

Rosefield Solar Farm

Environmental Statement

Volume 4
Appendix 15.1: Transport Assessment
(Tracked)

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Revision 0304
Deadline 67
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Rosefield Energyfarm Limited

APFP Regulation 5(2)(a)
Planning Act 2008
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(Applications: Prescribed Forms
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1. Introduction

1.1. Purpose of the Report

1.1.1. This Transport Assessment has been prepared on behalf of Rosefield Energyfarm Limited ('the Applicant') to review the transport access matters in relation to the Development Consent Order (DCO) application for the construction and operation of Rosefield Solar Farm (hereafter referred to as the 'Proposed Development').

1.1.2. This document has been updated at Deadline 6-7 to ~~describe the alterations to operational traffic access as discussed in sections 4.2 and 5.6~~ include the previously submitted Construction Access Review document. References to other application documents have not been updated from the original submission. Please refer to the **Guide to the Application [EN010158/APP/1.2.1~~23~~]** for the list of current versions of documents.

1.2. The Order Limits

1.2.1. The extent of the Order limits are shown in **Location, Order Limits and Grid Coordinate Plans [EN010158/APP/2.1]** and the Proposed Development is described in full in **ES Volume 1, Chapter 3: Proposed Development Description [EN010158/APP/6.1]** and shown spatially on the **Works Plans [EN010158/APP/2.3]**.

1.3. The Proposed Development

1.3.1. The Proposed Development comprises the construction, operation (including maintenance), and decommissioning of solar photovoltaic ('PV') development and energy storage, together with associated infrastructure and an underground cable connection to the National Grid East Claydon Substation.

1.3.2. The Proposed Development would include a generating station with a total exporting capacity exceeding 50 megawatts ('MW').

1.3.3. The principal components of the Proposed Development include:

- Solar PV development consisting of:
 - Ground mounted Solar PV generating station. The generating station would include Solar PV modules and mounting structures; and
 - Balance of Solar System (BoSS) which comprises: Inverters, Transformers, Switchgear and Combiner Boxes.

- A project substation (the 'Rosefield Substation') compound which may include Transformers, Switchgear, reactive power compensation bays, disconnectors, circuit breakers, busbars, control equipment, lightning surge arrestors, building(s) including office, control, functions, material storage, welfare facilities, firewalls and a security cabin and parking as well as wider monitoring and maintenance equipment. The buildings within the compound may also include roof-mounted solar panels and/or rain and/or grey water harvesting and recycling systems;
- 400kV Grid Connection Corridor to connect the Rosefield Substation and National Grid East Claydon Substation;
- A Main Collector Compound and two Satellite Collector Compounds comprising: Switchgear, Transformers, ancillary equipment, and operation, maintenance and welfare facilities and security cabins. The buildings and security cabins across these compounds may also include roof-mounted solar panels and/or rain and/or grey water harvesting and recycling systems;
- Battery Energy Storage System (BESS) compound including batteries and associated Inverters, Transformers, Switchgear and ancillary equipment and their containers, office/control/welfare buildings, enclosures, fencing and acoustic fencing, monitoring systems, air conditioning, electrical cables, fire safety infrastructure, and operation and maintenance security facilities. The buildings across these compounds may also include roof-mounted solar panels and/or rain and/or grey water harvesting and recycling systems;
- Cabling to connect the Solar PV modules and the BESS to the Satellite and Main Collector Compounds, the Main Collector Compound to the Rosefield Substation, and the Rosefield Substation to the National Grid East Claydon Substation;
- Ancillary infrastructure works including: boundary treatment, security equipment, lighting, fencing, landscaping, internal access tracks, works to facilitate vehicular access, earthing devices, earthworks, surface water management, and any other works identified as necessary to enable the Proposed Development;
- Green and blue infrastructure, recreation and amenity works including: amenity improvements;
- Site-wide operational monitoring and security equipment; and
- Highways infrastructure improvements and safety works including, where necessary: minor junction improvement works, road widening, passing places and works to facilitate vehicular access to the Site.

1.4. Structure of this Report

1.4.1. Following this introduction, the Transport Assessment (TA) report is structured as follows:

- The Proposed Development;
- Study Methodology;
- Baseline Conditions;
- Trip Generation and Distribution;
- Traffic Impact Assessment;
- Proposed Mitigation; and
- Summary and Conclusions.

1.5. Legislation and Planning Policy

1.5.1. Consideration has been given to national and local policy and guidance relevant to this assessment. The policy and guidance documents considered within this assessment are as follows:

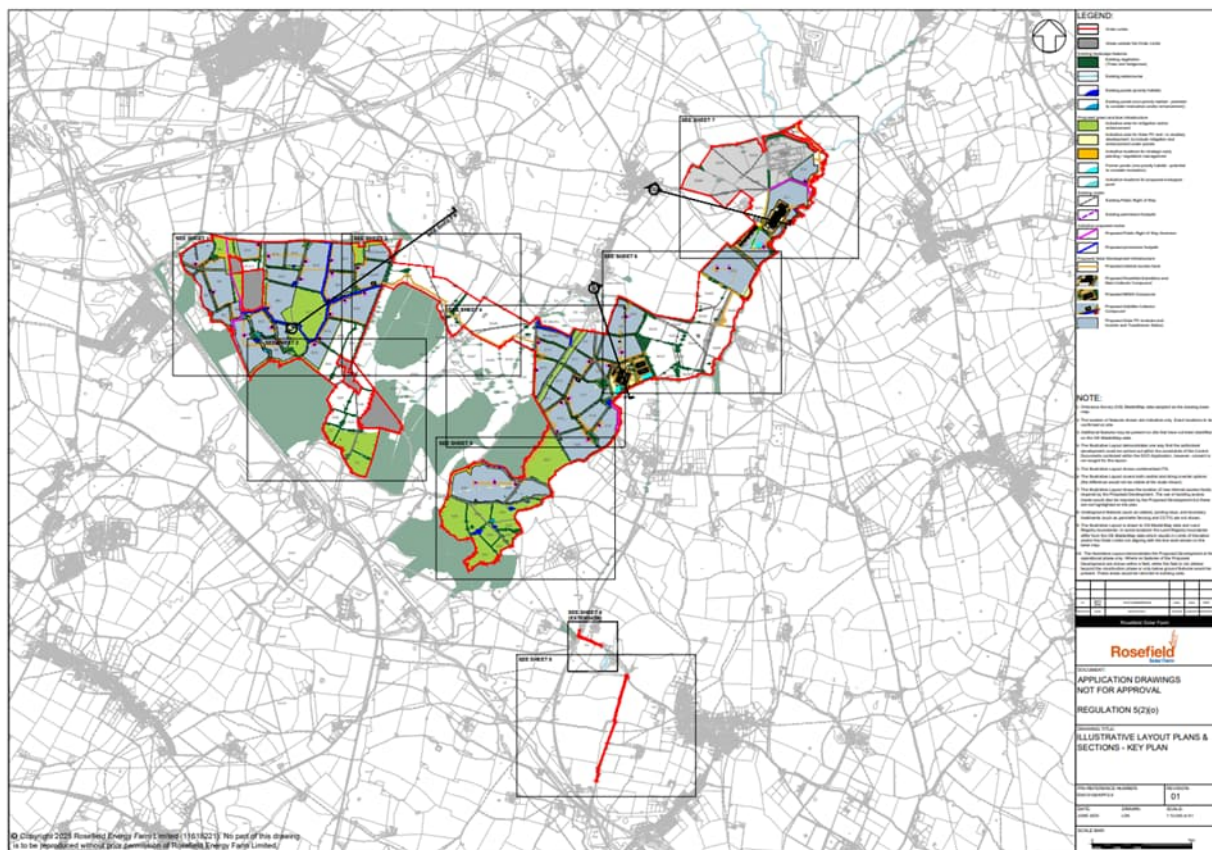
- Overarching National Policy Statement for Energy (NPS EN-1) (2023) (Ref.1-1);
- National Policy Statement for Renewable Energy Infrastructure (NPS EN-3) (2023) (Ref 1-2);
- Buckinghamshire Council, Highways Development Management Guidance, 2018 (Ref 1-7); and
- Buckinghamshire Council, Local Transport Plan 4, 2018 (Ref 1-5).
- Planning Practice Guidance "Travel Plans, Transport Assessments and Statements" (Ref 1-8);
- Institute of Environmental Management and Assessment (IEMA) Environmental Assessment of Traffic and Movement (2023) (Ref 1-9); and
- Design Manual for Roads & Bridges (DMRB) (Ref 1-10).

2. The Proposed Development

2.1. Site Location

- 2.1.1. The Proposed Development is located in close proximity to the settlements of Calvert, Middle Claydon, Botolph Claydon, East Claydon and Hogshaw. Steeple Claydon, Edgcott, Shipton Lee, Quainton, Granborough and Winslow are also located within 3km of the Site.
- 2.1.2. The High Speed Rail 2 (HS2) works area is located adjacent to the western edge of Parcel 1 and Parcel 1a. It is approximately 100m from Parcel 1 and 1a and less than 500m from Parcel 2. This section of HS2 is currently in its construction phase.
- 2.1.3. The Site measures approximately 675.05 hectares (ha) and is divided into four land parcels and is illustrated in **Figure 1**, outlined in red.

Figure 1: Proposed Development Layout



- 2.1.1. The Site is subdivided into four Parcels; namely:

- Parcel 1: The Western development area, located to the east of Calvert and to the south of Calvert Road. This would comprise solar arrays and associated access tracks;
- Parcel 1a: The Southern development area, located to the south east and adjacent to the HS2 development corridor and Greatmoor Energy from Waste (EfW) plant. This would comprise of mitigation areas and associated access tracks;
- Parcel 2: The Eastern development area, located to the south of Botolph Claydon village and to the west of Claydon Road. This would comprise solar arrays, a Battery Energy Storage System (BESS) development, and associated access tracks; and
- Parcel 3: The Northern development area, located to the north of Granborough Road and to the south of the National Grid East Claydon Substation. This area would feature solar arrays, Rosefield Substation and electrical grid connection infrastructure.

3. Study Methodology

3.1. Introduction

3.1.1. There are three phases of the Proposed Development, which have been considered in this assessment and are as follows:

- the construction phase;
- the operational (including maintenance) phase; and
- the decommissioning phase.

3.2. Project Phases

3.2.1. Of the three phases, the construction phase is considered to have the greatest impact in terms of transport and potential impacts on the highway network and sensitive receptors. Construction plant, bulk materials and electrical components will be transported to Site, potentially resulting in temporary significant increases in traffic on the study network.

3.2.2. The operational phase is restricted to occasional maintenance operations which generate significantly lower volumes of traffic that are not considered to be in excess of daily traffic variation levels found normally on the highway network.

3.2.3. The decommissioning phase involves fewer trips on the highway network than the construction phase, as minor elements of infrastructure are likely to be left in place, adding to local infrastructure that can potentially be used for future agricultural or leisure uses in the future.

3.3. Scoping Discussions

3.3.1. The Applicant submitted a request for EIA Scoping Opinion **ES Volume 4, Appendix 5.3: EIA Scoping Opinion Response Matrix [EN010158/APP/6.4]** to the Planning Inspectorate (PINS) in respect of the Environmental Impact Assessment (EIA) which included a section considering traffic and transport.

