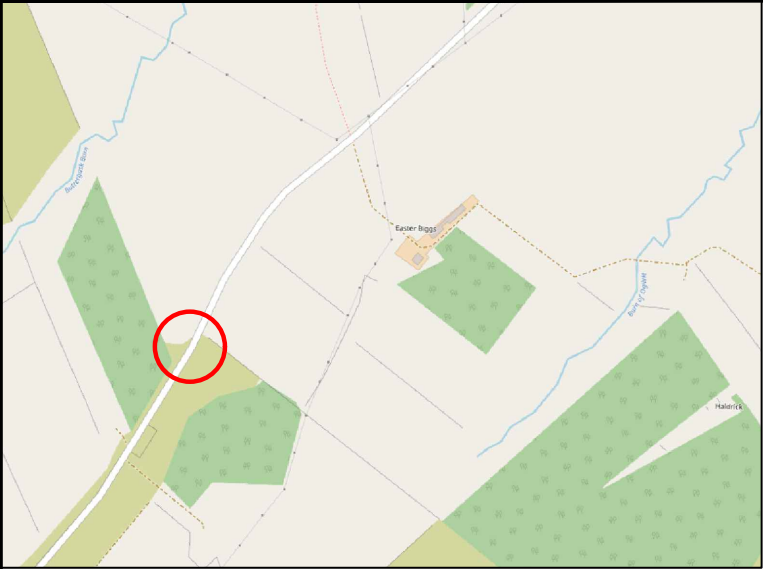
Project
Windburn Windfarm
Swept Path Assessment

Title
28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 16 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
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Drawing Number
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Rev.
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- Key:**
- Transporter Vehicle
 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

Rev.	Date	Revision details	Drawn	Checked	Approved

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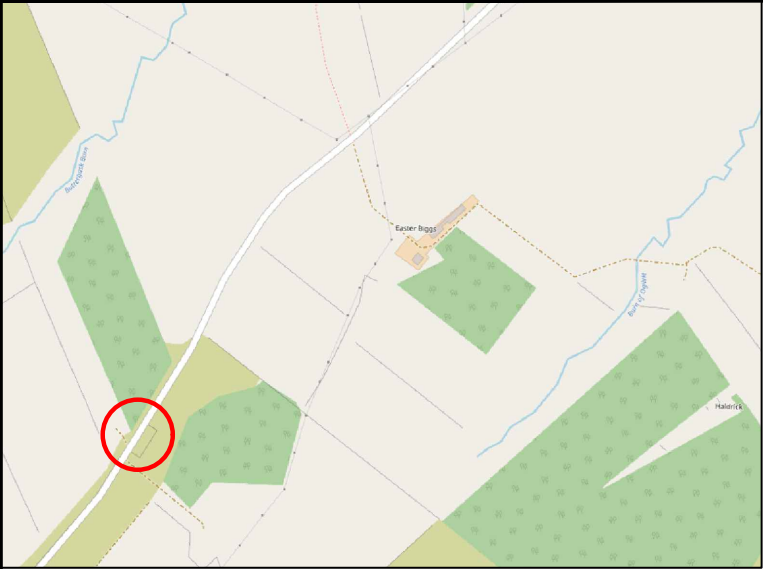
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Client
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Project
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Swept Path Assessment

Title
28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 17 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information	Drawing Number GB01T24C69/SPA024T	Rev. -



Swept path of vehicle accommodated within adopted highway boundary

Notes:

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- Please note that marked service locations are indicative only and should be confirmed by topographical survey.

Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Project

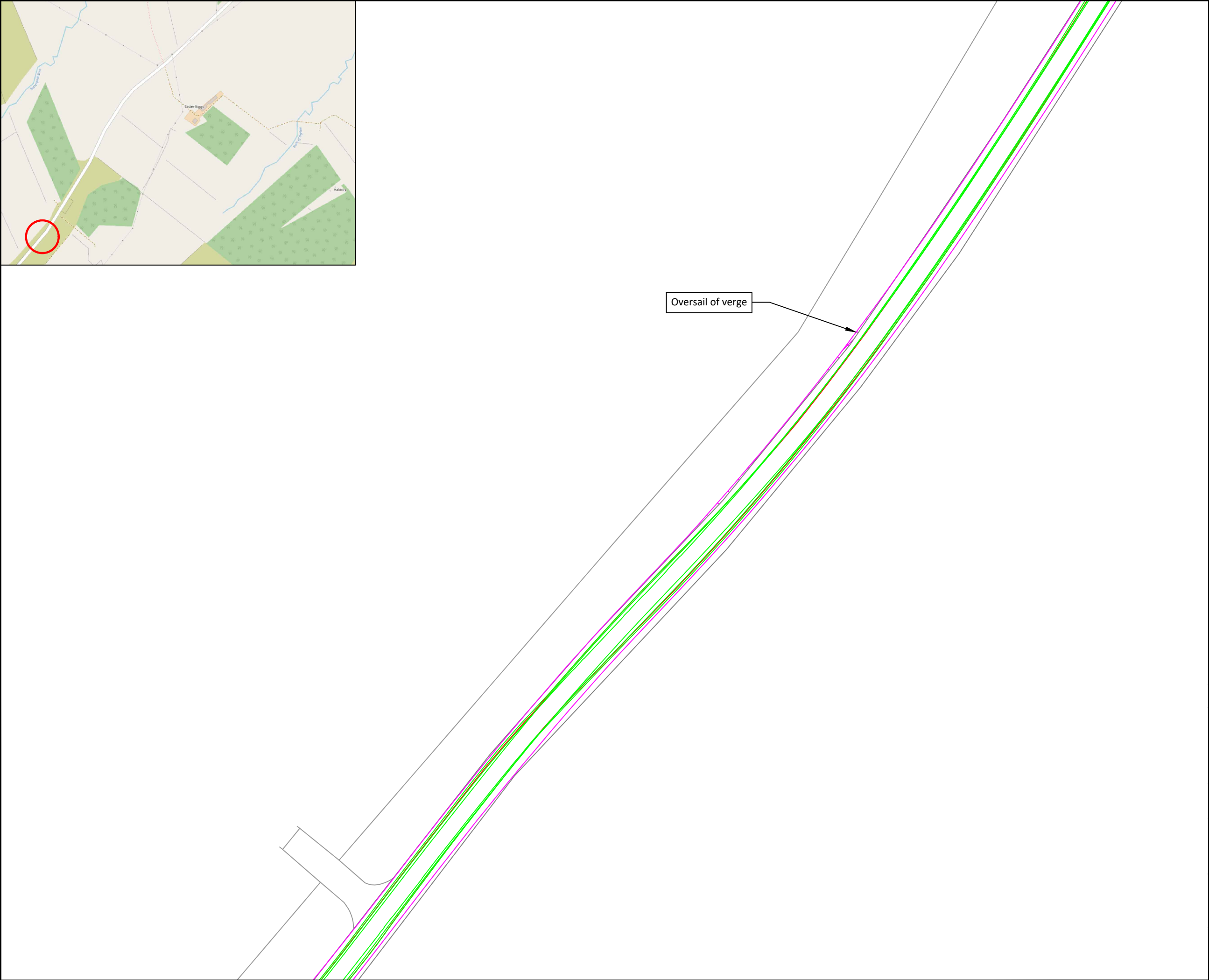
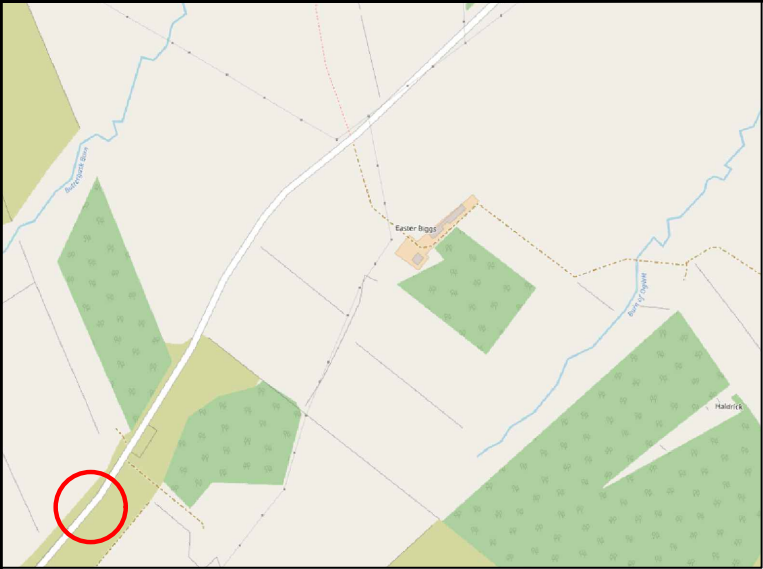
Windburn Windfarm
Swept Path Assessment

Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 18 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Project

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Swept Path Assessment

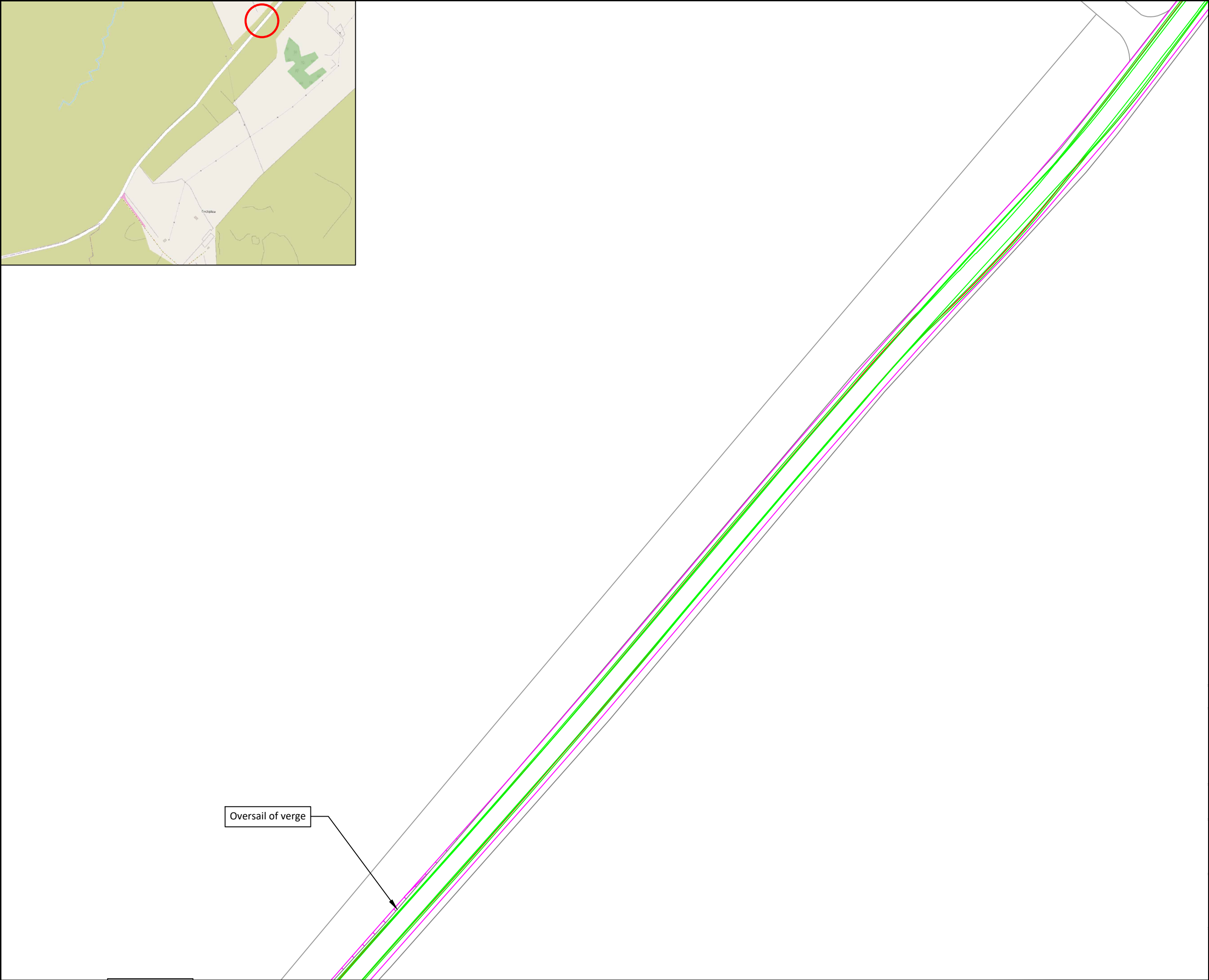
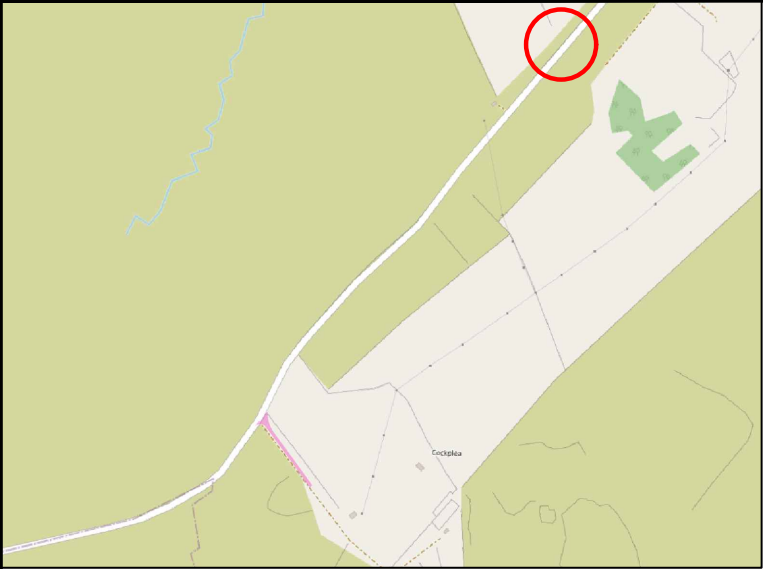
Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 19 of 27

Drawn	TF	Checked	ADV	Approved	ADV
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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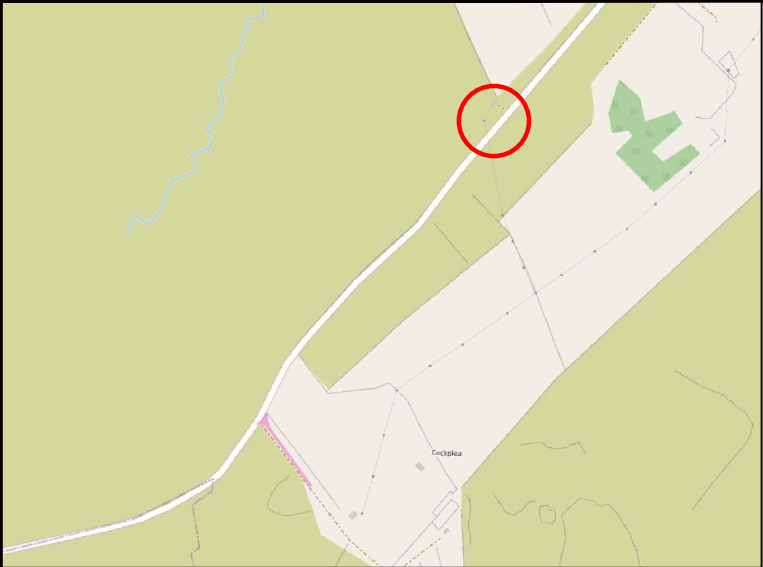
Project

Windburn Windfarm
Swept Path Assessment

Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 20 of 27

Drawn	Checked	Approved
TF	ADV	ADV
Original dtp. size	Date	Scale
A3	08/07/2024	1:500
Drawing Status	Drawing Number	Rev.
Information	GB01T24C69/SPA027T	-



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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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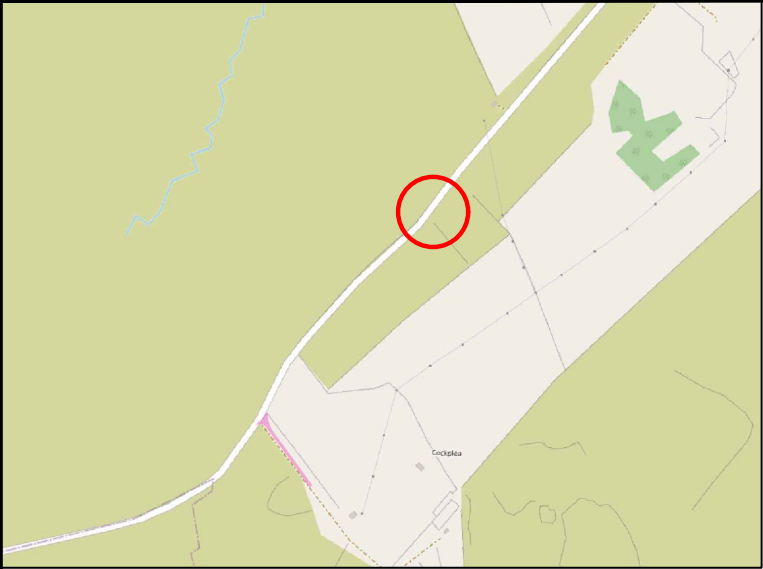
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Client
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Project
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Swept Path Assessment

Title
28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 21 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information		Drawing Number GB01T24C69/SPA028T
Rev. -		Rev. -

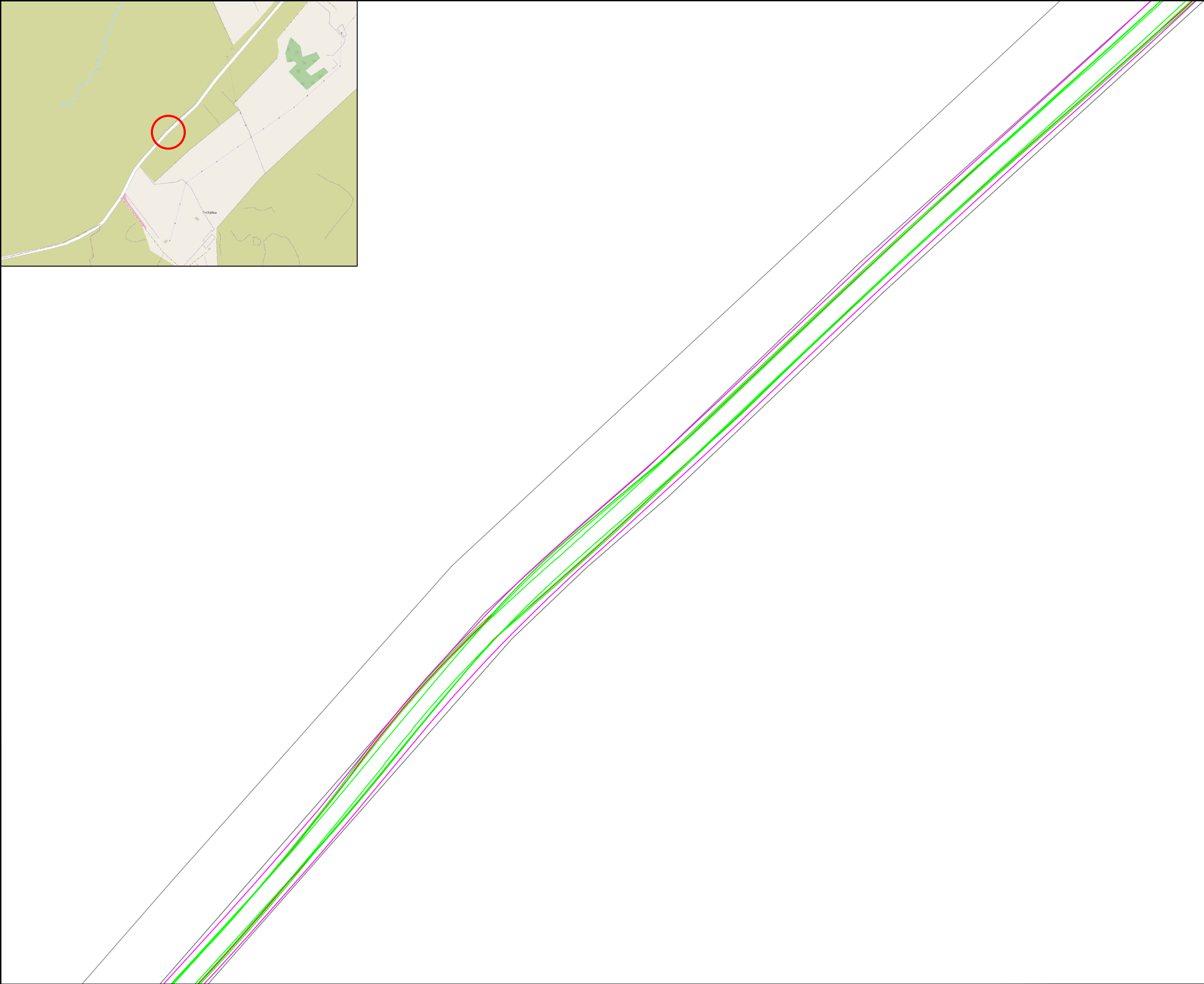
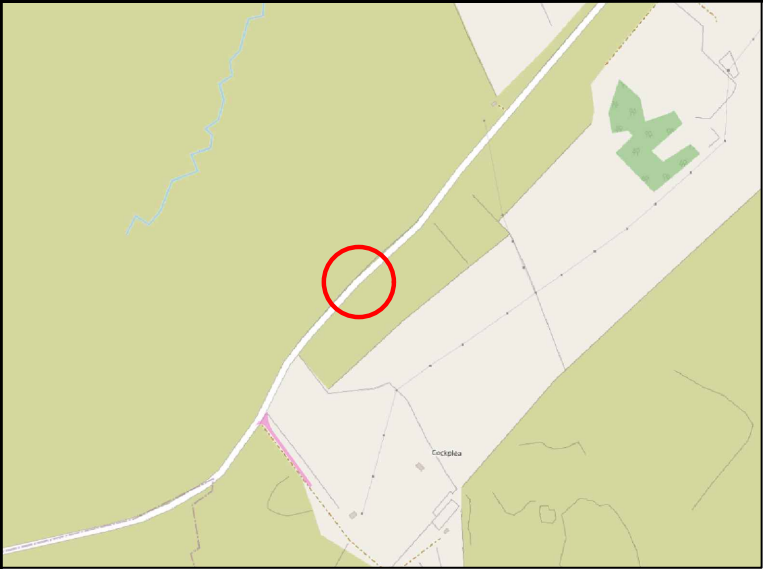