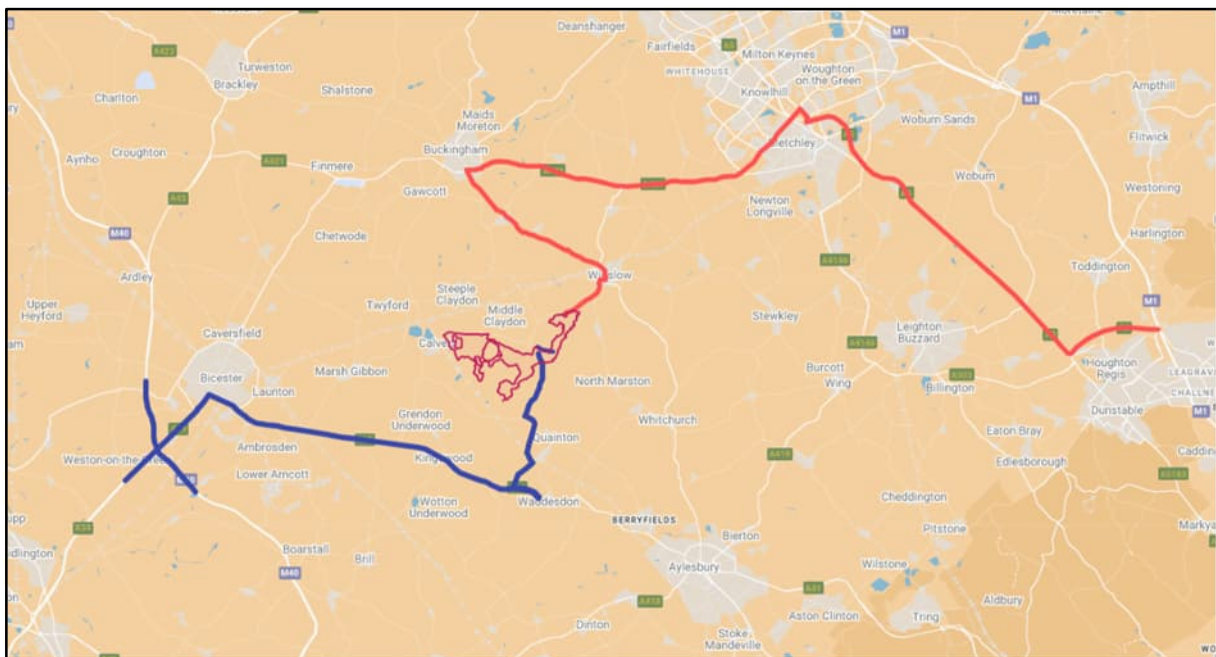
3.3.2. Further consultation with officers from Buckinghamshire Council, Oxfordshire County Council and National Highways have been held and the Applicant is grateful for the input of officers from all of the highway authorities.

4. Baseline Conditions

4.1. Access Arrangements

- 4.1.1. All construction traffic, with the sole exception of Abnormal Indivisible Loads (AIL) will approach the Site from the A41, located to the south of the Order Limits. Deliveries for construction materials would be made by Heavy Goods Vehicles (HGVs) and Light Goods Vehicles (LGV).
- 4.1.2. Access from the A41 will be taken from Station Road/Dewes Way, Snake Lane/Fidlers Field and Claydon Road. The proposed access route is illustrated in **Figure 3** (in blue).
- 4.1.3. Construction traffic will originate from across the study area road network, with all traffic bypassing Bicester to the south.

Figure 2: Proposed Access Strategy



- 4.1.4. A principal access junction is to be built on Claydon Road, providing access to the Parcels 1, 1a, and 2 via a network of upgraded and new private access tracks. Access between Parcels 1 and 1a will cross the minor road, Three Points Lane.
- 4.1.5. Access to Parcel 3 will be taken from the south from a new junction on Granborough Road. This will be used by all construction traffic, with the sole exception of AIL traffic. AIL traffic is unable to use the A41 corridor due to a low rail bridge (to the north of Blackthorn). As such, the National Highways High and Heavy Load route from Winslow, specifically designated to access National Grid East Claydon Substation, is to be

used, with access taken from a new junction on East Claydon Road, located to the northeast of the existing substation access junction.

4.1.6. It is expected that AIL traffic associated with the transport of transformer components will commence from the M1 corridor and would proceed to the Proposed Development via Milton Keynes, Buckingham and Winslow. The AIL route is illustrated in red in **Figure 3**.

4.1.7. The number of AIL movements is expected to be no greater than 14 inbound components across the whole construction period.

4.1.8. The proposed AIL Route is described in detail in **Annex 3: AIL Route Survey Report**.

4.1.8.4.1.9. A review of alternative access routes was undertaken and this was prepared as the Construction Access Review report. A copy of this report, including its detailed EIA-style assessment of alternative access routes raised by TCS Biosciences, is included in Annex 5.

4.2. Proposed Operational and Maintenance Access Strategy

4.2.1. During the operational phase, up to 24 LGV trips per day, on average, are predicted to cater for cleaning of panels and general Site maintenance.

4.2.2. When longer term maintenance/rolling replacement of battery units or panels is required, HGV access will be necessary with up to 12 HGV trips potentially per day. The number of vehicle trips occurring during this phase will be well below the number of movements assessed for the construction phase and significantly below the overall IEMA guidance thresholds. As such, no further assessment is required.

4.2.3. Access infrastructure to enable maintenance and potential replacement of larger equipment on Site will be retained to facilitate access, when required.

4.2.4. Access would be via the construction access points on Claydon Road and Granborough Road for land Parcels One and Two.

4.2.5. Access to Parcel 3 during the operational (including maintenance) phase for Car and Light Goods Vehicles (LGV) can be from East Claydon Road, subject to the approval of Buckinghamshire Council.

4.2.6. The operational access from the north however will only be for car and LGV access, given the real and practical road safety issues associated with HGV traffic through Winslow. HGV access during the operational phase will still be from the south via Granborough Road. The Applicant is unable to alter this.

- 4.2.7. The southern access will be used for all construction access (excluding AIL access) and will be retained to permit occasional HGV access, cable maintenance visits and emergency access. Advance notice would be given of access requirements and biosecurity measures would be implemented along the southern route when it is in use.
- 4.2.8. Access from the north for car and LGV access will be arranged to prevent traffic cutting through Parcel 3 as requested by initial inquiries to Buckinghamshire Council officers

4.3. Proposed Decommissioning Access Strategy

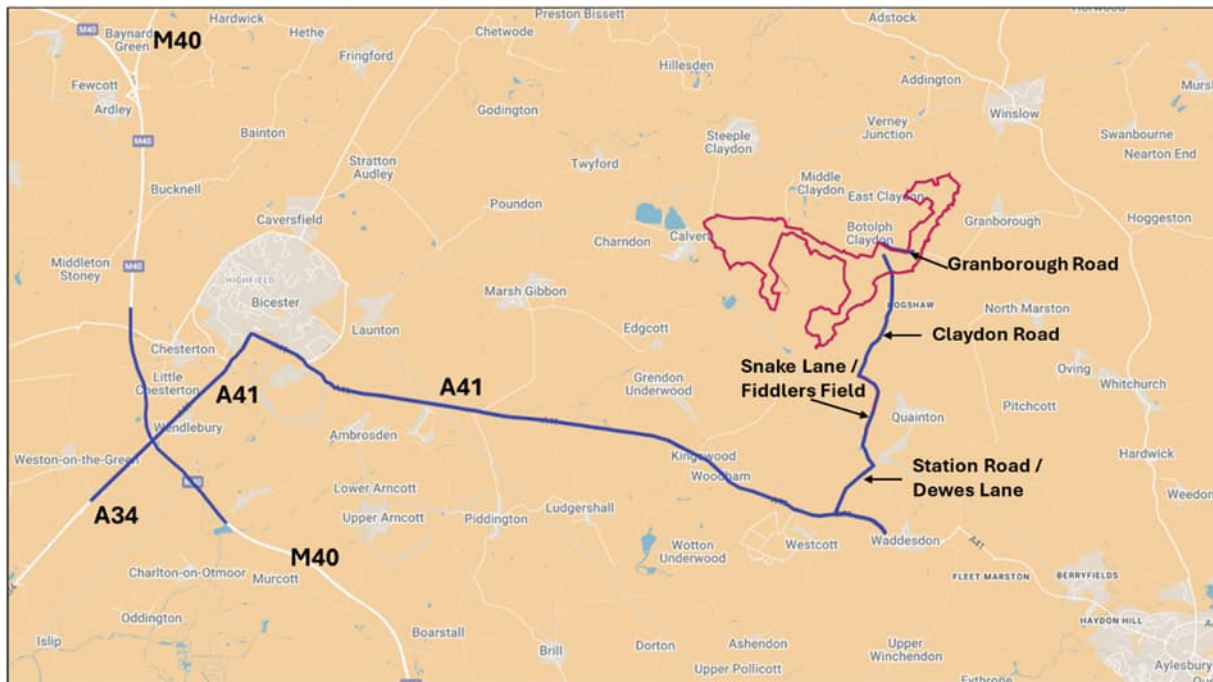
- 4.3.1. At the end of the operational life of the Proposed Development, the Solar PV development, BESS and all associated above ground equipment will be completely removed in line with the Decommissioning Environmental Management Plan (DEMP) [EN010158/APP/7.4].
- 4.3.2. At this stage, it is not possible to accurately forecast the traffic impacts during the decommissioning phase, as projections of the baseline data into the future would not be accurate.
- 4.3.3. The levels of traffic associated with the decommissioning of the Proposed Development will be less than that during construction since some of the below ground elements will be left in situ and the access tracks may be retained for use by the landowners, as detailed in the Decommissioning Statement.
- 4.3.4. To protect future stakeholders, it is proposed that a Decommissioning Traffic Management Plan (DTMP) is prepared prior to decommissioning works commencing and that this is secured via a Development Consent Order (DCO) requirement.

4.4. Study Area Determination

- 4.4.1. The study area has been based on those roads that are expected to experience increased traffic flows associated with the construction of the Proposed Development. The geographic scope was determined through a review of the other developments in the area, Ordnance Survey (OS) plans and an assessment of the potential origin locations of construction staff and supply locations for construction materials.
- 4.4.2. Bulk materials for use in the Site will be sourced from existing supply locations located to the west.
- 4.4.3. Electrical components, plant and general deliveries are likely to originate along the M40 corridor from the Southeast and Midlands.

- 4.4.4. The assessment has assumed that staff engaged during the construction process will be based within the major urban areas of Bicester and Aylesbury during the construction phase.
- 4.4.5. The proposed study area therefore includes the highway links most likely to be impacted by the proposed movements associated with the Proposed Development and includes:
- The A34 to the southwest of Bicester;
 - The M40 to the north and south of Junction 9;
 - The A41 from its junction with the M40 through to Waddesdon;
 - Station Road/Dewes Lane from its junction with the A41 to the Buckingham Railway Centre;
 - Snake Lane/Fidlers Field from its junction at the Buckingham Railway Centre to its junction with Claydon Road;
 - Claydon Road from its junction with Snake Lane/Fidlers Field to its junction with Quainton Road/Granborough Road;
 - Granborough Road between its junction with Claydon Road and the proposed site access junction. A plan illustrating the proposed study area is provided in **Figure 4**.

Figure 3: Study Area Network



- 4.4.6. Effects associated with construction traffic generated by the Proposed Development would be most pronounced in close proximity to the Proposed Development access junctions and on the final approaches to these locations. As vehicles travel away from the Proposed Development, they would disperse across the wider highway network, thus diluting any potential effects.
- 4.4.7. It is therefore expected that the effects relating to construction traffic are unlikely to be significant beyond the study area identified above.

4.5. Pedestrian, Equestrian & Cyclist Links

4.5.1. A review of the Buckinghamshire Council Public Rights of Way (PRoW) map¹ has been undertaken. There are a number of PRoW routes located within the Site and these are noted in the **Street, Rights of Way and Access Plan [EN010158/APP/XX]**.

4.5.2. Wherever possible, existing PRoW routes would be respected and potential enhancements could be provided where required. Further details are provided in the **Outline Rights of Way and Access Management Strategy (RoWAS) [EN010158/APP/7.8]**.