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- Key:**
- Transporter Vehicle
 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

Oversail of verge

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Client							
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Project							
Windburn Windfarm Swept Path Assessment							
Title							
28.5m Tower Section (E138 Steel Section 2) Continuous Section Sheet 22 of 27							
Drawn		Checked		Approved			
TF		ADV		ADV			
Original dtp. size		Date		Scale			
A3		08/07/2024		1:500			
Drawing Status			Drawing Number			Rev.	
Information			GB01T24C69/SPA029T			-	



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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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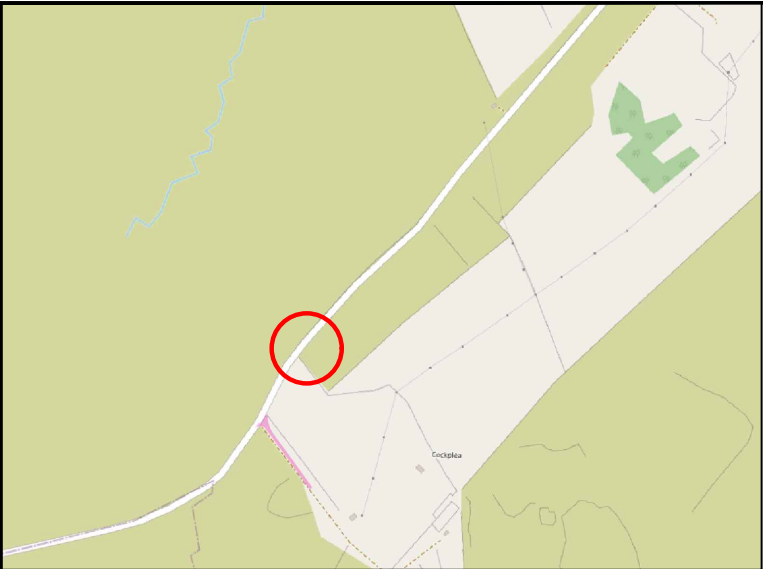
Project

Windburn Windfarm
Swept Path Assessment

Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 23 of 27

Drawn	TF	Checked	ADV	Approved	ADV
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Drawing Status	Information		Drawing Number	GB01T24C69/SPA030T	Rev. -



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Key:

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- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Project

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Swept Path Assessment

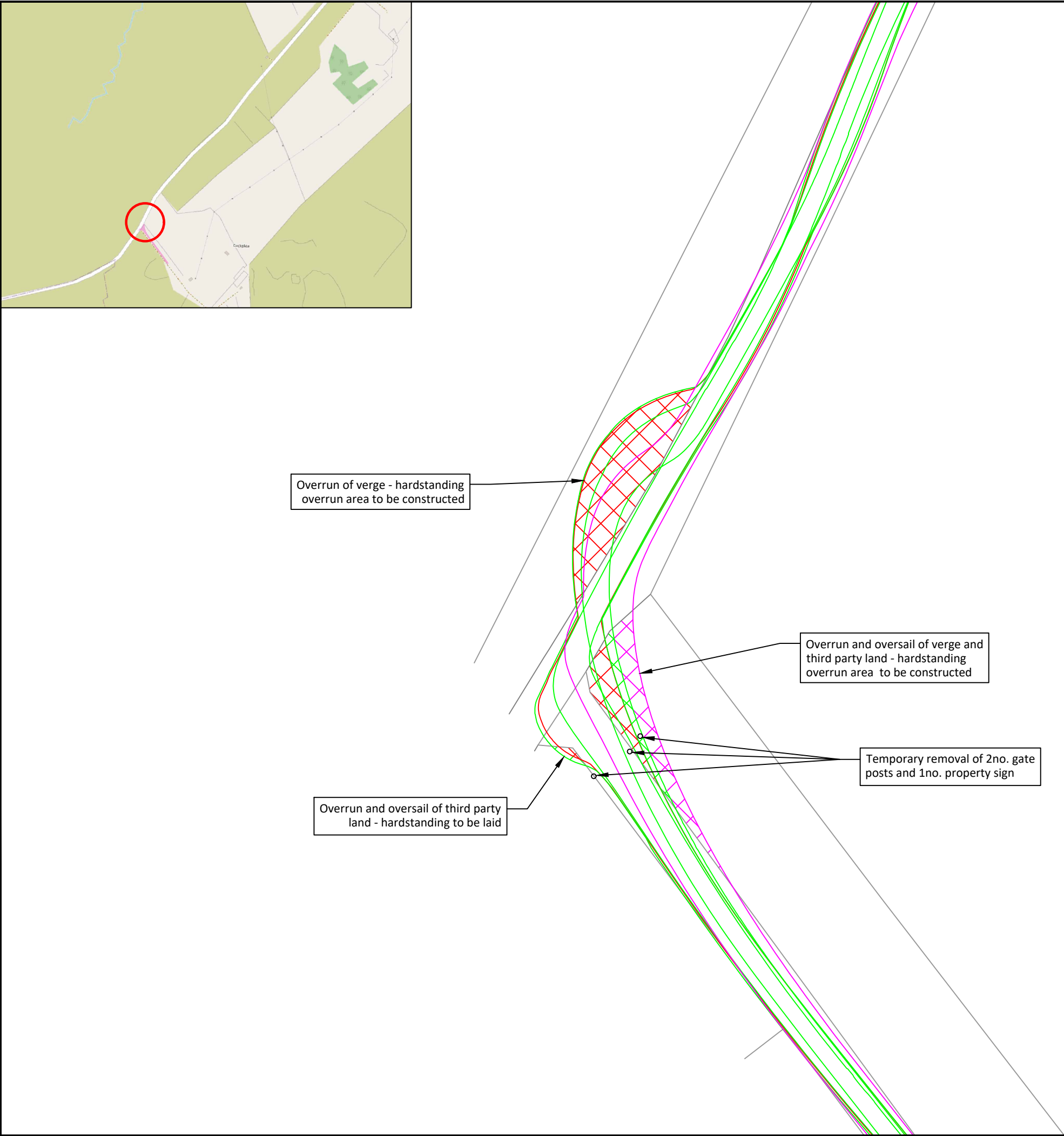
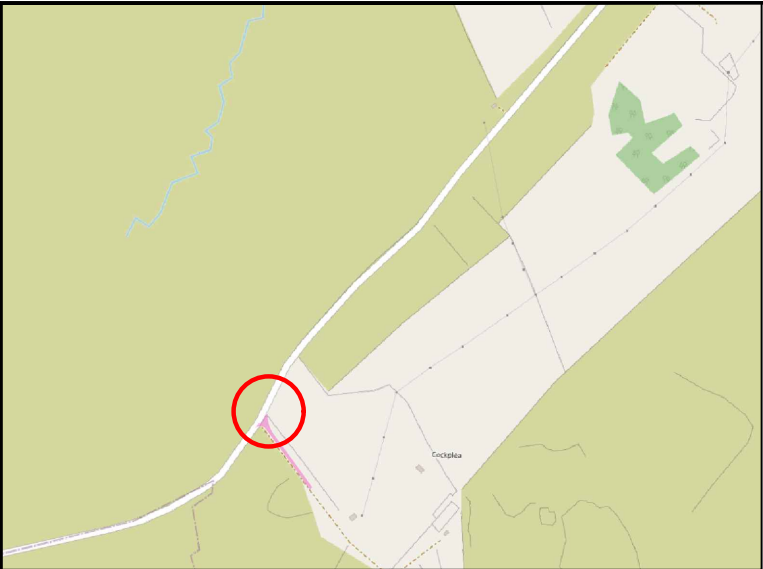
Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 24 of 27

Drawn	TF	Checked	ADV	Approved	ADV
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- Key:**
- Transporter Vehicle
 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

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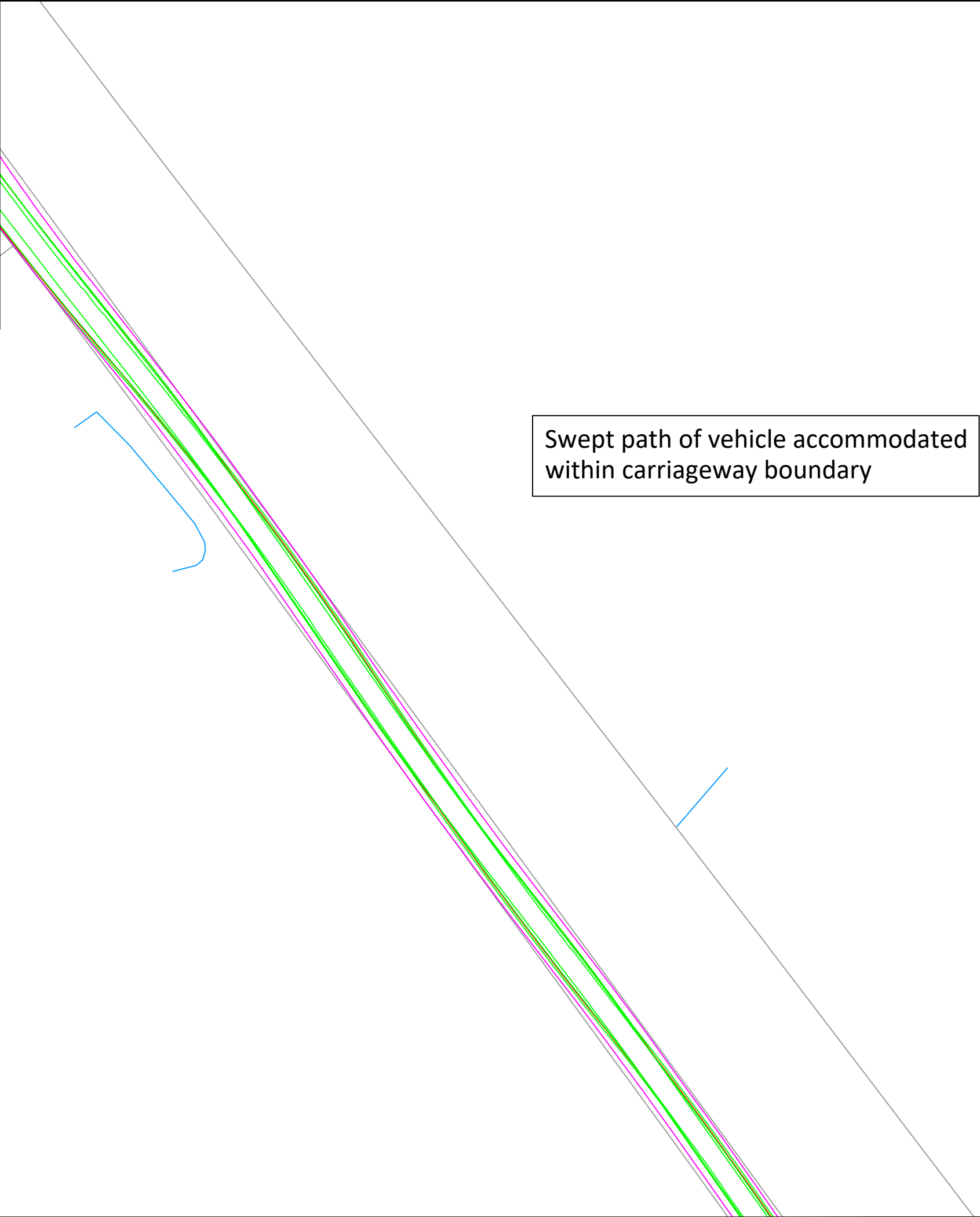
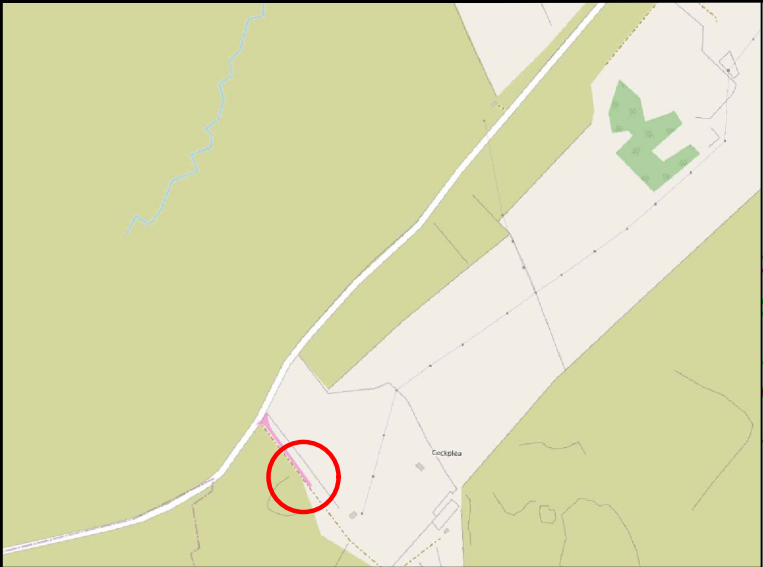
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Project
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Swept Path Assessment

Title
28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 25 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
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Key:

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- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Project

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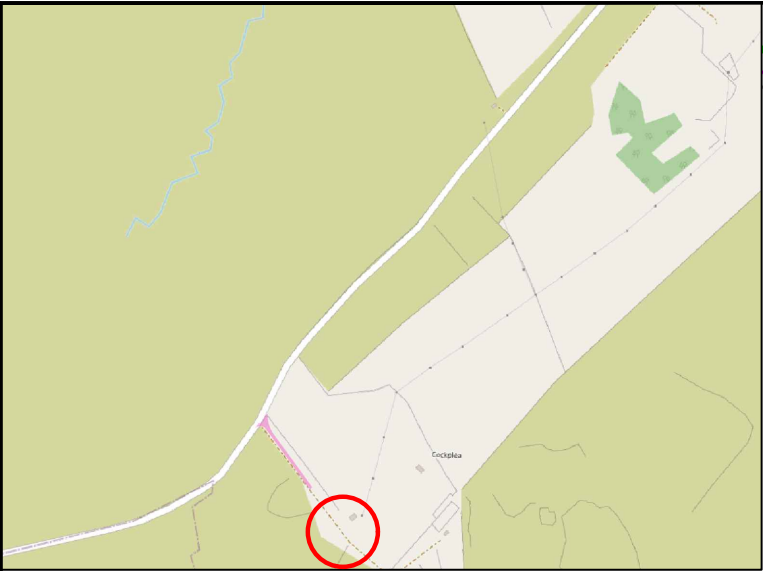
Title

28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 26 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dpg. size	A3	Date	08/07/2024	Scale	1:500
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Swept path of vehicle accommodated within carriageway boundary

- Notes:**
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- Key:**
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 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

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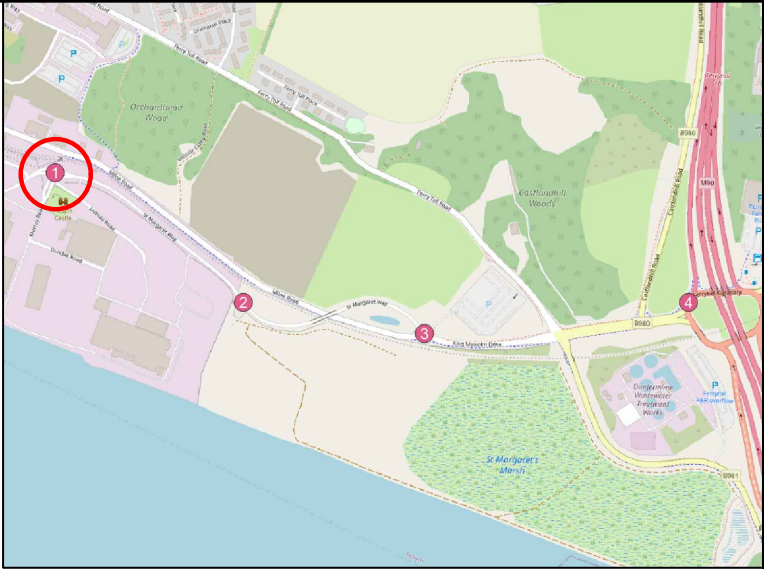
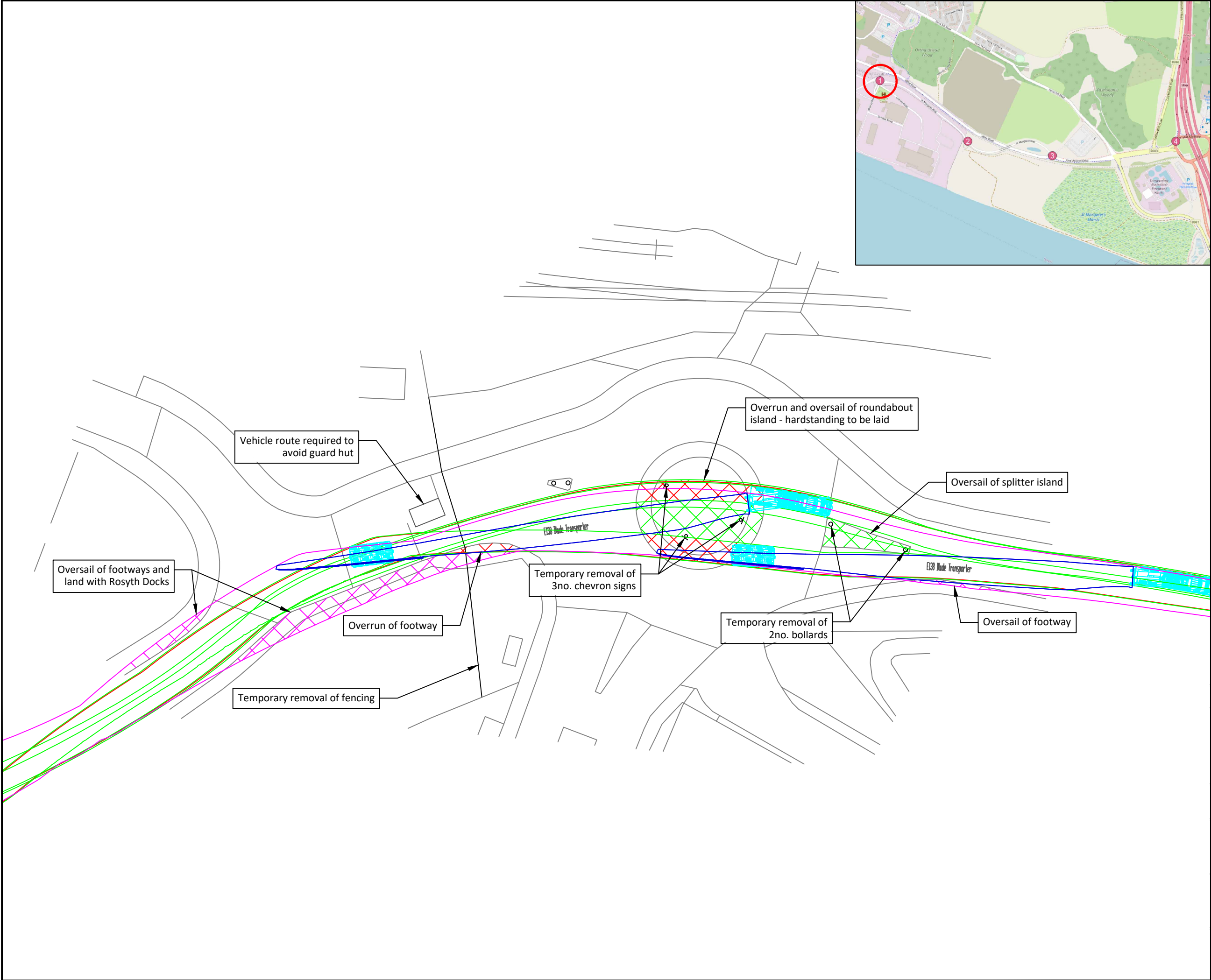
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Client
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Project
Windburn Windfarm
Swept Path Assessment