4.5.3. Outwith the development area, PRoW routes do interact with the proposed construction traffic access routes. These include:

- Station Road/Dewes Lane
 - PRoW WES/9/5;
 - PRoW QUA/29A/2;
 - PRoW QUA/30/1;
- Snake Lane/Fidlers Field
 - PRoW QUA/31/4;
 - PRoW QUA/23/1;
 - PRoW QUA/24/1;
 - PRoW QUA/22A/1;
 - PRoW QUA/27/2;
- Claydon Road
 - PRoW QUA/38/2;
 - PRoW QUA/11/1;
 - PRoW QUA/40/4 (Bridleway);
 - PRoW HOG/7/1;
 - PRoW HOG/7/2;
- Granborough Road
 - PRoW ECL/6/1

4.5.4. The PRoW routes are used by pedestrian, cyclist and equestrian users.

¹ <https://prow.buckscc.gov.uk/standardmap.aspx>

- 4.5.5. In addition to the PRoW network, the Buckinghamshire Greenway is proposed to pass through the Site. The established Bernwood Jubilee Way also passes through the Site.
- 4.5.6. A review of the National Cycle Network (NCN) Route map² has also been undertaken. The closest NCN route is NCN 51 “Varsity Way – Oxford to Cambridge”.
- 4.5.7. NCN 51 passes to the north of the Site and does not interact with any of the proposed construction traffic delivery route highways. There is however a short interaction with the potential AIL route on Vicarage Road in Winslow, where the route shares a 310m section of highway with the AIL route. Given that AIL traffic will be under strict police escort, the potential interactions are considered to be very low and wholly controllable.

4.6. Road Access

The M40

- 4.6.1. The M40, located to the west of the Site, forms part of the Strategic Road Network (SRN) and is operated by National Highways on behalf of the Secretary of State for Transport. The M40 is a modern three lane motorway connecting London to Birmingham, via Oxford and as a trunk road, is entirely suitable for HGV and high-volume traffic flows.

The A41

- 4.6.2. The A41 provides connections from the M40 to Bicester and Aylesbury and functions as a district distributor road and southern bypass of Bicester. The road is operated by Oxfordshire County Council and Buckinghamshire Council within their respective administrative areas.
- 4.6.3. The A41 varies in width between Bicester and Waddesdon but is predominantly a 7.5m wide road capable of accommodating HGV traffic and high volumes of traffic.

Station Road/Dewes Lane

- 4.6.1. Station Road connects the A41 to Quainton. The road is known locally as Station Road or Dewes Lane and both names are used in this report. The road is approximately 6m in width and has been used for access by HS2 traffic. The road features modern, narrow passing places and is capable of accommodating HGV traffic.

² <https://explore.osmaps.com/?lat=51.912204&lon=-1.034599&zoom=11.2335&style=Standard&type=2d&overlays=os-ncn-layer>

4.6.2. Station Road/Dewes Lane is maintained by Buckinghamshire Council.

Snake Lane/Fidlers Field

4.6.4. Snake Lane, also known as Fidlers Field, provides a bypass route to the west of Quainton and joins Claydon Road to the north. The road is maintained by Buckinghamshire Council.

4.6.5. Snake Lane/Fidlers Field is partly used by HS2 traffic to access a construction compound and is due to be rebuilt and realigned as part of the HS2 works to provide a new bypass for a life expired structure crossing the railway at the Buckinghamshire Railway Centre (BRC).

4.6.6. The road is in a very poor condition and would need to be reconstructed and resurfaced prior to the Proposed Development works commencing, should this work have not been undertaken by Buckinghamshire Council or HS2.

Claydon Road

4.6.7. Claydon Road is a local distributor road providing local north – south connections. The road is operated by Buckinghamshire Council and is of sufficient width to accommodate two-way HGV and agricultural traffic. The road is in reasonable condition at present, although there are localised areas where road and verge repairs would be required.

Quainton Road

4.6.8. Quainton Road provides connections from the village of Botolph Claydon to Claydon Road. The road is operated by Buckinghamshire Council and is of sufficient width to accommodate two-way HGV and agricultural traffic. No construction traffic is proposed to access Botolph Claydon village.

Granborough Road

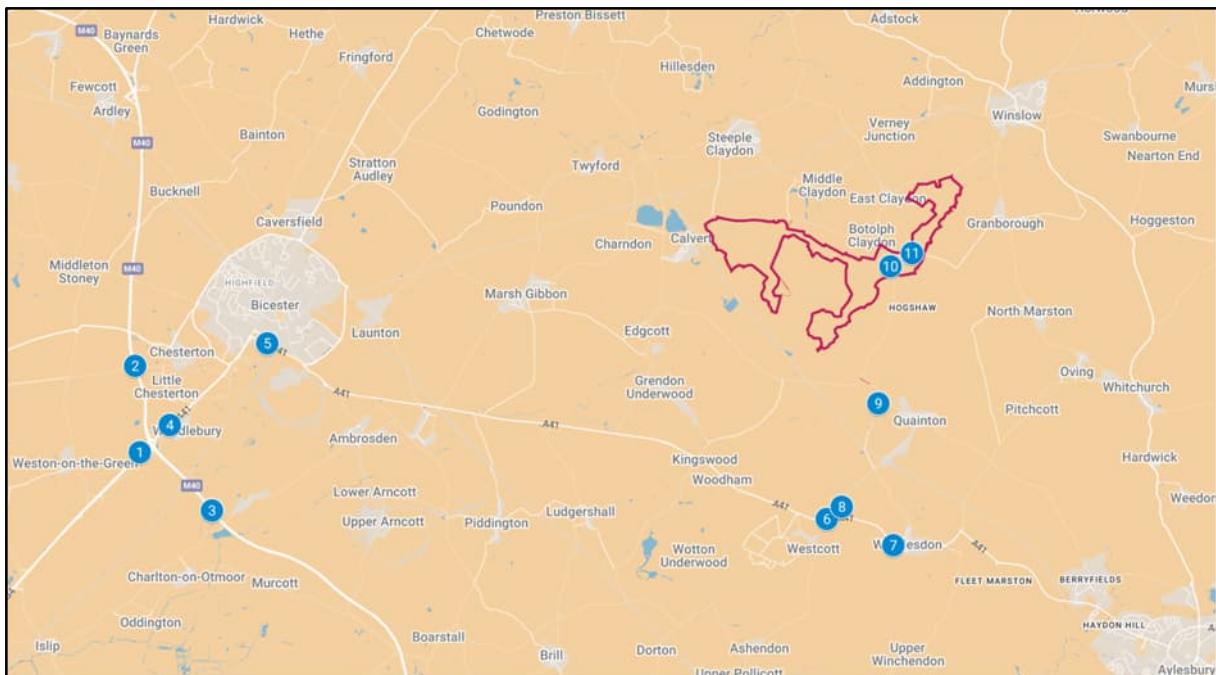
4.6.9. Granborough Road provides connections from Quainton Road and Claydon Road to Granborough. The road is narrower than other roads within the study area at approximately 4.5m - 5m in width and provides local connections and agricultural connections in the area. It is also maintained by Buckinghamshire Council.