Title
28.5m Tower Section (E138 Steel Section 2)
Continuous Section
Sheet 27 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
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Key:

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- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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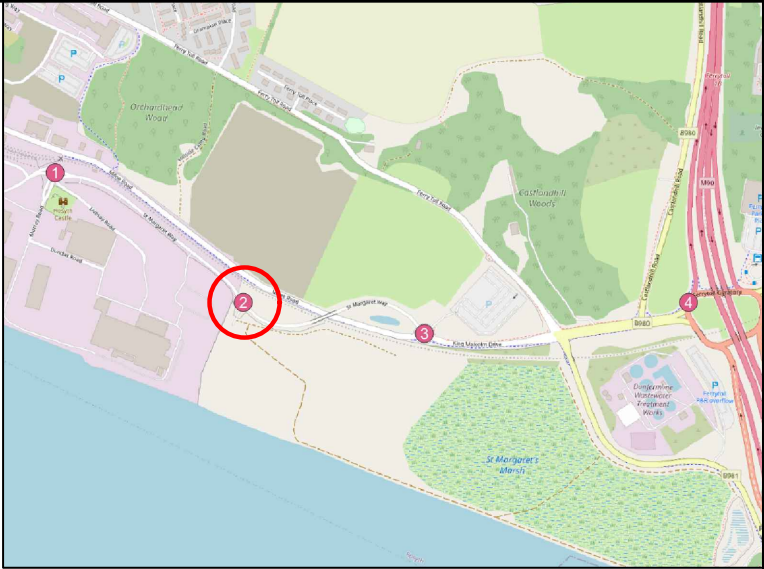
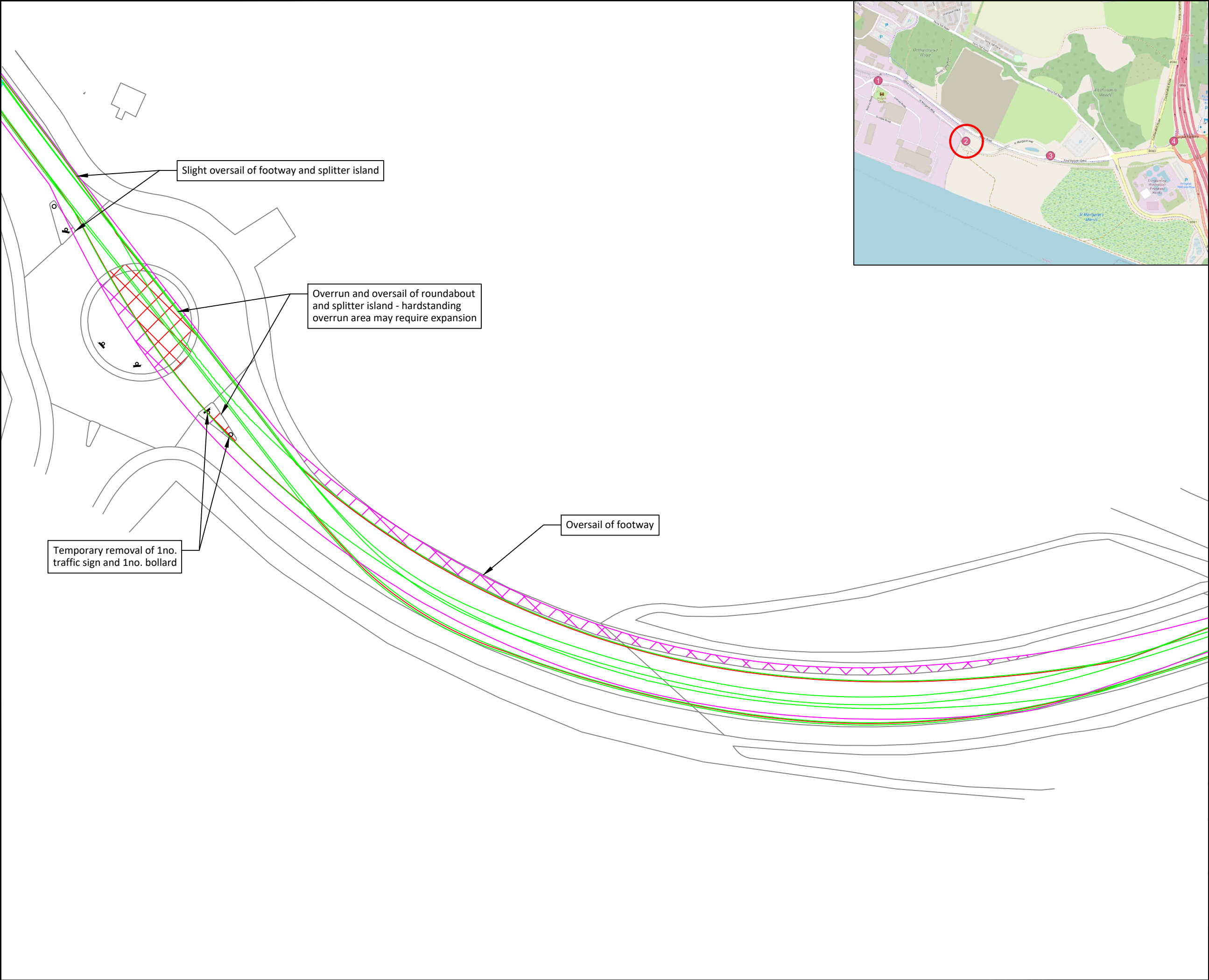
Project
Windburn Windfarm
Swept Path Assessment

Title
E138 Bogie Blade Transporter (67.8m Blade)
Pinch Point 1

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information		Rev. -

Drawing Number
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Information



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Key:

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- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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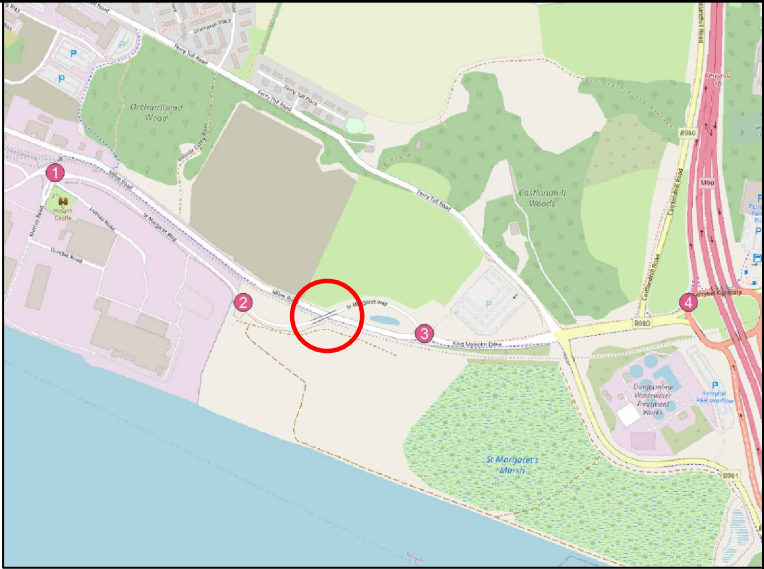
Project

Windburn Windfarm
Swept Path Assessment

Title

E138 Bogie Blade Transporter (67.8m Blade)
Pinch Point 2
Sheet 1 of 2

Drawn	Checked	Approved
TF	ADV	ADV
Original dtp. size	Date	Scale
A3	08/07/2024	1:500
Drawing Status	Drawing Number	Rev.
Information	GB01T24C69/SPA002B	-



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Key:

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- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Project

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Swept Path Assessment

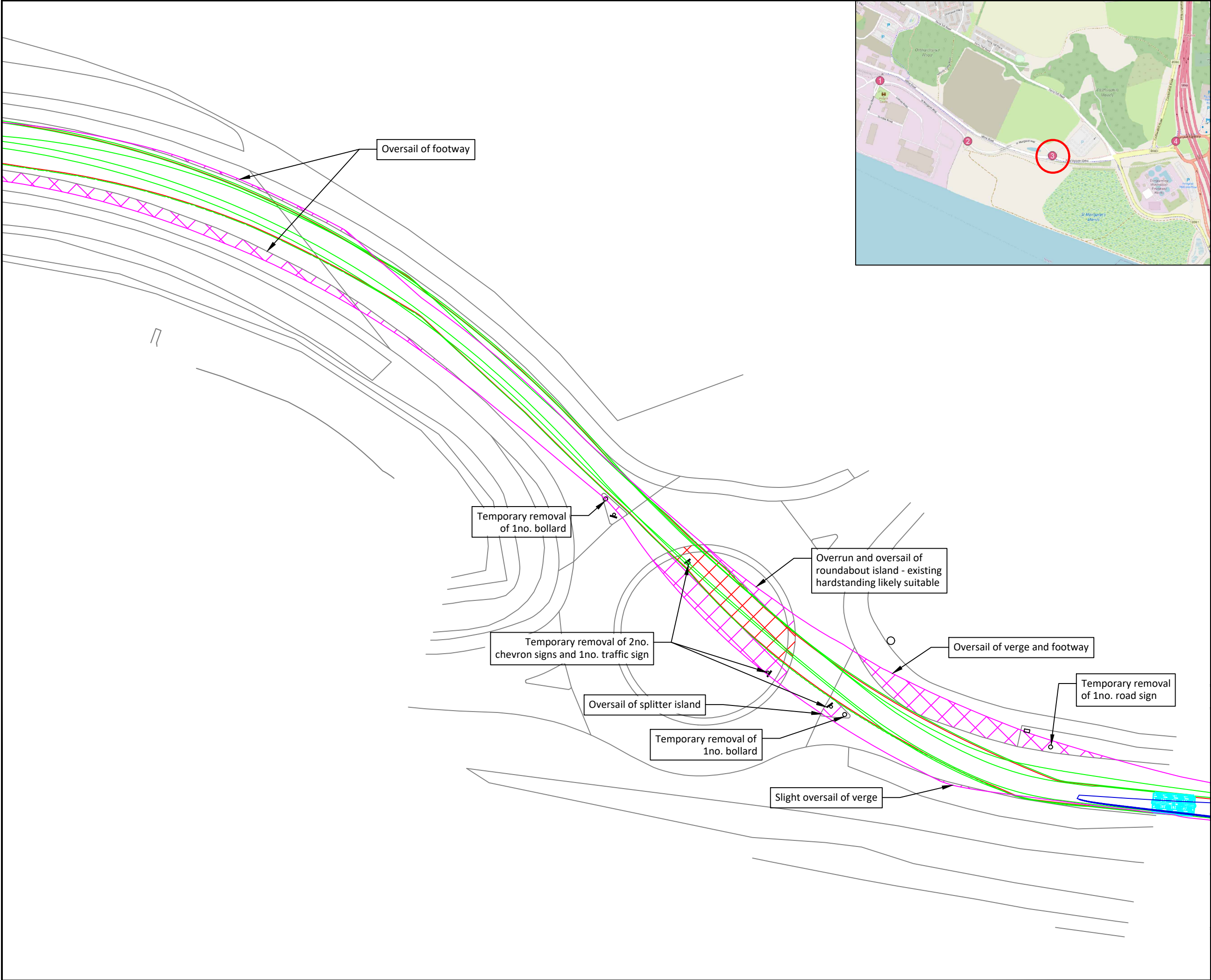
Title

E138 Bogie Blade Transporter (67.8m Blade)
Pinch Point 2
Sheet 2 of 2

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
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Key:

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- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Client
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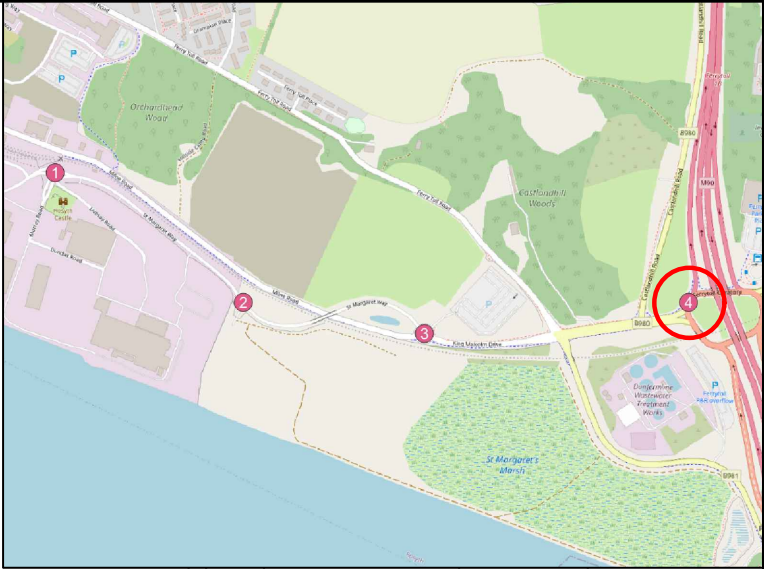
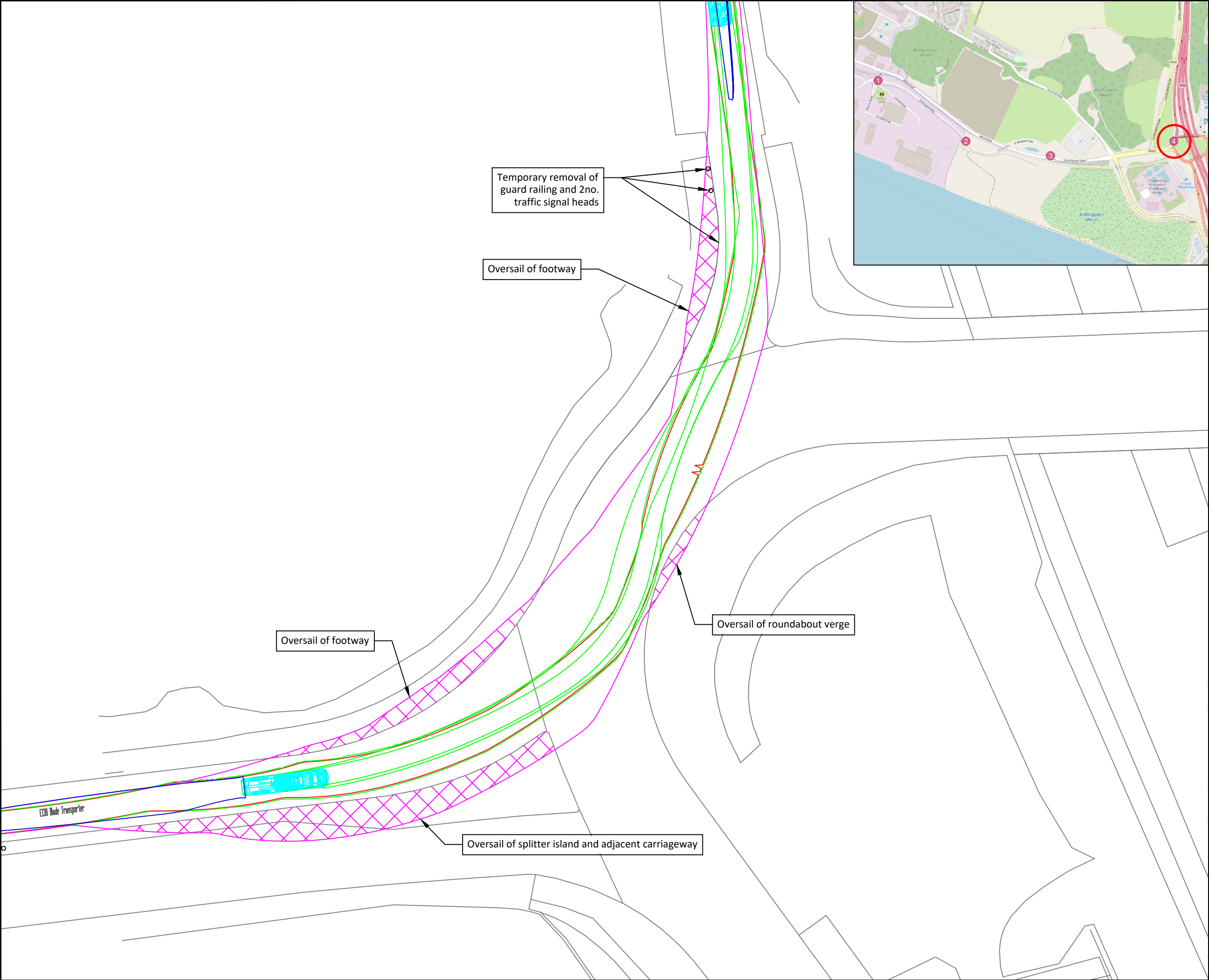
Project
Windburn Windfarm
Swept Path Assessment

Title
E138 Bogie Blade Transporter (67.8m Blade)
Pinch Point 3

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information		Rev. -

Drawing Number
GB01T24C69/SPA004B

Rev.
-



Notes:

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- Please note that marked service locations are indicative only and should be confirmed by topographical survey.

Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

Rev.	Date	Revision details	Drawn	Checked	Approved

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Project

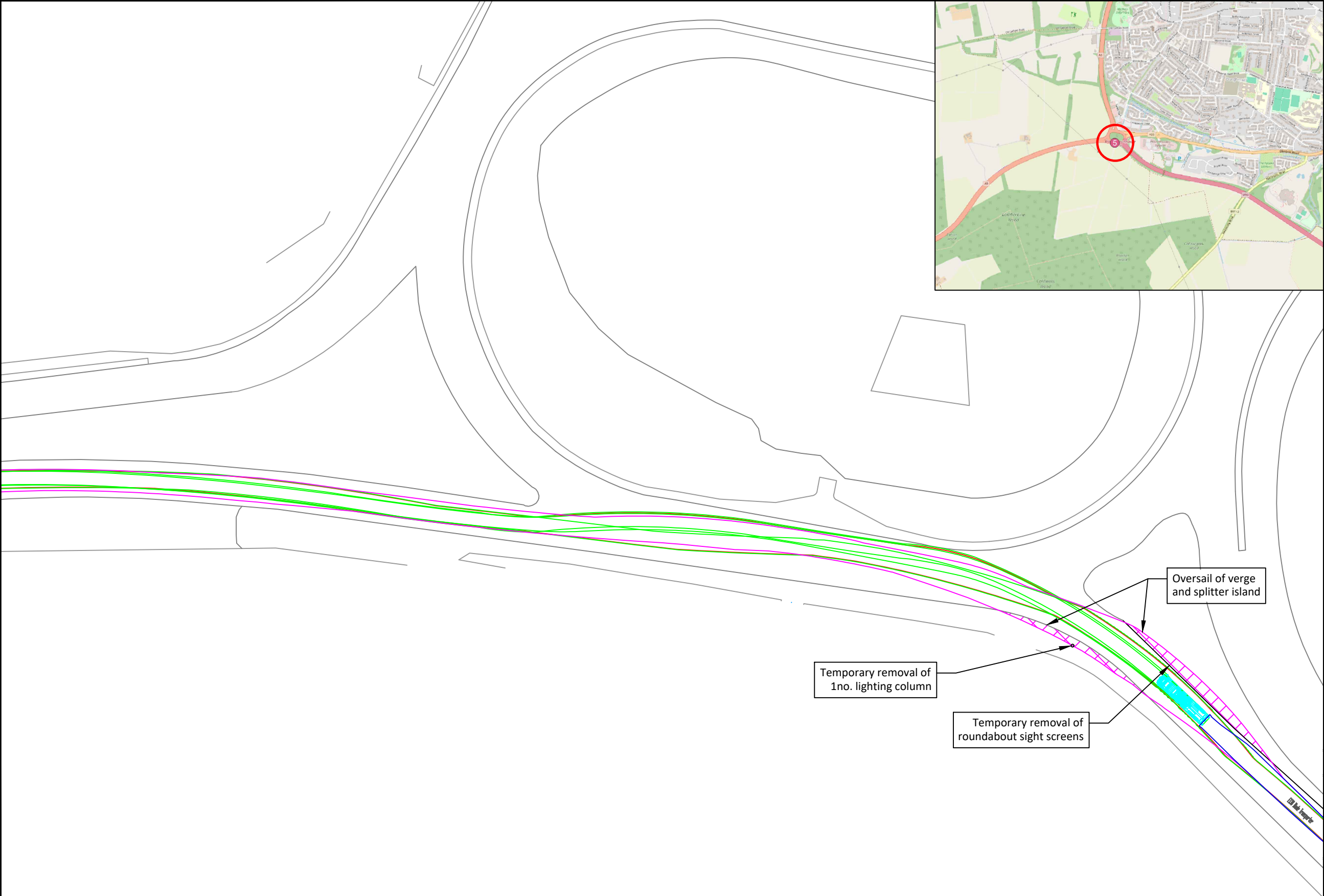
Windburn Windfarm
Swept Path Assessment

Title

E138 Bogie Blade Transporter (67.8m Blade)
Pinch Point 4

Drawn	Checked	Approved
TF	ADV	ADV
Original dtp. size	Date	Scale
A3	08/07/2024	1:500
Drawing Status	Drawing Number	Rev.
Information	GB01T24C69/SPA005B	-

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 3. Please note that marked service locations are indicative only and should be confirmed by topographical survey.

- Key:**
- Transporter Vehicle
 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

Rev.	Date	Revision details	Drawn	Checked	Approved

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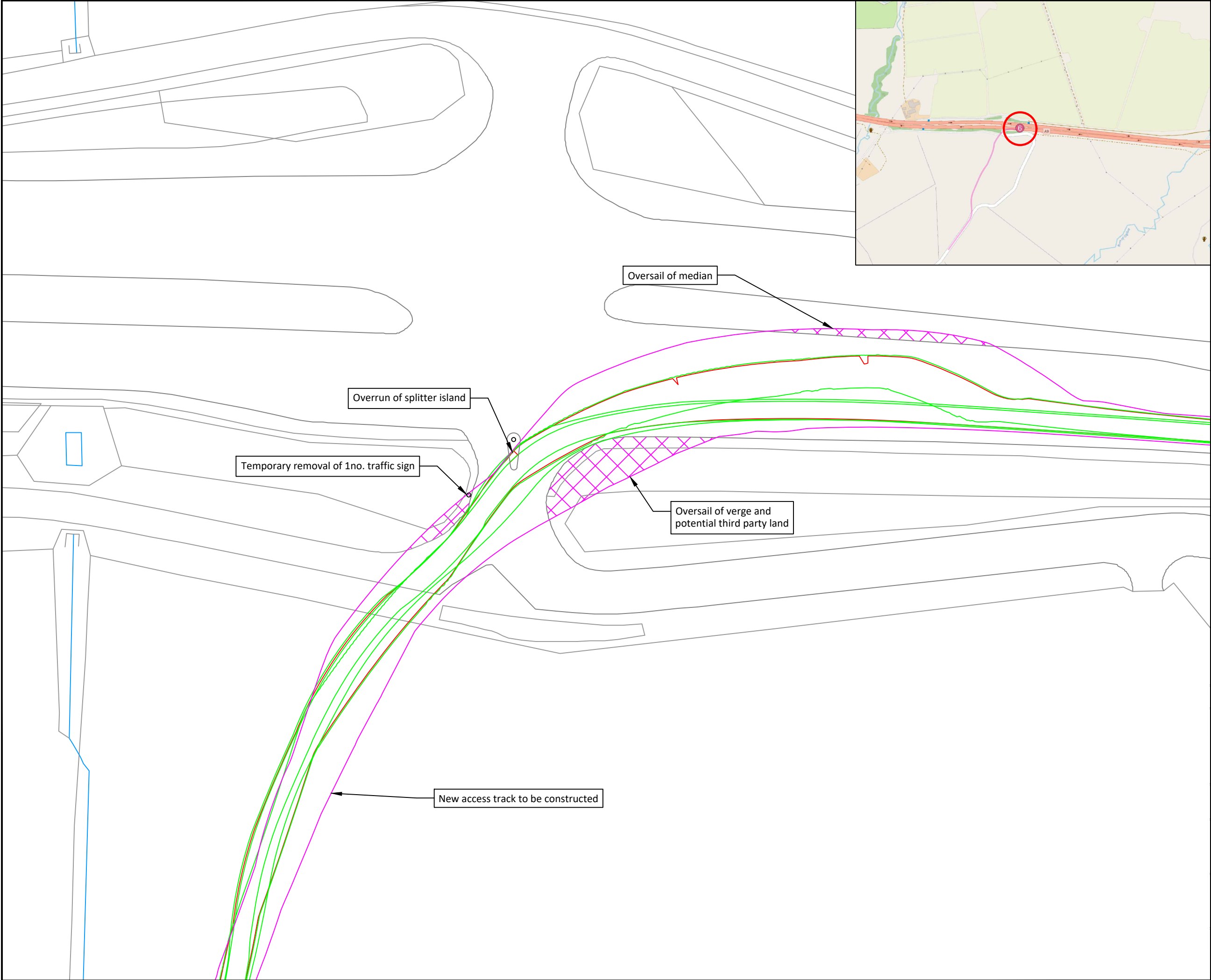
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Client
Windburn Wind Farm Limited

Project
Windburn Windfarm
Swept Path Assessment

Title
E138 Bogie Blade Transporter (67.8m Blade)
Pinch Point 5

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:750
Drawing Status Information	Drawing Number GB01T24C69/SPA006B	Rev. -



Notes:

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- Please note that marked service locations are indicative only and should be confirmed by topographical survey.

Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

Rev.	Date	Revision details	Drawn	Checked	Approved

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Client

Windburn Wind Farm Limited

Project

Windburn Windfarm
Swept Path Assessment

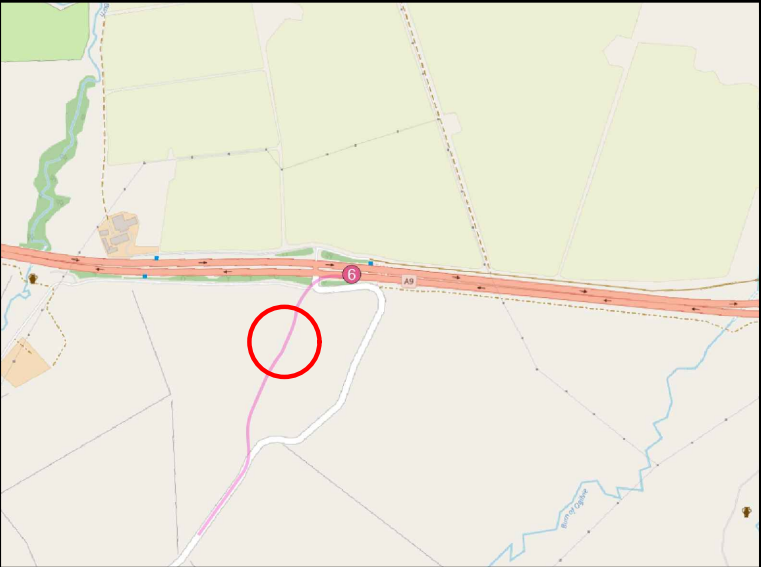
Title

E138 Bogie Blade Transporter (67.8m Blade)
Pinch Point 6

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
Drawing Status	Information	Drawing Number	GB01T24C69/SPA007B	Rev.	-

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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Client

Windburn Wind Farm Limited

Project

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Swept Path Assessment

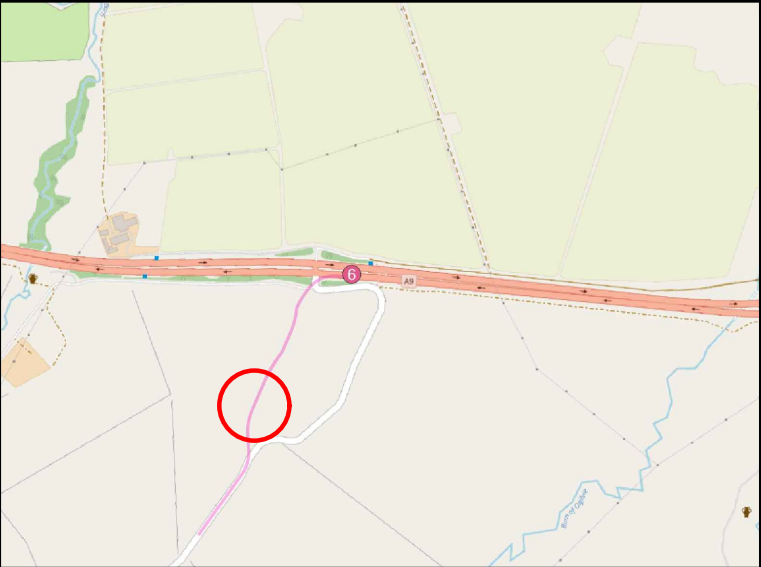
Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 1 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
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Notes:

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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Client

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Project

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Swept Path Assessment

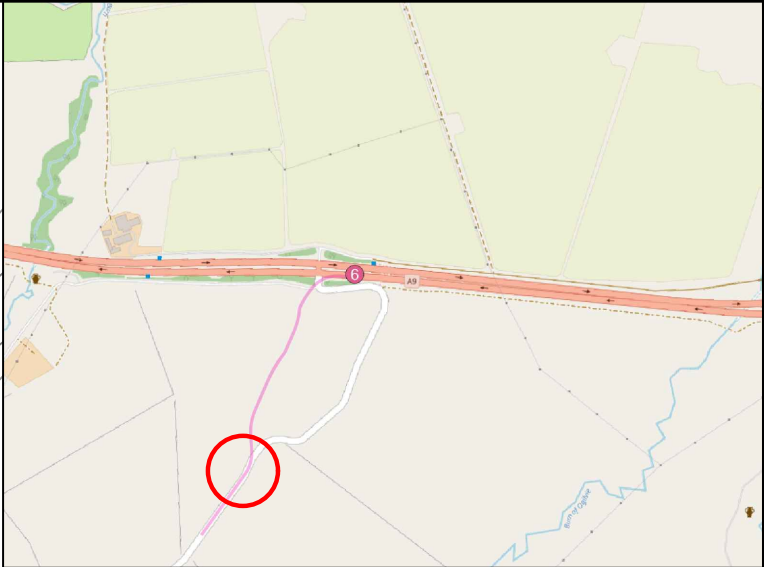
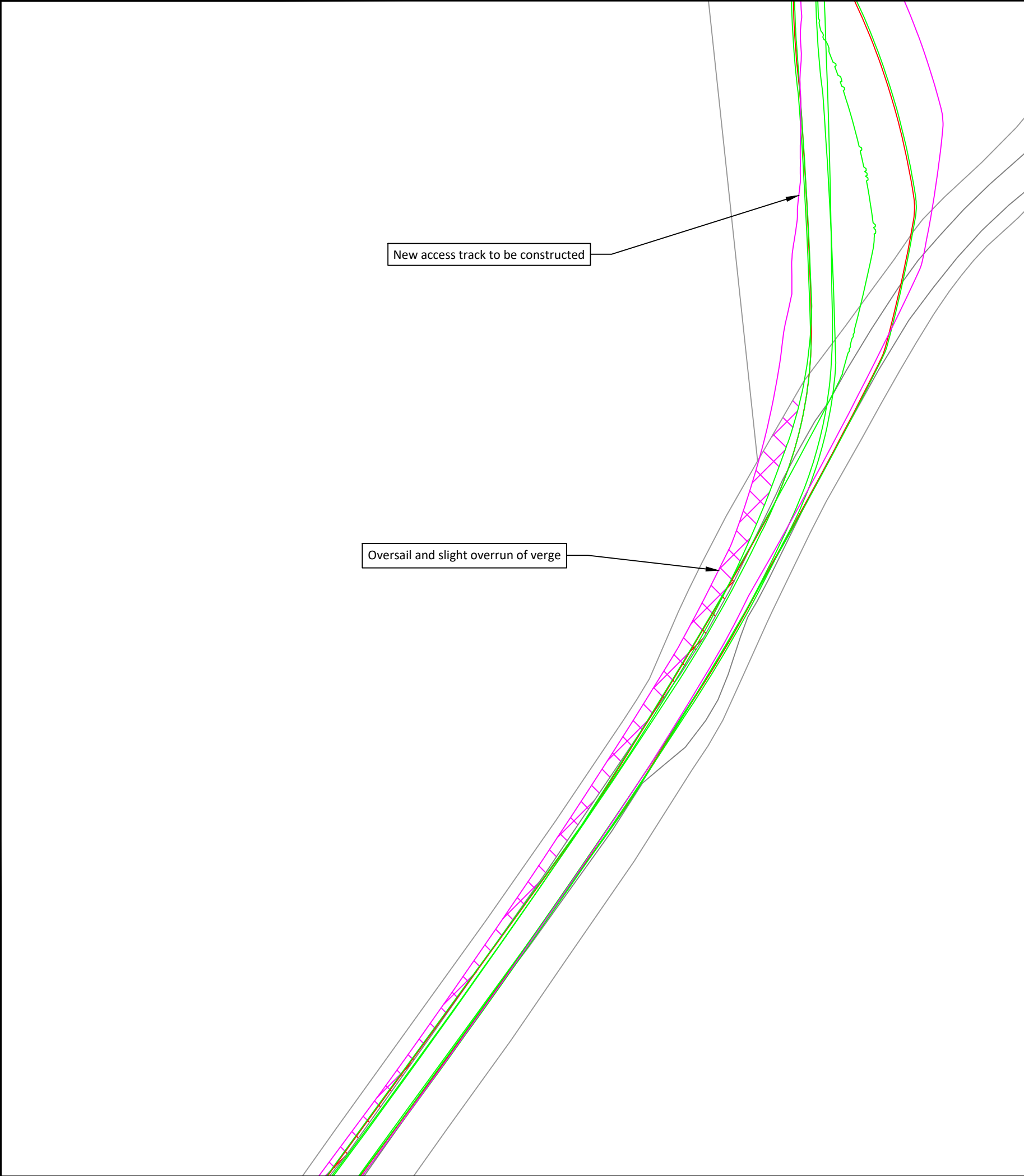
Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 2 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Client

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Project

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Swept Path Assessment

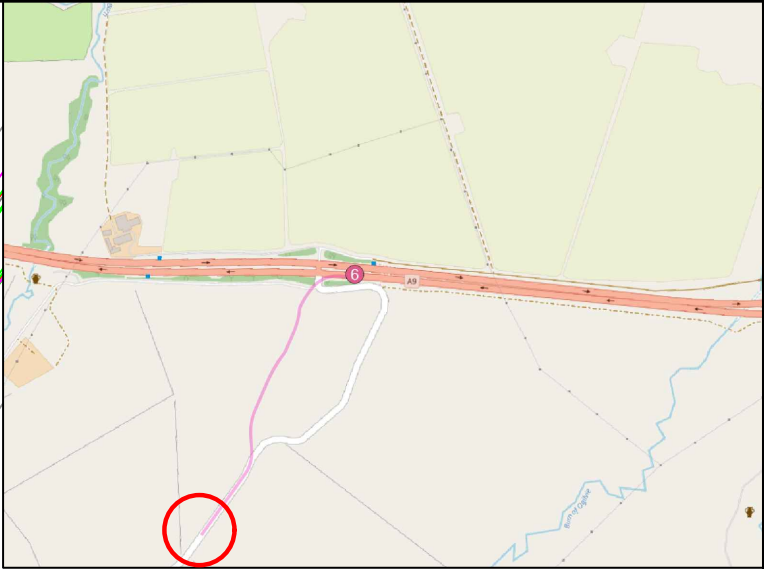
Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 3 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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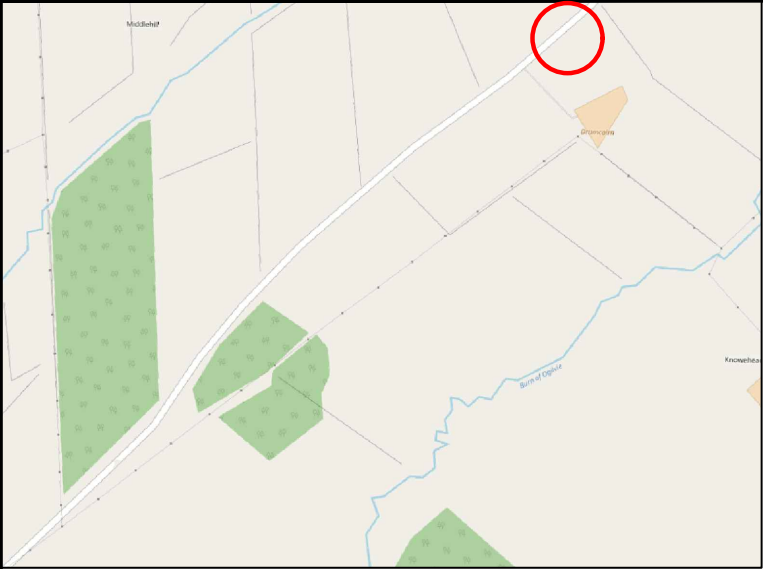
Project

Windburn Windfarm
Swept Path Assessment

Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 4 of 27

Drawn	Checked	Approved
TF	ADV	ADV
Original dtp. size	Date	Scale
A3	08/07/2024	1:500
Drawing Status	Drawing Number	Rev.
Information	GB01T24C69/SPA011B	-



Oversail and slight overrun of verge

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- Key:**
- Transporter Vehicle
 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

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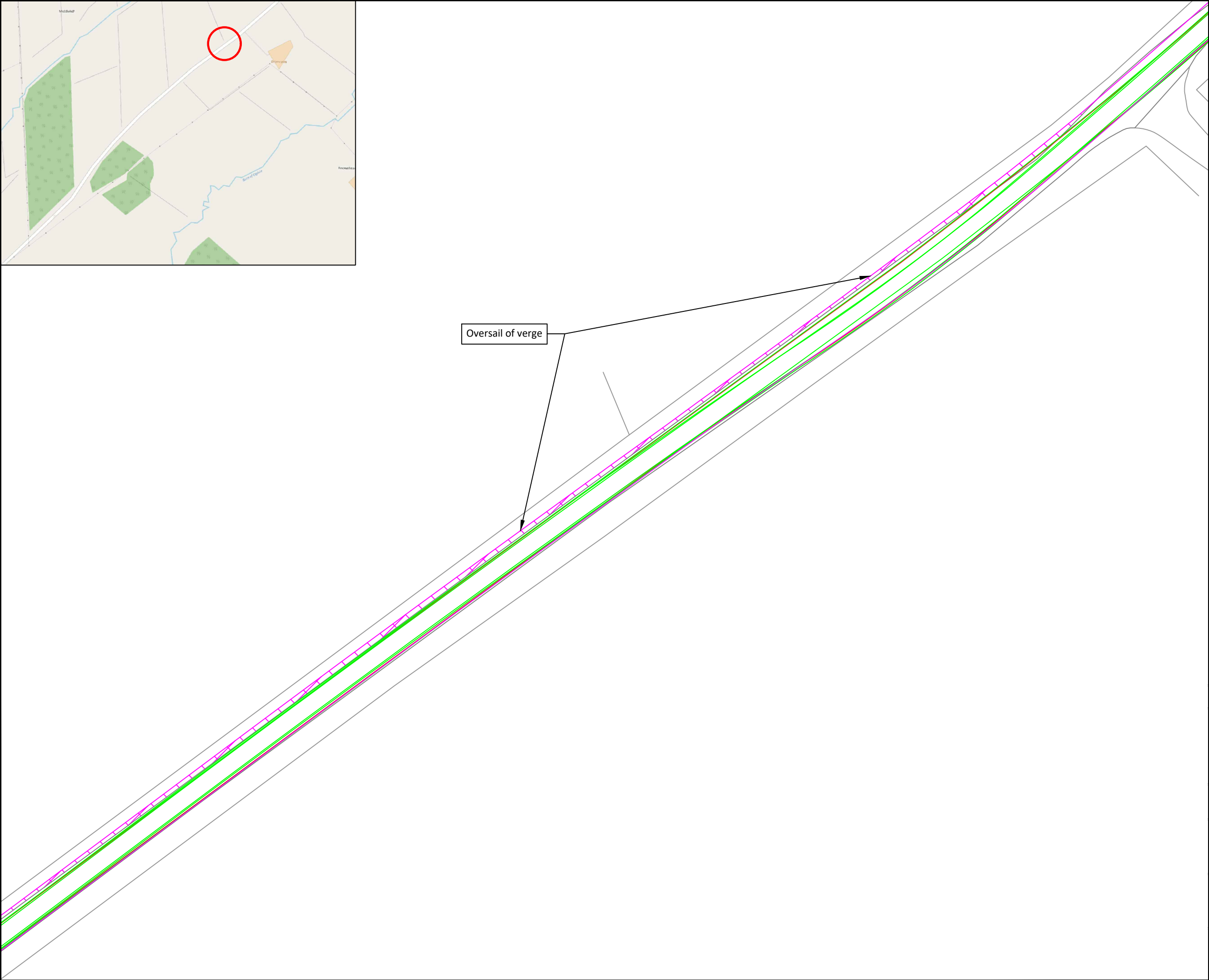
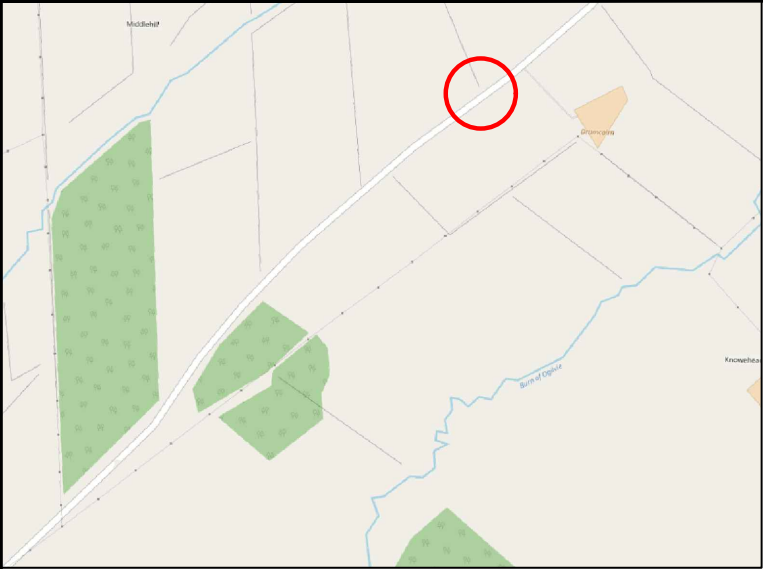
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Project
Windburn Windfarm
Swept Path Assessment

Title
E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 5 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information	Drawing Number GB01T24C69/SPA012B	Rev. -



Notes:

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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Project

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Swept Path Assessment

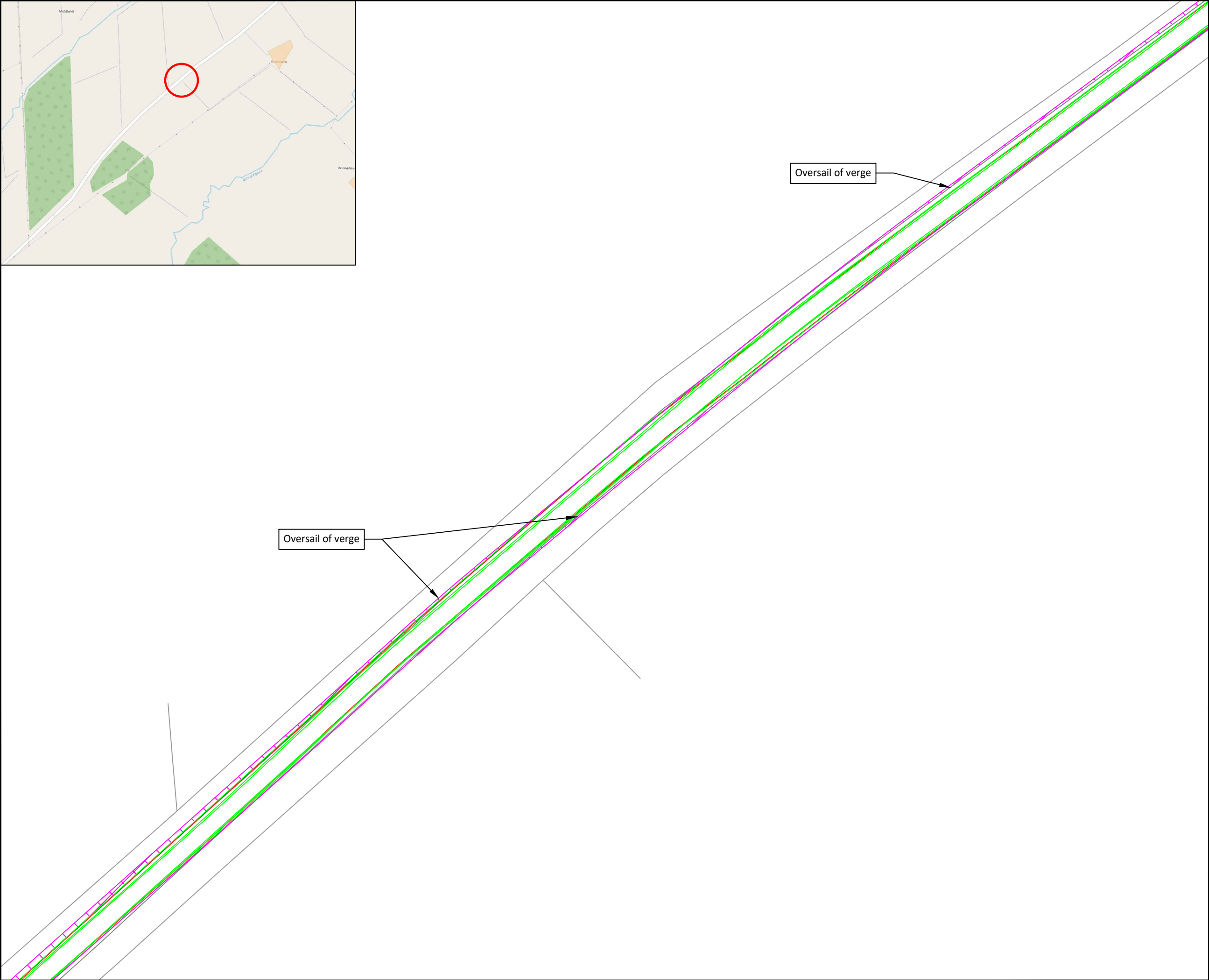
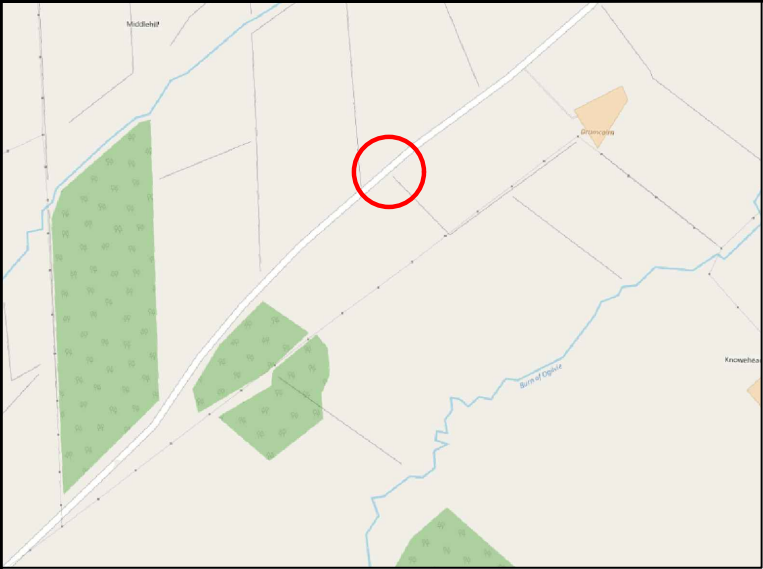
Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 6 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
Drawing Status	Information		Drawing Number	GB01T24C69/SPA013B	Rev.
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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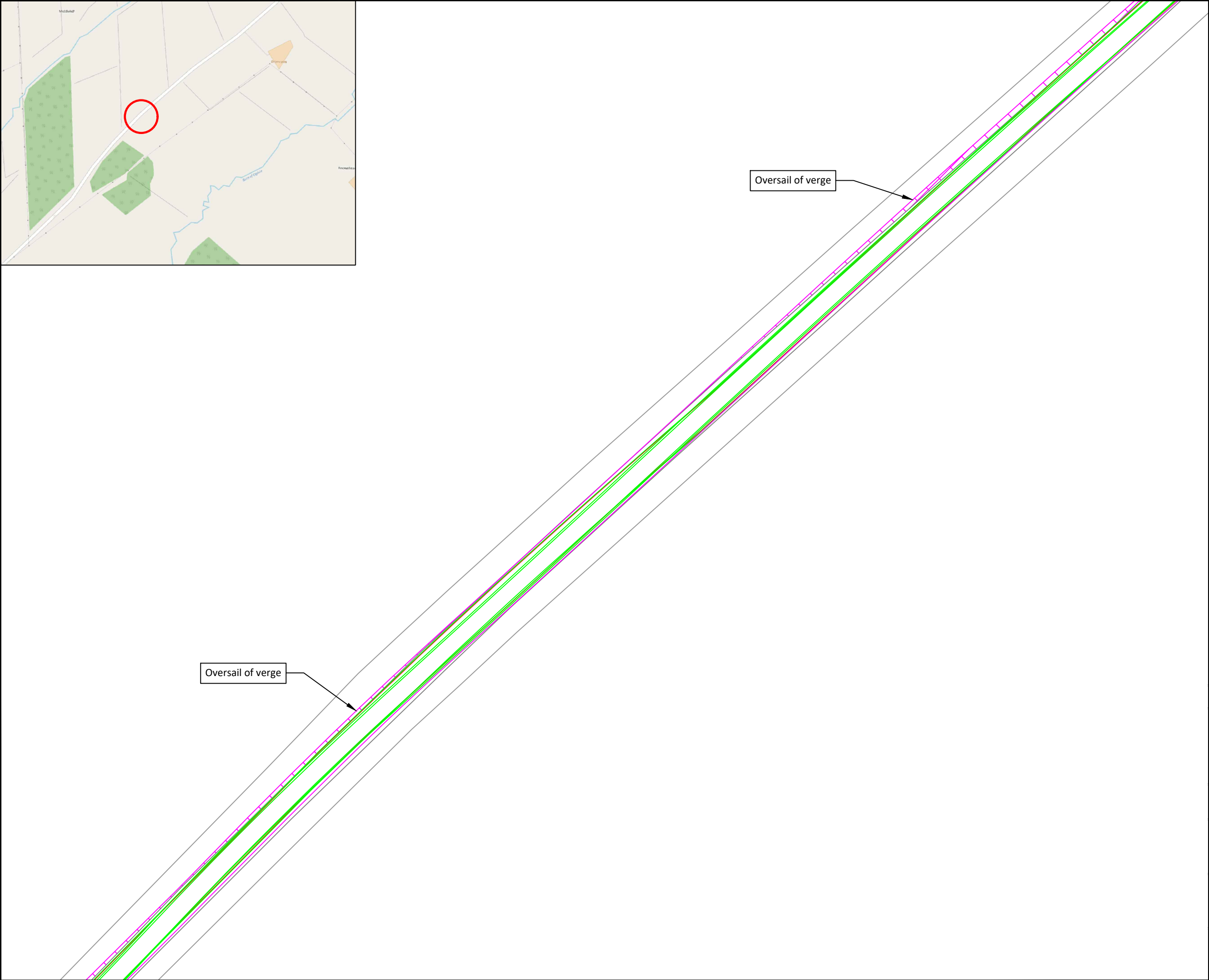
Project

Windburn Windfarm
Swept Path Assessment

Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 7 of 27

Drawn	Checked	Approved
TF	ADV	ADV
Original dtp. size	Date	Scale
A3	08/07/2024	1:500
Drawing Status	Drawing Number	Rev.
Information	GB01T24C69/SPA014B	-



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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Project

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Swept Path Assessment

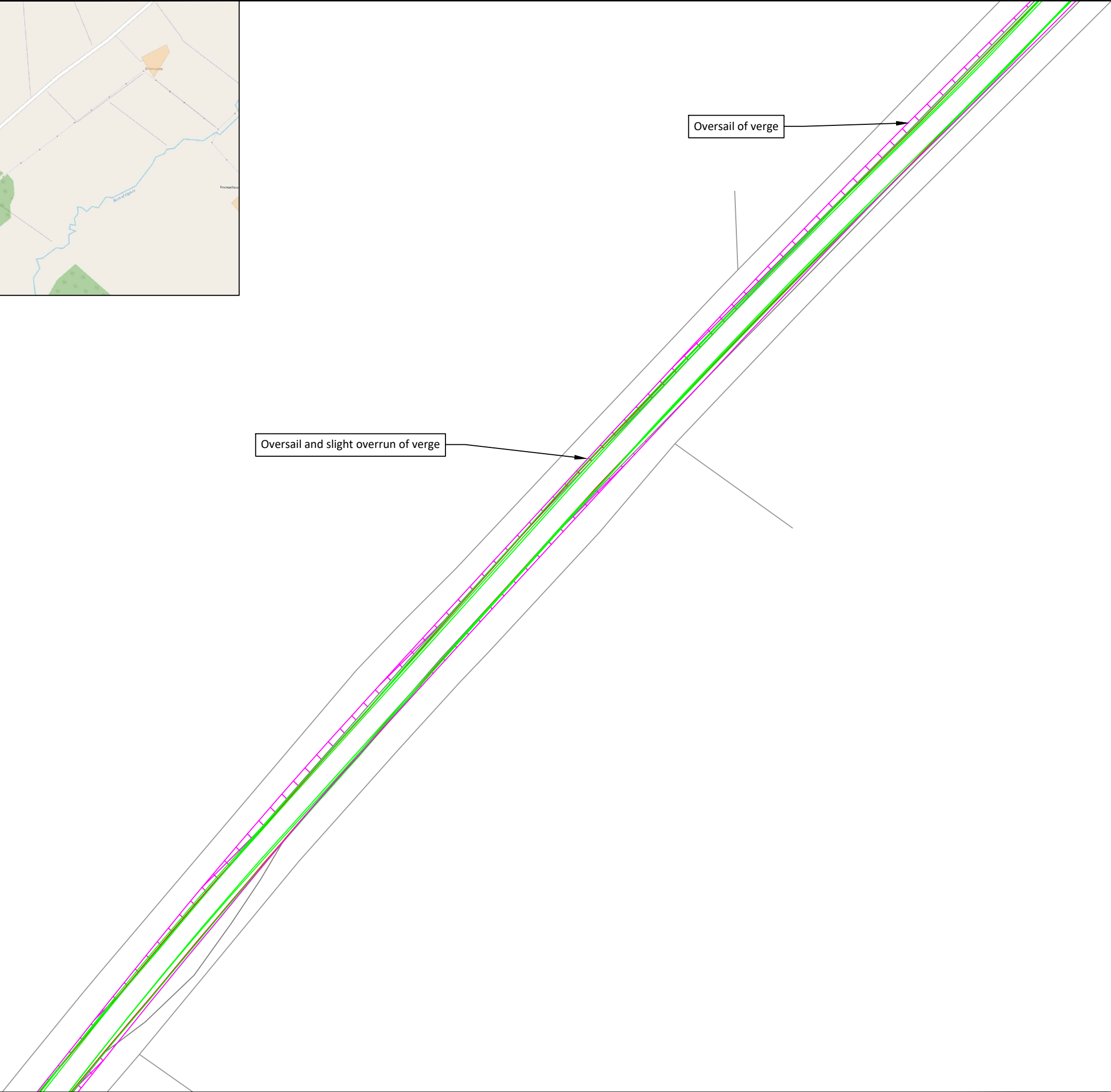
Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 8 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Project

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Swept Path Assessment

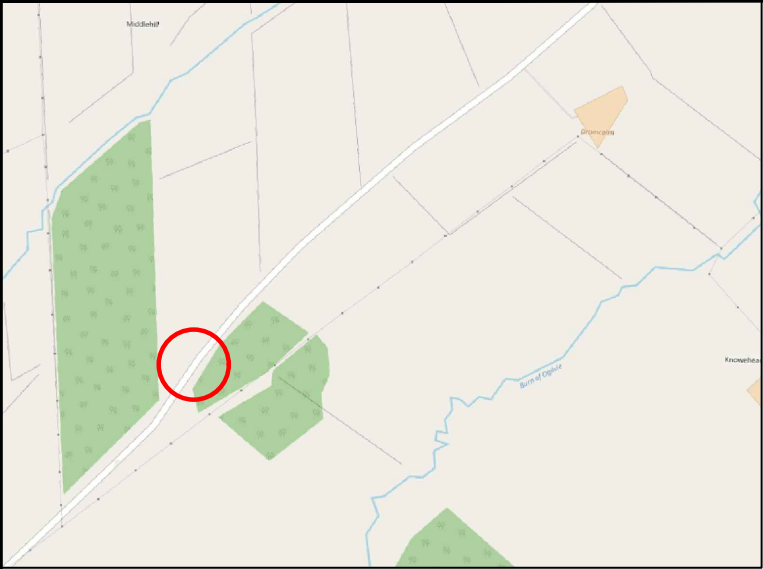
Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 9 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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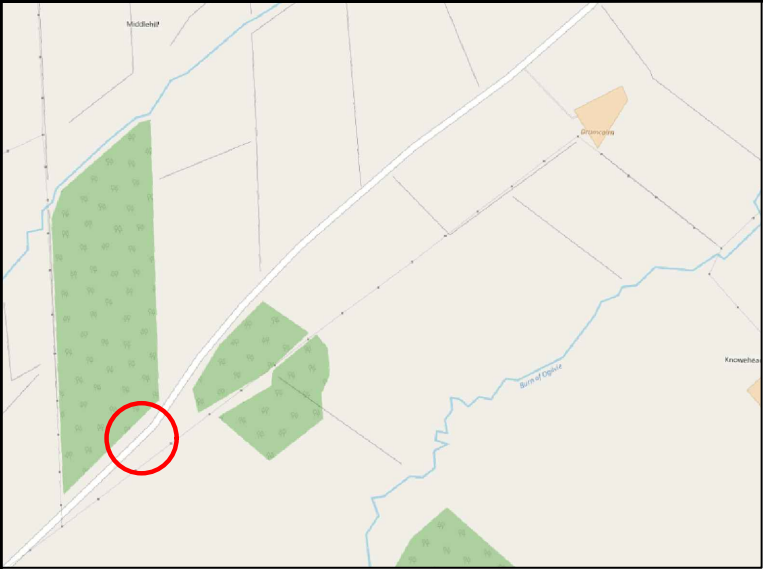
Project