4.7. Existing Traffic Conditions

4.7.1. In order to assess the impact of construction traffic on the study area, Automatic Traffic Counts (ATC) were undertaken throughout the study area in January 2024, following consultation and agreement of Buckinghamshire Council.

- 4.7.2. Traffic flows were observed at six locations, noting the volume, vehicle class and directions of Cars & LGV and HGV traffic. The locations of the ATC sites are illustrated in **Figure 5**.
- 4.7.3. To supplement the ATC data, data from the Department for Transport's (DfT) road traffic database³ was also obtained to provide a review of the wider study area. Five survey locations from the DfT were used. These locations are also noted in **Figure 5**.

Figure 4: Traffic Survey Locations



- 4.7.4. The traffic survey data for 2024 has been summarised in **Table 4.1**.

Table 4.1: 2024 Traffic Survey Summary (Per Day)

Ref No	Source	Description	Cars & LGV	HGV	Total Traffic
1	DfT	A34	61,141	8,386	69,527
2	DfT	M40 North	92,727	14,952	107,679
3	DfT	M40 South	61,909	7,495	69,404
4	DfT	A41	31,169	2,137	33,306

³ <https://roadtraffic.7dft.gov.uk/#6/55.254/-6.053/basemap-regions-countpoints>

Ref No	Source	Description	Cars & LGV	HGV	Total Traffic
5	DfT	A41 Bicester	21,267	1,906	23,173
6	ATC	A41 West	10,509	2,326	12,836
7	ATC	A41 East	9,471	2,308	11,780
8	ATC	Station Road / Dewes Lane	821	250	1,071
9	ATC	Snake Lane / Fidlers Field	91	30	120
10	ATC	Claydon Road	1,241	238	1,479
11	ATC	Granborough Road	264	81	345

4.7.5. The traffic surveys were undertaken during work phases for HS2 and include traffic associated with this long-term construction project.

4.8. Road Safety

4.8.1. A review of traffic accidents on the online road safety resource Crashmap.co.uk for a five-year period (2019 – 2023) has indicated that there were five recorded traffic accidents on the proposed access route from the A41 to the proposed Site access junction.

4.8.2. Accidents are recorded as Slight (damage only incidents), Serious (injury accidents) and Fatal accidents (those resulting in a death).

4.8.3. Three accidents occurred at the junction of Station Road/Dewes Lane and Snake Lane/Fidlers Field, located to the northeast of the HS2 Station Road construction compound access junction. The first accident occurred on 13 January 2022, the second occurred on 24 January 2022 and third on 15 February 2023. Both accidents in 2022 were classified as being Serious (i.e. an accident that resulted in an injury). The 2023 accident was classed as Slight.

4.8.4. The first accident involved one casualty, the second and third both involved two. Both Serious accidents involved one car and one HGV. The Slight accident involved two cars, one of which was driven by a Young Driver (a person aged 25 or younger).

4.8.5. An accident on Quainton Road, to the east of Botolph Claydon occurred on 3 October 2021. This involved one car only.

4.8.6. A further “Slight” accident was recorded on 27 November 2022 on Quainton Road, east of Botolph Claydon, near the junction with

Granborough Road. This accident involved one motorcycle and no other vehicles.

- 4.8.7. No accidents have been recorded at other locations within the five-year period, including at the junction with the A41. No accidents have involved vulnerable road users such as pedestrians, cyclists, children or young drivers.

4.9. Future Year Traffic Conditions

- 4.9.1. Construction of the Proposed Development is assumed to commence in 2029 and will be completed in 2031.
- 4.9.2. To assess the likely effects during the construction phase, base year traffic flows were determined by applying a National Road Traffic Forecast (NRTF) low growth factor to the surveyed traffic flows.
- 4.9.3. The NRTF low growth factor for 2024 to 2029 is 1.026. These factors were applied to the 2024 survey data, previously outlined in **Table 4.1**, to estimate the baseline traffic conditions within the peak period of construction, estimated to occur in 2029.
- 4.9.4. The 2029 base traffic flows are shown in **Table 4.2**.

Table 4.2: 2029 Baseline Traffic Flows (Per Day)

Ref No	Description	Cars & LGV	HGV	Total Traffic
1	A34	62,731	8,604	71,335
2	M40 North	95,138	15,340	110,478
3	M40 South	63,519	7,690	71,209
4	A41	31,980	2,193	34,172
5	A41 Bicester	21,820	1,956	23,776
6	A41 West	10,783	2,387	13,169
7	A41 East	9,718	2,368	12,086
8	Station Road/ Dewes Lane	842	256	1,099
9	Snake Lane/ Fidlers Field	93	31	124
10	Claydon Road	1,273	244	1,518
11	Granborough Road	271	83	354

Please note that rounding errors may occur.

4.10. Committed Developments

- 4.10.1. A review of committed development has been undertaken based upon the short list presented in **ES Volume 2, Chapter 17: Cumulative Effects [EN010158/APP/6.2]**.
- 4.10.2. In line with agreed transport planning guidance, only committed developments will be included in the assessment. These will be included in the baseline traffic flows, should the committed development be complete or likely to be complete by 2029.
- 4.10.3. Committed developments to be included in the assessment will be those of a significant scale, i.e. where their development impact exceeds a 10% increase in traffic flows on a link within the study area network.
- 4.10.4. Planning applications that are in development, scoping or are undetermined are not committed will not be included in the assessment.
- 4.10.5. A review of the potential committed developments has been undertaken, based upon the criteria described above. The list of applications is illustrated in **Annex AB**.
- 4.10.6. The committed developments that are included in the assessment are as follows:
- 22/00125/REF: New Category C Prison, known at Grendon Springhill 2; and
 - HS2.
- 4.10.7. HS2 traffic flows that are accurate for 2029 are not publicly available and as such, the existing HS2 flows operating at the time of the traffic surveys are being retained and subject to traffic growth assumptions to provide a robust assessment.
- 4.10.8. Traffic flows from the proposed Grendon Springhill 2 prison development have been obtained from the Transport Assessment for that project. The daily traffic flows are provided for a short section of the A41 and have been extended to extremes of the Proposed Development study area on that road.
- 4.10.9. The Grendon Springhill 2 prison development only provides traffic flows for its operational phase. No construction traffic details are provided. It has been assumed that the prison would be fully operational at the time of peak construction traffic generation. This is an overestimate as the prison development will take some time to discharge planning conditions and start construction works, however it provides a robust assessment scenario.

4.10.10. The committed development traffic flows are illustrated in **Table 4.3**.

Table 4.3: Committed Development Traffic Flows (Per Day)

Ref No	Description	Cars & LGV	HGV	Total Traffic
1	A34	0	0	0
2	M40 North	0	0	0
3	M40 South	0	0	0
4	A41	380	0	0
5	A41 Bicester	380	0	0
6	A41 West	540	0	0
7	A41 East	540	0	0
8	Station Road/ Dewes Lane	0	0	0
9	Snake Lane/ Fidlers Field	0	0	0
10	Claydon Road	0	0	0
11	Granborough Road	0	0	0

4.10.11. The committed development traffic flows will be included in the 2029 baseline traffic flows and will be used in the Traffic Impact Assessment.

4.10.12. Committed development assessments for the decommissioning phase will not be undertaken as the future baseline and traffic conditions are impossible to estimate and the need for a decommissioning assessment has been scoped out.

5. Trip Generation and Distribution

5.1. Construction Phase – Trip Derivation

5.1.1. During the 30-month construction period, the following traffic will require access to the Site:

- staff transport, in either cars or staff minibuses;
- construction equipment and materials, deliveries of machinery and supplies such as ready-mix concrete and aggregate;
- Solar PV modules and their mounting frames;
- components relating to the battery storage element and associated grid connection infrastructure; and
- AILs consisting of the transformers and a heavy lift crane.

5.1.2. A construction programme has been developed to help estimate peak in construction activities.

5.1.3. Average monthly traffic flow data was used to establish the construction trips associated with the Proposed Development, based on the assumptions detailed in the following sections.

5.2. Construction Staff

5.2.1. Staff would arrive in cars, LGV and minibus vehicles. To promote sustainable travel, a Staff Travel Plan will be implemented to ensure the following to help reduce single occupancy car journeys:

- 75% of staff will arrive by minibus;
- 15% will arrive by LGV (expected to accommodate on average three staff); and
- 10% will arrive by car.

5.2.2. The workforce will depend on the activities undertaken but based on previous solar farm construction site experience for a project of this scale, an estimate of staff requirements has been made based against the construction programme.

5.2.3. Based on these assumptions, staff transport cars and LGVs would account for a maximum of 218 vehicle movements (109 inbound trips and 109 outbound trips) per day during the peak of staff requirements.

5.2.4. The movement of staff to and from the Proposed Development can be controlled by the Staff Travel Plan proposed for the Site and contained in **Outline CTMP [EN010158/APP/7.5]**.

5.3. General Deliveries

- 5.3.1. Throughout the construction phase, general deliveries will be made to construction areas via HGV. These would include fuel, site office supplies, generic construction materials and staff welfare etc. At the height of construction, it is assumed that up to 16 movements to Site are made (8 inbound trips and 8 outbound trips) per day.

5.4. Material Deliveries

- 5.4.1. Various materials will need to be delivered to the construction Site to construct the Proposed Development. At the outset of the construction works, HGV deliveries will deliver plant and initial material deliveries to the Site to enable the formation of the site compound and to deliver construction machinery.
- 5.4.2. The Site will require bulk material deliveries of aggregate, ready-mix concrete, geotextile, road surfacing materials, etc. During the construction programme, some of these materials that are used for temporary works will need to be removed from Site (such as temporary compound hardstands).
- 5.4.3. The estimated materials required on Site have been reviewed from the Proposed Development design team. The following assumptions have been made to estimate the traffic volumes:
- All bulk aggregate and road building materials will be delivered by HGV with a 20 tonne capacity. Approximately 227,707 tonnes of material will need to be imported;
 - Foundation steel will be delivered via HGV in 30 tonne deliveries. Approximately 1,567 tonnes of reinforcement will be required;
 - Ready-mix deliveries will be made by vehicles with a 6m³ capacity. Approximately 7,287m³ of concrete will be required;
 - A total of 470,433 Solar PV panels will be delivered by shipping container, with up to 550 panels being transported per container;
 - A total of 408 BESS battery units will be delivered in shipping container format or similar, one per HGV;
 - Panel frame components can be delivered in component form by shipping container;
 - A total of 153 large inverter units are containerised and delivered individually;
 - Cabling sand is delivered in 20 tonne capacity HGV, with approximately 110,260 tonnes required;
 - Cabling is delivered in drums, none of which are considered AILs in dimension or weight;

- Transformers are considered as AIL movements and will be delivered as one delivery each. Between three and 6 transformer loads are anticipated, depending upon final design and value engineering; and
- Commissioning will be undertaken by staff specifically travelling to Site by LGV.