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Swept Path Assessment

Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 10 of 27

Drawn	Checked	Approved
TF	ADV	ADV
Original dtp. size	Date	Scale
A3	08/07/2024	1:500
Drawing Status	Drawing Number	Rev.
Information	GB01T24C69/SPA017B	-



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- Key:**
- Transporter Vehicle
 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

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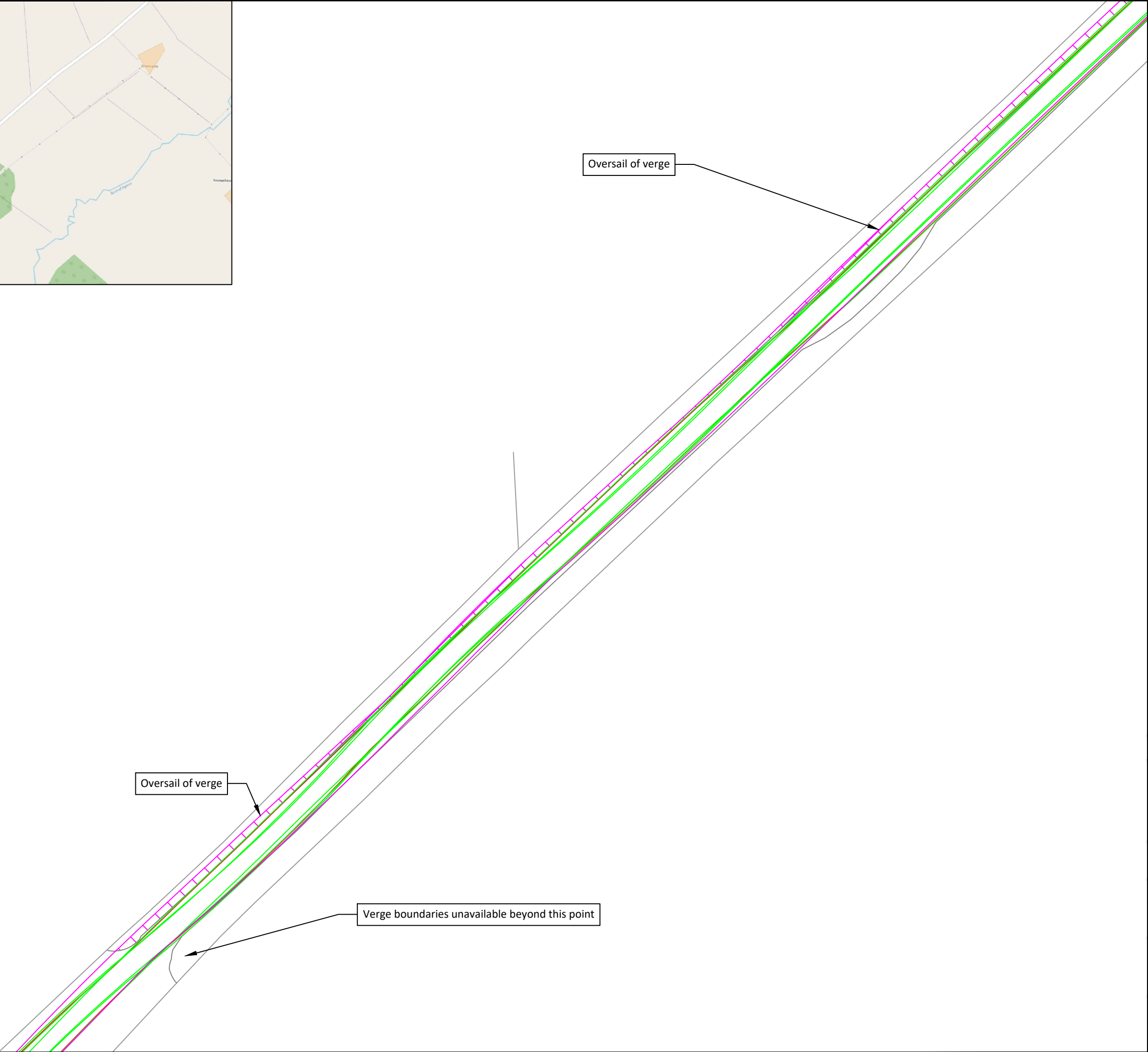
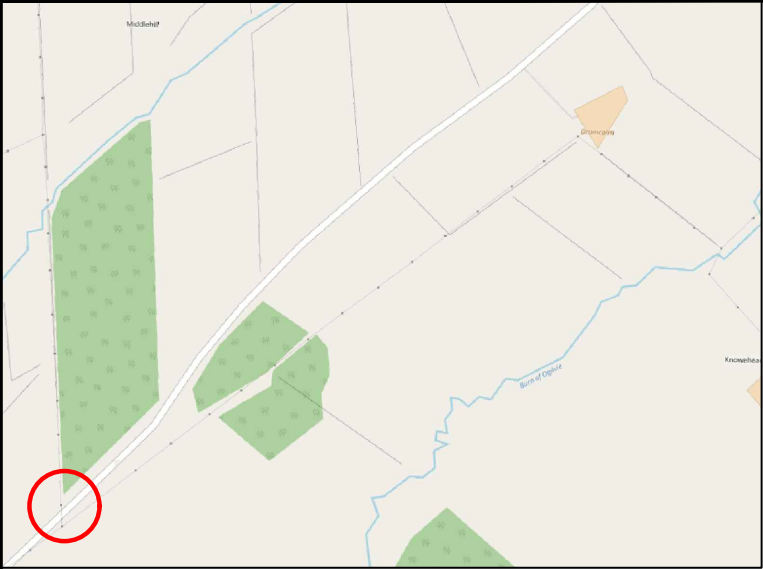
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Client
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Project
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Swept Path Assessment

Title
E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 11 of 27

Drawn TF	Checked ADV	Approved ADV
Original dpg. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information	Drawing Number GB01T24C69/SPA018B	Rev. -



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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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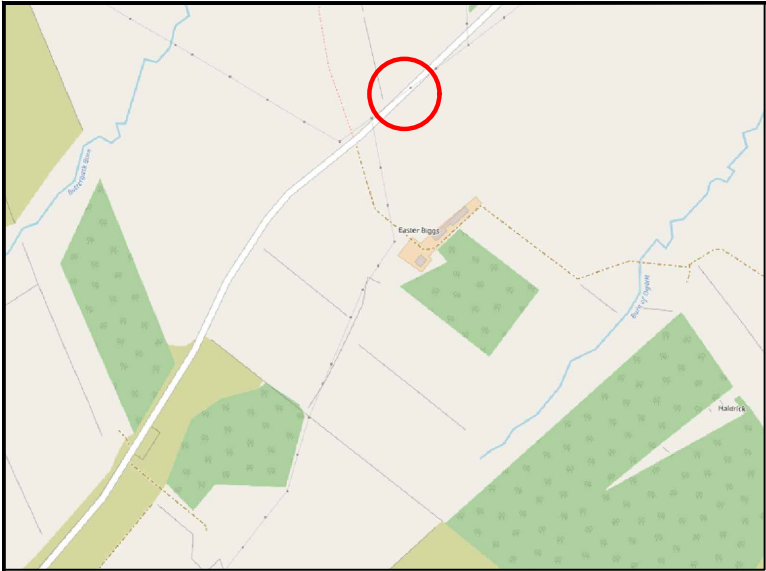
Project
Windburn Windfarm
Swept Path Assessment

Title
E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 12 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information		Rev. -

Drawing Number
GB01T24C69/SPA019B

Rev.
-



Swept path of vehicle accommodated within adopted highway boundary

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- Key:
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 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

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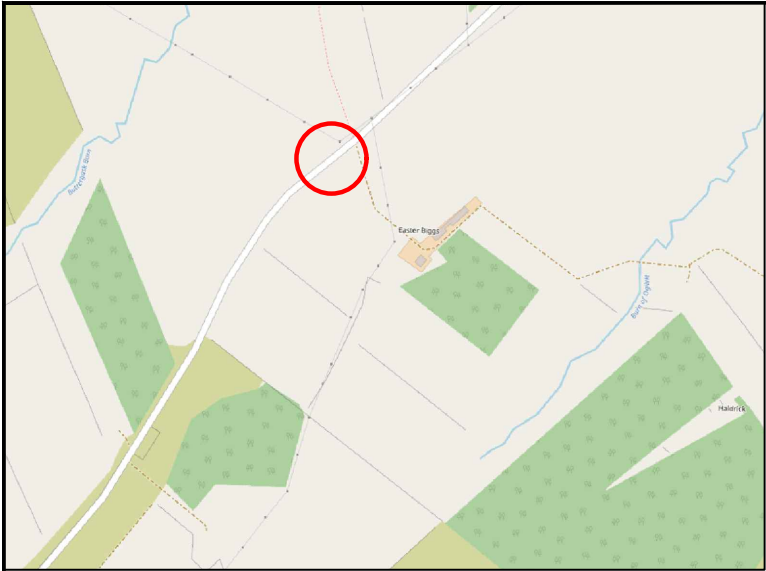
T 0131 460 1847
E scotland@systra.co.uk

Client
Windburn Wind Farm Limited

Project
Windburn Windfarm
Swept Path Assessment

Title
E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 13 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information		Drawing Number GB01T24C69/SPA020B
		Rev. -



Swept path of vehicle accommodated within adopted highway boundary



Notes:

- Do not scale from drawing.
- All dimensions in metres unless otherwise stated.
- Please note that marked service locations are indicative only and should be confirmed by topographical survey.

Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

Rev.	Date	Revision details	Drawn	Checked	Approved

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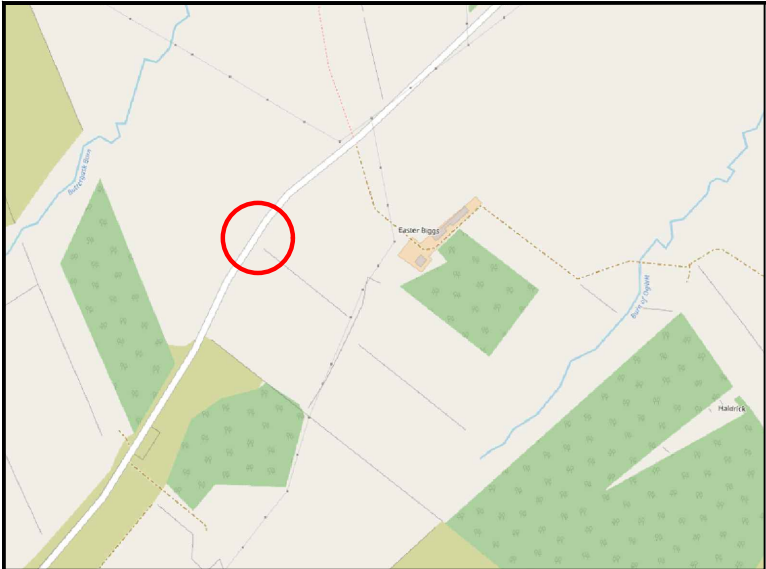
Project

Windburn Windfarm
Swept Path Assessment

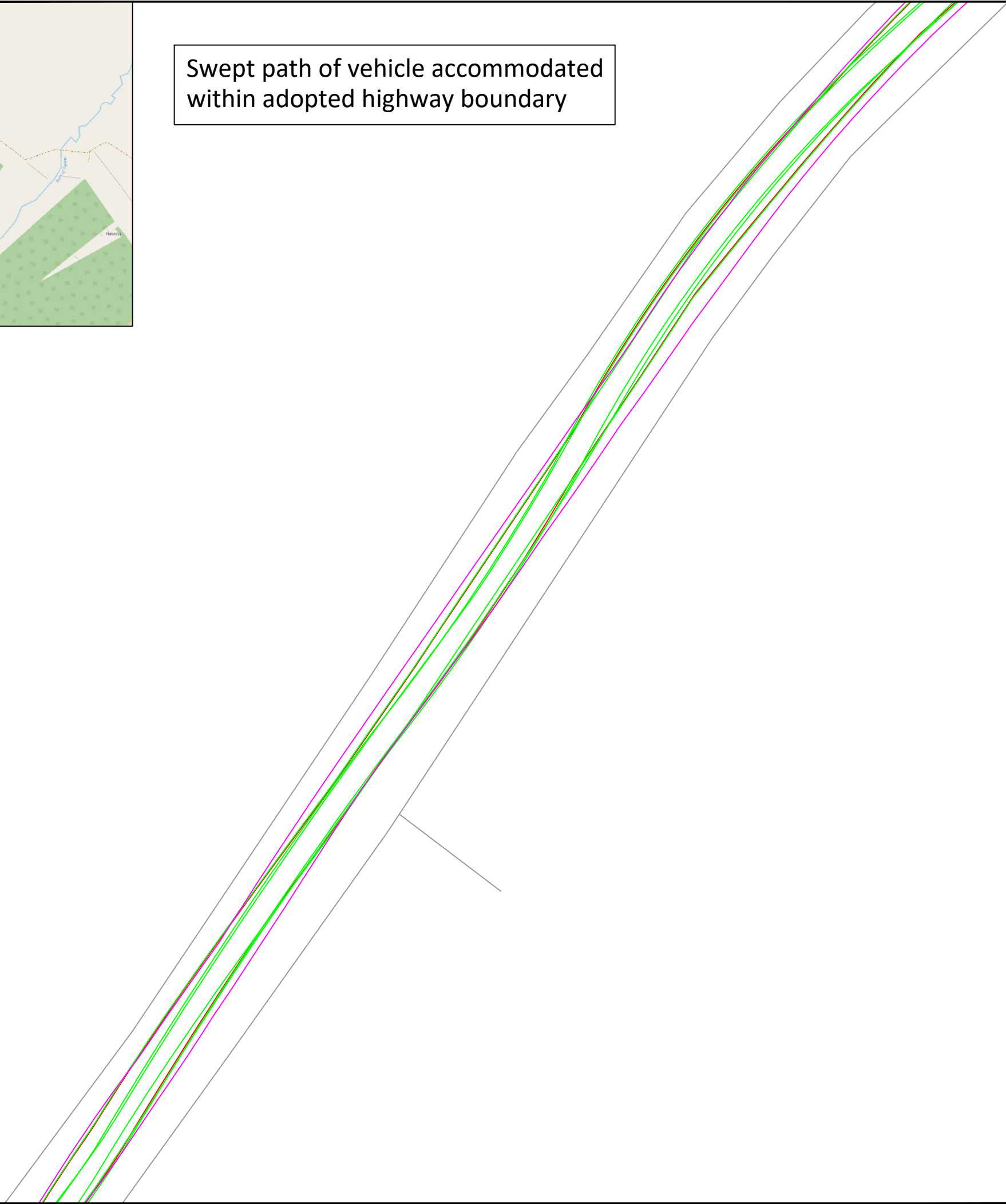
Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 14 of 27

Drawn	Checked	Approved
TF	ADV	ADV
Original dtp. size	Date	Scale
A3	08/07/2024	1:500
Drawing Status	Drawing Number	Rev.
Information	GB01T24C69/SPA021B	-



Swept path of vehicle accommodated
within adopted highway boundary



of vehicle accommodated
ted highway boundary

- Notes:**
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 3. Please note that marked service locations are indicative only and should be confirmed by topographical survey.

- Key:**
- Transporter Vehicle
 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

Rev.	Date	Revision details	Drawn	Checked	Approved

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Client
Windburn Wind Farm Limited

Project
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Swept Path Assessment

Title
E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 15 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information	Drawing Number GB01T24C69/SPA022B	Rev. -



Swept path of vehicle accommodated within adopted highway boundary



- Notes:**
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 2. All dimensions in metres unless otherwise stated.
 3. Please note that marked service locations are indicative only and should be confirmed by topographical survey.

- Key:**
- Transporter Vehicle
 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

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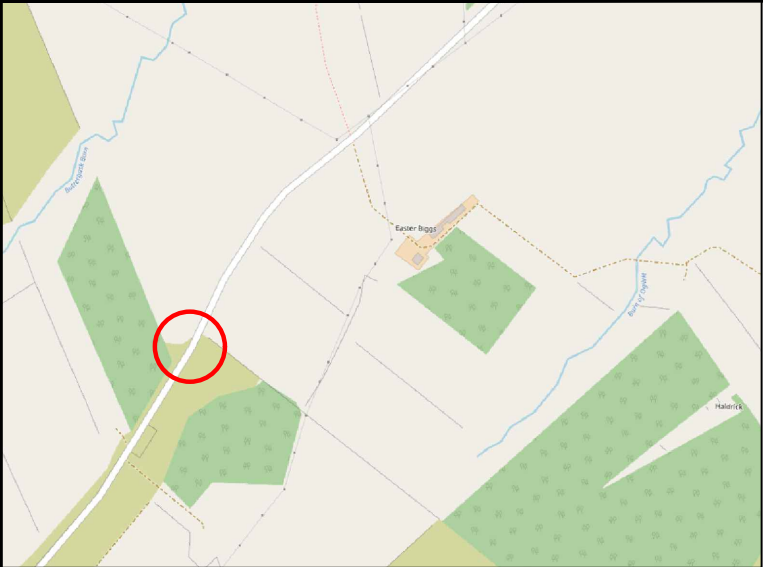
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Client
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Project
Windburn Windfarm
Swept Path Assessment

Title
E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 16 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information	Drawing Number GB01T24C69/SPA023B	Rev. -



Swept path of vehicle accommodated within adopted highway boundary

Notes:

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- Please note that marked service locations are indicative only and should be confirmed by topographical survey.

Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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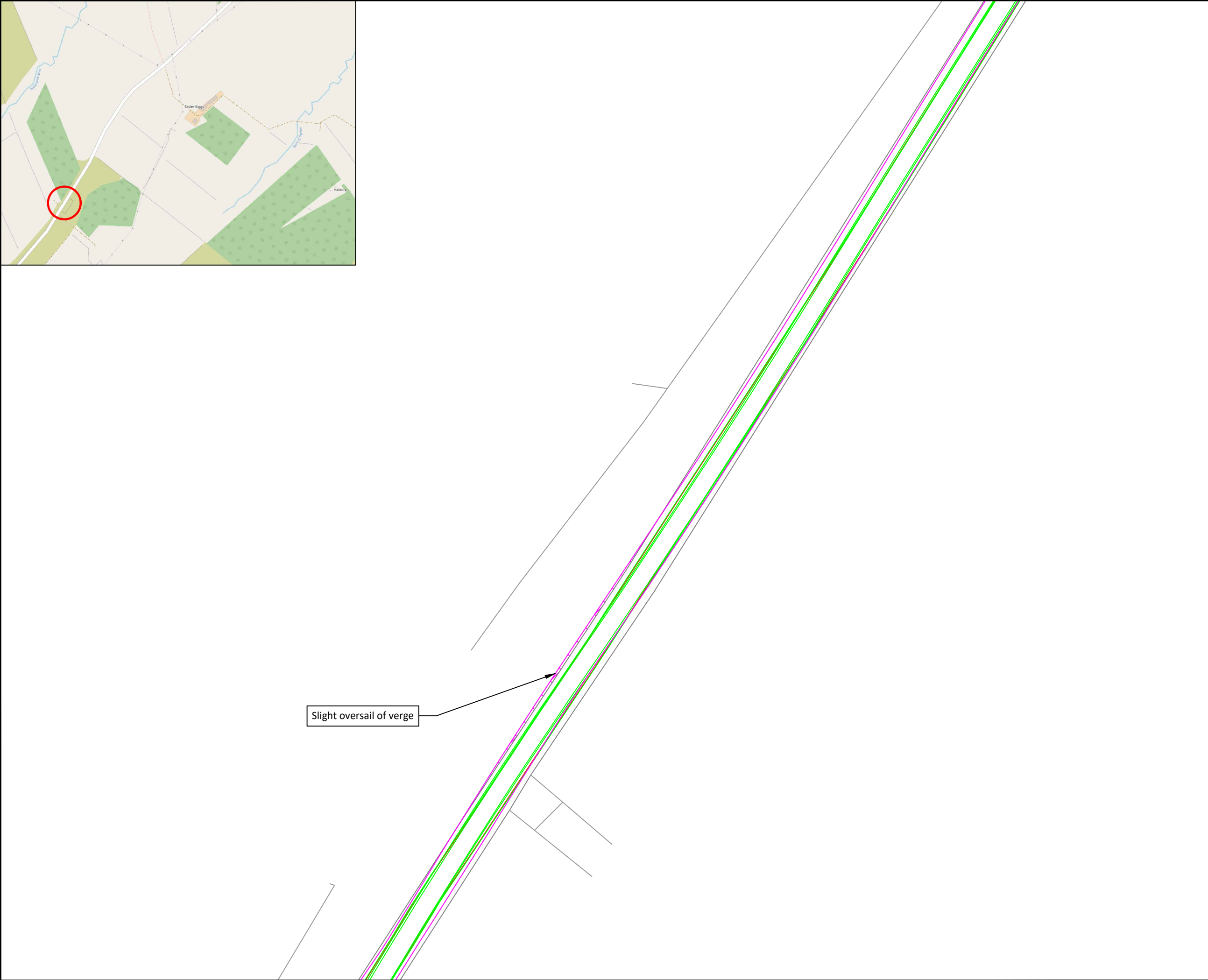
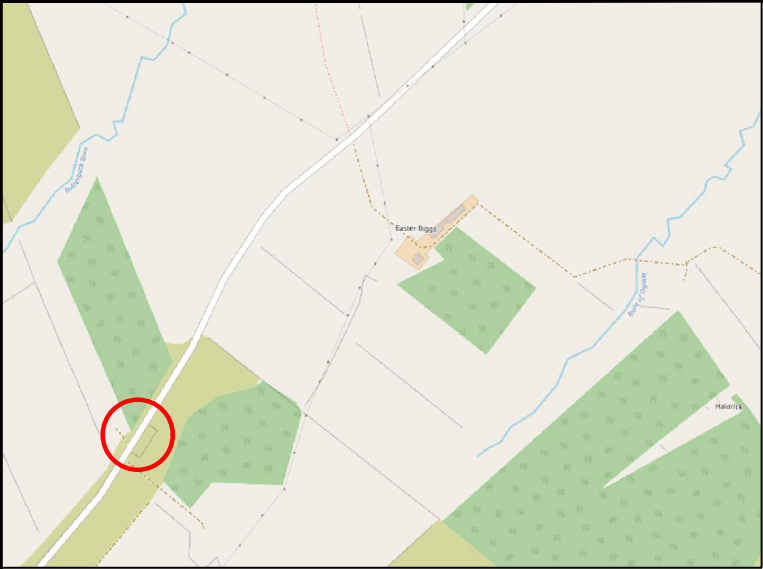
Project

Windburn Windfarm
Swept Path Assessment

Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 17 of 27

Drawn	Checked	Approved
TF	ADV	ADV
Original dtp. size	Date	Scale
A3	08/07/2024	1:500
Drawing Status	Drawing Number	Rev.
Information	GB01T24C69/SPA024B	-



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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Project

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Swept Path Assessment

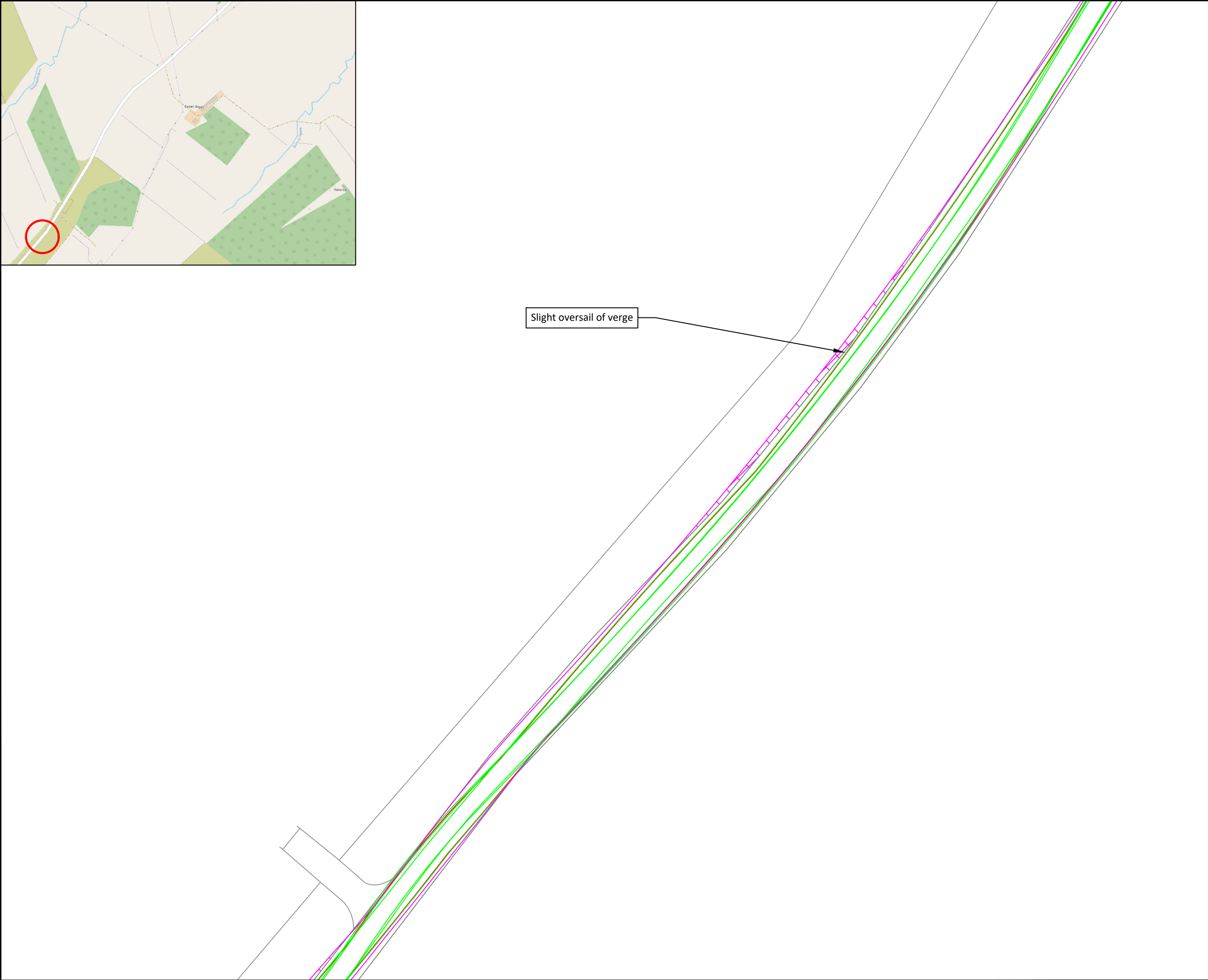
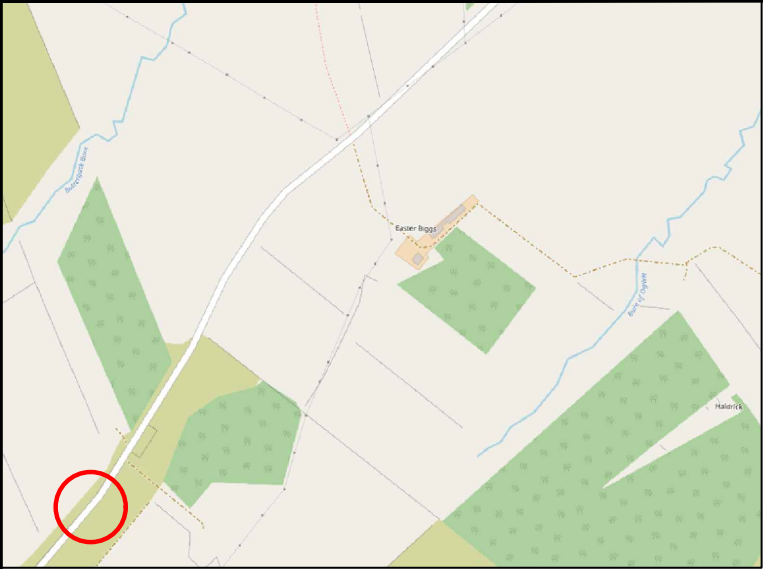
Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 18 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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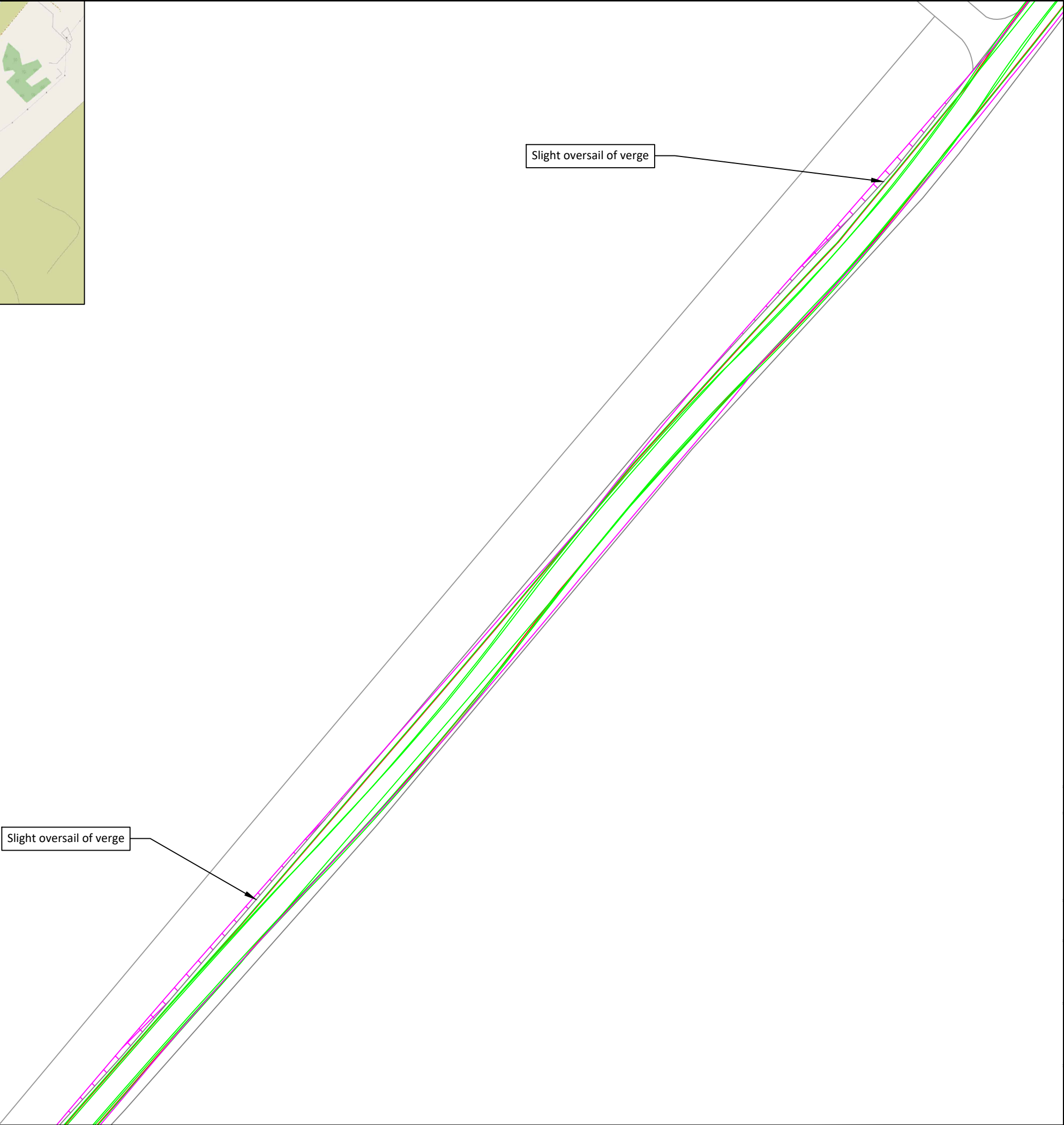
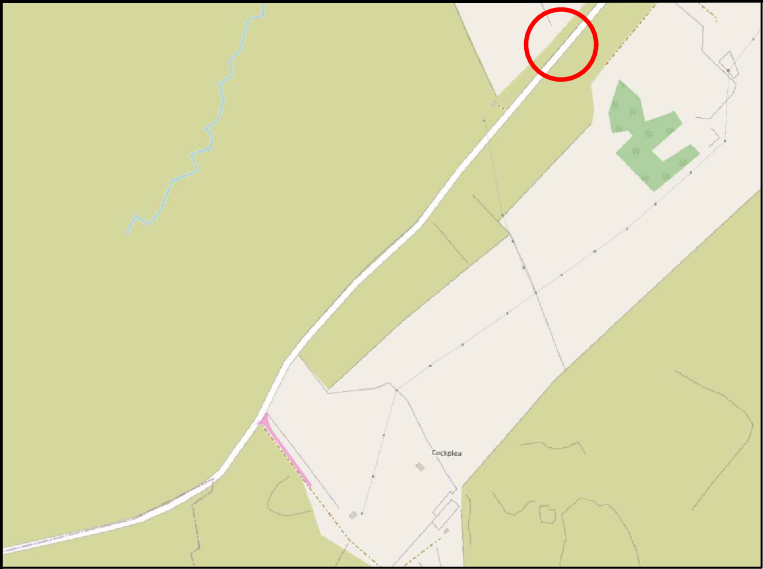
Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 19 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Project

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Swept Path Assessment

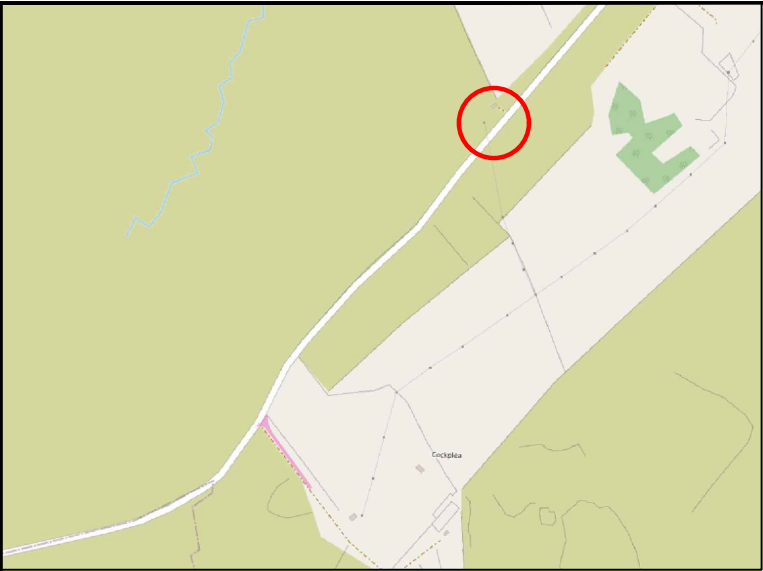
Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 20 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dpg. size	A3	Date	08/07/2024	Scale	1:500
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Client

Windburn Wind Farm Limited

Project

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Swept Path Assessment

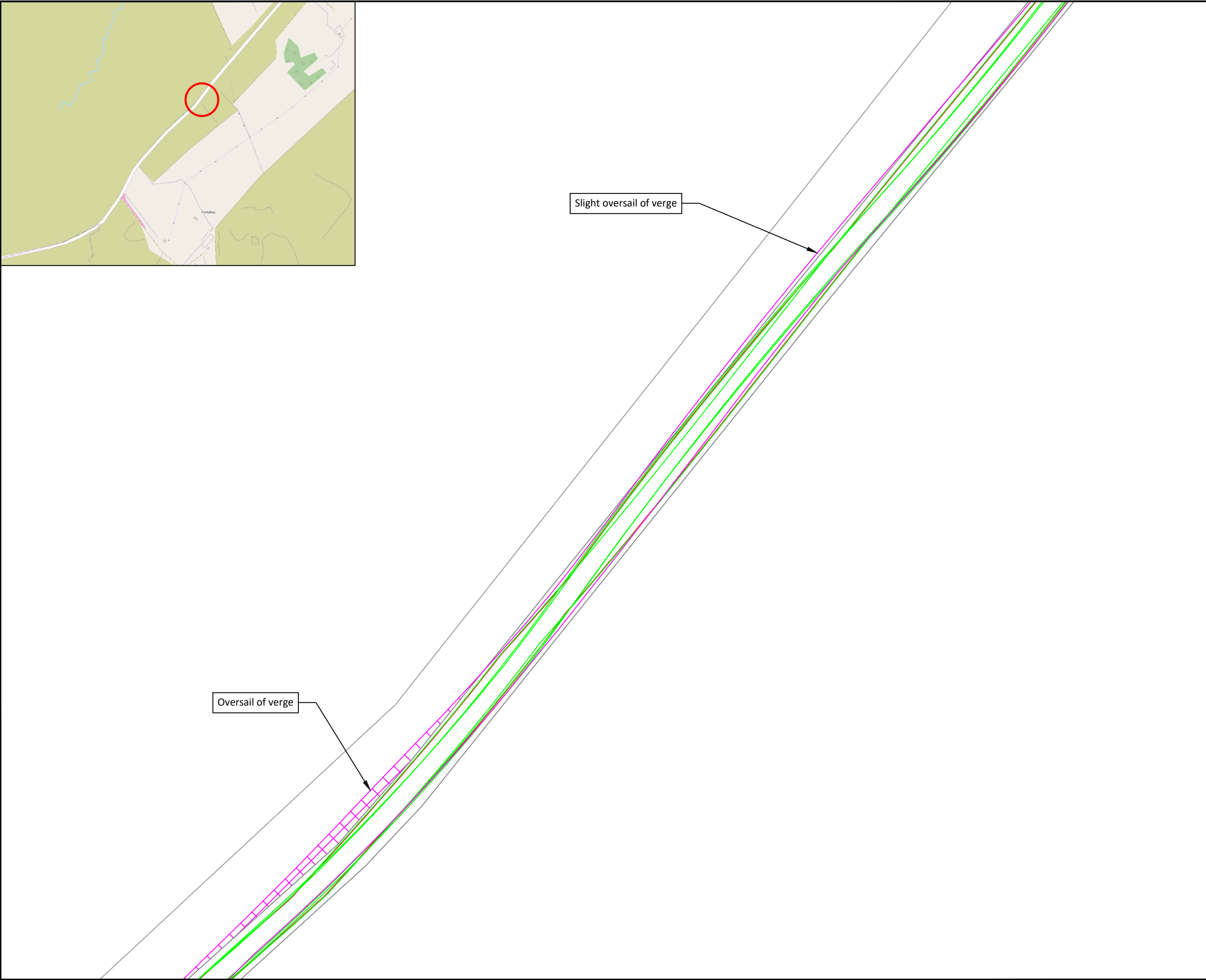
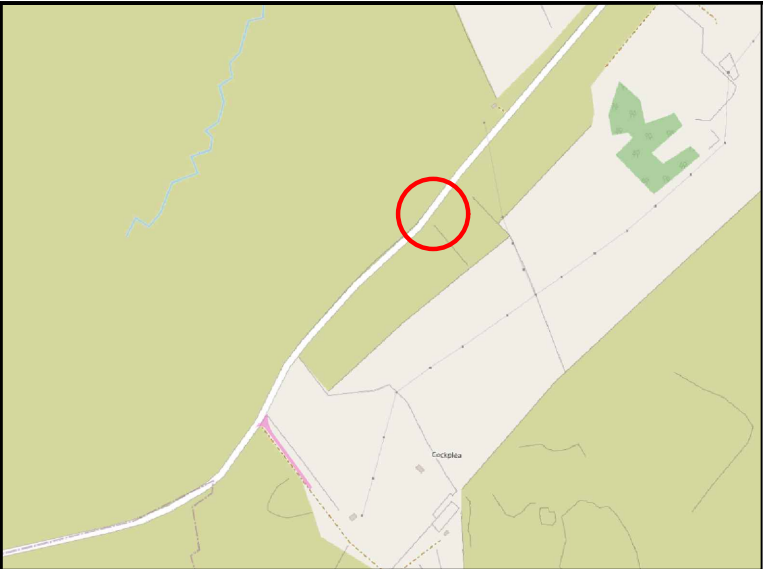
Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 21 of 27

Drawn	TF	Checked	ADV	Approved	ADV
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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

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Project

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Swept Path Assessment

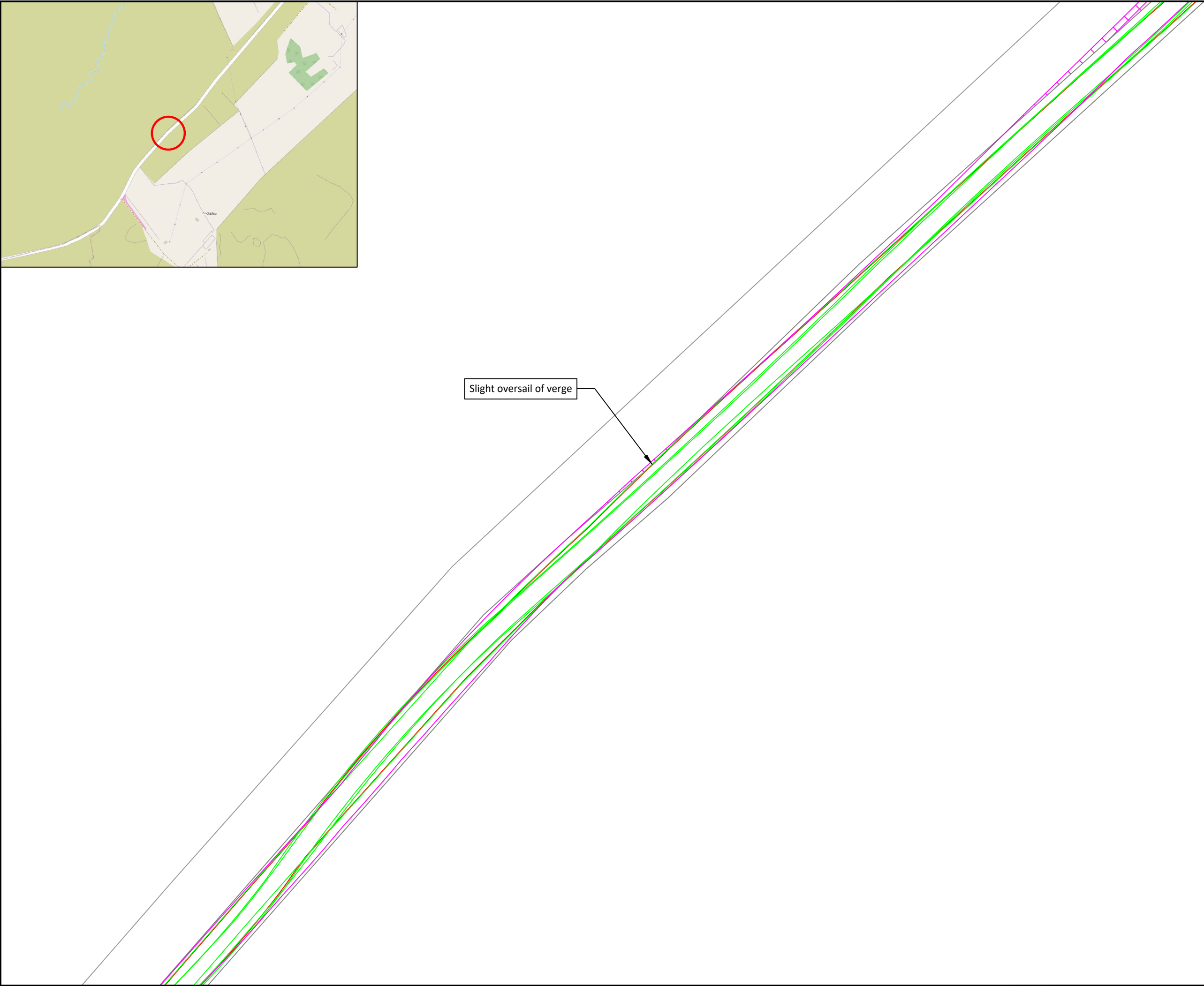
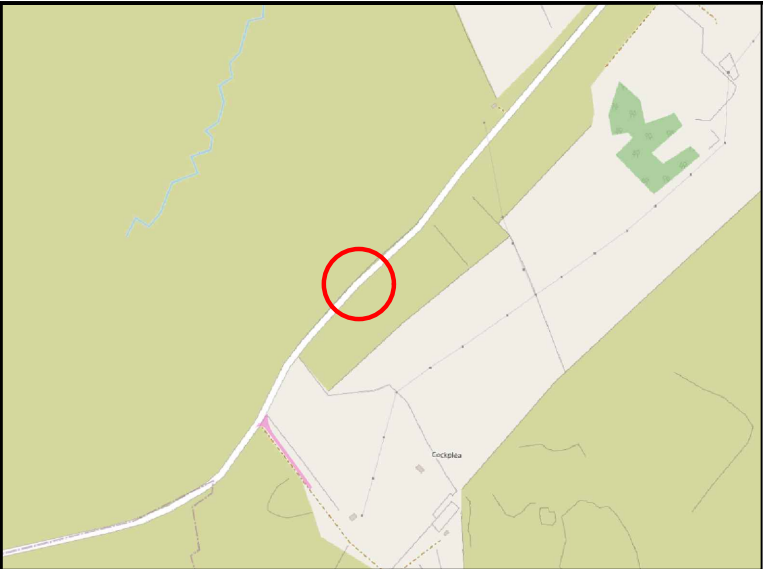
Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 22 of 27

Drawn	Checked	Approved
TF	ADV	ADV

Original dtp. size	Date	Scale
A3	08/07/2024	1:500

Drawing Status	Drawing Number	Rev.
Information	GB01T24C69/SPA029B	-



- Notes:**
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 2. All dimensions in metres unless otherwise stated.
 3. Please note that marked service locations are indicative only and should be confirmed by topographical survey.

- Key:**
- Transporter Vehicle
 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

Rev	Date	Revision details	Drawn	Checked	Approved

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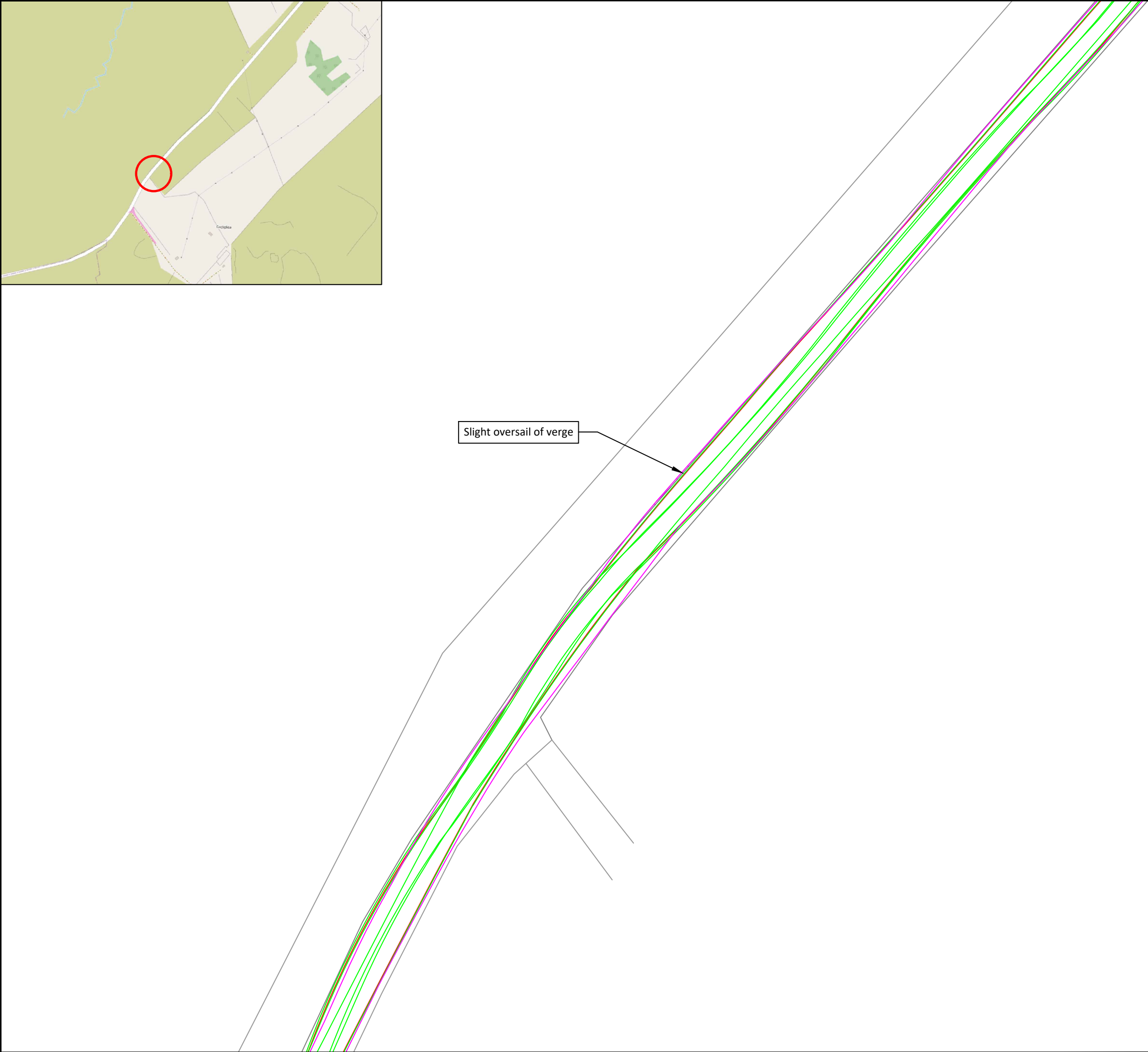
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Client
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Project
Windburn Windfarm
Swept Path Assessment

Title
E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 23 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information	Drawing Number GB01T24C69/SPA030B	Rev. -



- Notes:**
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- Key:**
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 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

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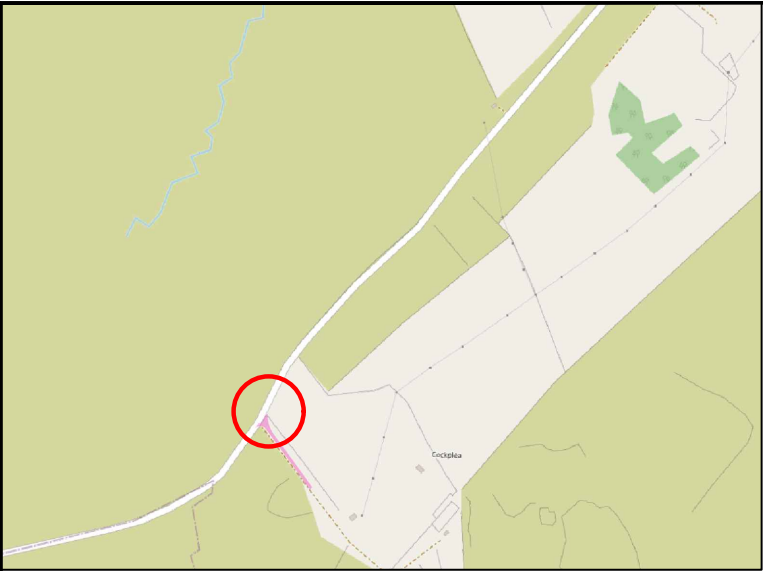
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Client
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Project
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Swept Path Assessment

Title
E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 24 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information	Drawing Number GB01T24C69/SPA031B	Rev. -



Oversail of verge

Overrun and oversail of verge
and potential third party land

Temporary removal of 2no. gate
posts and 1no. property sign

- Notes:
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 2. All dimensions in metres unless otherwise stated.
 3. Please note that marked service locations are indicative only and should be confirmed by topographical survey.

- Key:
- Transporter Vehicle
 - Load Outline
 - Over-run envelope of tractor and trailer wheels
 - Over-sail envelope being swept by tractor and trailer bed
 - Over-sail envelope being swept by load path
 - Over-run area of tractor and trailer wheels out with carriageway
 - Over-sail area of tractor and trailer bed out with carriageway
 - Over-sail area of load out with carriageway

Rev.	Date	Revision details	Drawn	Checked	Approved

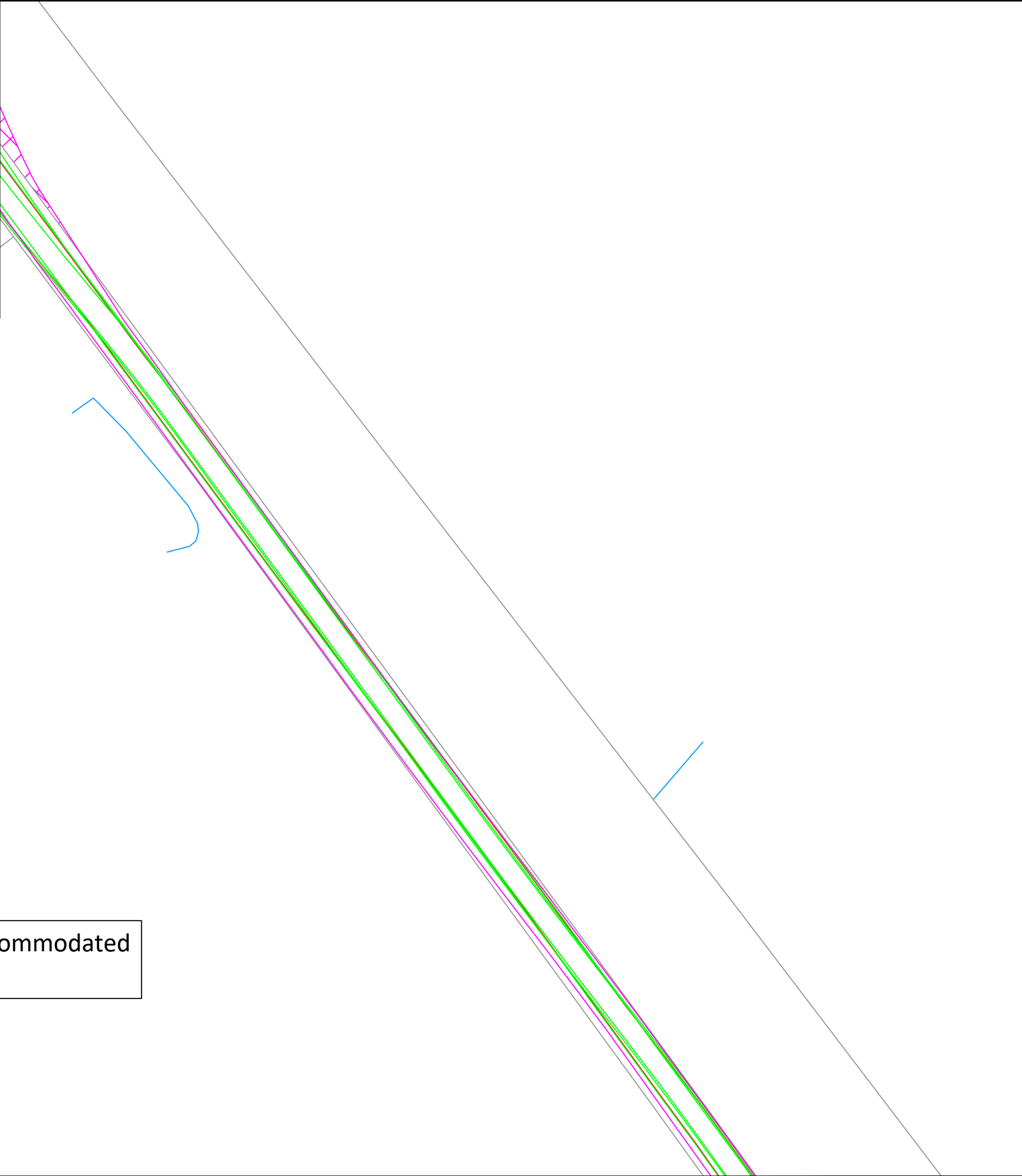
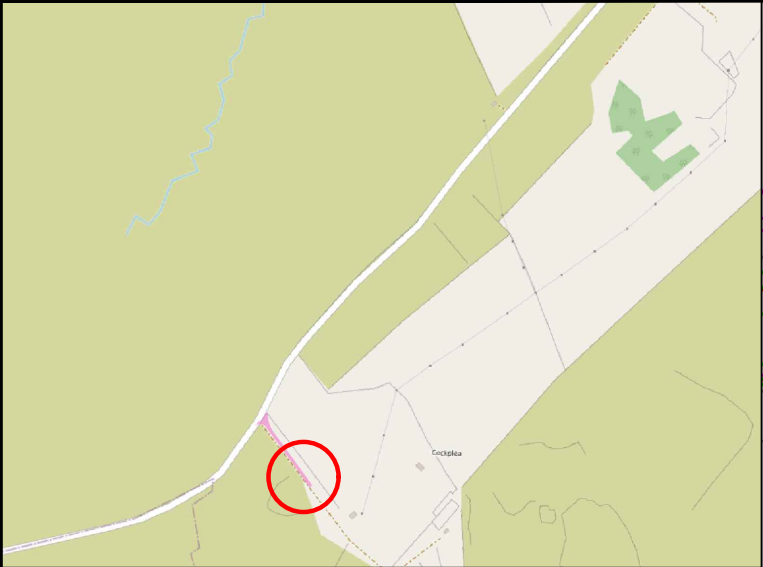
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Project Windburn Windfarm Swept Path Assessment					
Title E138 Bogie Blade Transporter (67.8m Blade) Continuous Section Sheet 25 of 27					
Drawn TF		Checked ADV		Approved ADV	
Original dtp. size A3		Date 08/07/2024		Scale 1:500	
Drawing Status Information			Drawing Number GB01T24C69/SPA032B		Rev. -



Swept path of vehicle accommodated within highway boundary

Notes:

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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

Rev.	Date	Revision details	Drawn	Checked	Approved

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Client

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Project

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Swept Path Assessment

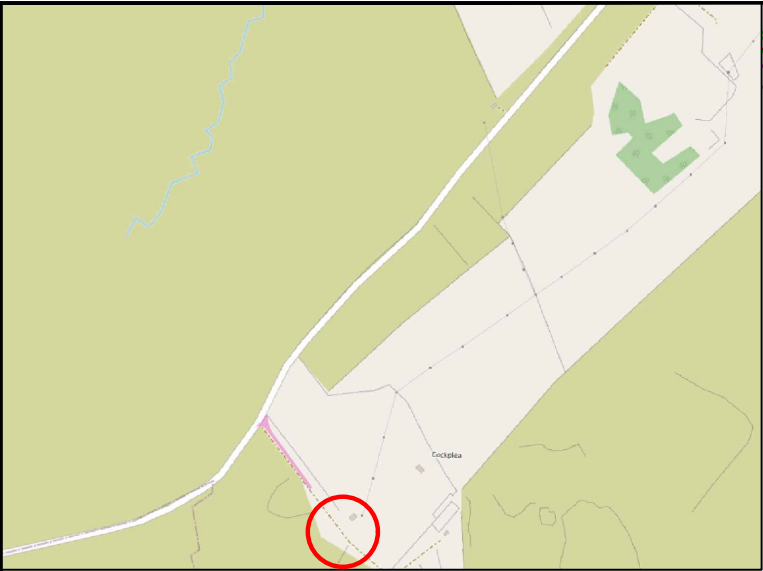
Title

E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 26 of 27

Drawn	TF	Checked	ADV	Approved	ADV
Original dtp. size	A3	Date	08/07/2024	Scale	1:500
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Swept path of vehicle accommodated within highway boundary

Notes:

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Key:

- Transporter Vehicle
- Load Outline
- Over-run envelope of tractor and trailer wheels
- Over-sail envelope being swept by tractor and trailer bed
- Over-sail envelope being swept by load path
- Over-run area of tractor and trailer wheels out with carriageway
- Over-sail area of tractor and trailer bed out with carriageway
- Over-sail area of load out with carriageway

Rev.	Date	Revision details	Drawn	Checked	Approved

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Project
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Swept Path Assessment

Title
E138 Bogie Blade Transporter (67.8m Blade)
Continuous Section
Sheet 27 of 27

Drawn TF	Checked ADV	Approved ADV
Original dtp. size A3	Date 08/07/2024	Scale 1:500
Drawing Status Information		Rev. -

Drawing Number
GB01T24C69/SPA034B

Rev.
-

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