5.4.4. The resulting traffic generation estimates have been plotted onto the indicative construction programme to estimate the peak journeys on the network. **Annex 2** illustrates the trip generation throughout the construction programme.

5.4.5. The peak of construction in terms of vehicular movements will occur in Month 8 of the construction programme and results in 359 daily trips (218 Car/LGV and 141 HGV journeys).

5.4.6. A review of average traffic flows across the entire construction period has also been undertaken. On average, the total number of daily vehicle movements is 269 movements per day (135 inbound and 135 outbound) or which 185 movements (92 inbound and 92 outbound) are Car & LGV movements and 85 (42 inbound and 42 outbound) are HGV movements.

5.4.7. The average vehicle movements across the whole construction period equate to 11 inbound vehicle movements per hour, over a typical 12 hour working day.

5.5. Distribution of Construction Trips

5.5.1. The distribution of Proposed Development's construction traffic on the network would vary depending on the types of loads being transported.

5.5.2. The following distribution estimates have been used to assign construction traffic to the study area network:

- All bulk materials will be imported from the west using the A41 corridor. For the purposes of the assessment, it is assumed that material would be supplied from sources to the west of Bicester, with access to the A41 via the B430 and B4030, bypassing Bicester itself;
- It has been assumed for the purposes of the assessment that all readymix concrete will originate from suppliers located on the A41 corridor, between Bicester and the A41/Station Road junction;
- 70% of general site deliveries will originate from Bicester and the M40 corridor, whilst 30% will originate from Aylesbury;
- Staff movements would be split between Bicester and Aylesbury, as the two largest population settlements with the greatest capacity for hotels and accommodation in close proximity to the study area. The assumed split of

staff is 50% originating from Aylesbury, 40% from Bicester and 10% from settlements on the M40 corridor; and

- All traffic will approach the Site from the south (excluding AIL traffic) and will use the proposed access route only. The routing of traffic would be controlled by the **Outline CTMP [EN010158/APP/7.5]**.

5.5.3. The distribution of construction traffic will be enforced by the construction contracts proposed for the project. Regular reviews and audits will be undertaken to enforce routing and to ensure the use of the Staff Travel Plan.

5.5.4. Following the distribution and assignment of traffic flows to the study area network, the resultant daily traffic during the peak of construction is summarised in **Table 5.1**.

Table 5.1: Construction Peak Month Daily Traffic Flows

Ref No	Description	Cars & LGV	HGV	Total Traffic
1	A34	10	0	10
2	M40 North	10	18	28
3	M40 South	10	24	34
4	A41	29	100	130
5	A41 Bicester	109	100	209
6	A41 West	109	138	247
7	A41 East	109	3	112
8	Station Road / Dewes Lane	218	141	359
9	Snake Lane / Fidlers Field	218	141	359
10	Claydon Road	218	141	359
11	Granborough Road	74	31	105

Please note that rounding errors may occur.

5.6. Operational Phase

5.6.1. During the operational phase, up to 24 LGV journeys per day are predicted to cater for cleaning of Solar PV panels and general site maintenance.

5.6.2. When longer term maintenance of battery units or panels is required, HGV access will be necessary with up to 12 HGV trips potentially per day. The number of vehicle trips occurring during this phase will be well below the

number of movements assessed for the construction phase and significantly below the overall IEMA guidance thresholds.

5.6.3. Access will be via the access routes noted in Section 4.2

5.7. Decommissioning Phase

5.7.1. During decommissioning, the cabling, Solar PV panels, High Voltage (HV) equipment, foundations, etc. comprising the surface elements of the Proposed Development will be removed. Other elements such as sections of access tracks, access junctions, the grid connection ducting, landscaping, areas of ecological enhancement may be retained. The traffic generation associated with the decommissioning phase is therefore less than that associated with the construction phase.

6. Traffic Impact Assessment

6.1. Construction Impact

- 6.1.1. The peak month traffic data was combined with the future year (2029) traffic data to allow a comparison between the baseline results (in **Table 2**) to be made. The increase in traffic volumes is illustrated in percentage increases for each class of vehicle. This is illustrated in **Table 6.1**.

Table 6.1: Percentage Impact Summary

Ref No	Description	Cars & LGV	HGV	Total Traffic
1	A34	0.02%	0.00%	0.01%
2	M40 North	0.01%	0.12%	0.03%
3	M40 South	0.02%	0.31%	0.05%
4	A41	0.09%	4.58%	0.38%
5	A41 Bicester	0.49%	5.13%	0.88%
6	A41 West	0.96%	5.80%	1.88%
7	A41 East	1.06%	0.13%	0.93%
8	Station Road/Dewes Lane	25.88%	55.19%	32.72%
9	Snake Lane/Fidlers Field	234.59%	461.58%	290.87%
10	Claydon Road	17.12%	57.84%	23.68%
11	Granborough Road	27.32%	36.87%	29.56%

Please note that rounding errors may occur.

6.2. Local Road Impact

- 6.2.1. The highest total traffic movement increases occur on Station Road/Dewes Lane, Snake Lane/Fidlers Field and Granborough Road. This is expected, due to the relatively low baseline traffic flow on these roads. Claydon Road does not experience a traffic increase in excess of 24%.
- 6.2.2. None of the other links within the study area experience traffic impacts in excess of 1.9%. These are significantly below the accepted industry standard estimate of daily traffic flow variation of 10%.

- 6.2.3. The traffic impact to the eastern section of the A41, towards Waddesdon is 0.93%. This section of the study area leading through Waddesdon and Aylesbury, would be used by a very limited number of HGV movements (up to three per day) and staff movements (109 per day – 55 inbound and 54 outbound). This level of traffic is not predicted to cause capacity issues to the east, outside of the assessment study area.
- 6.2.4. It should be noted the construction phase is transitory in nature and the peak of construction activities is short lived, occurring over a relatively short timeframe when taking account of the whole construction programme.

6.3. Road Link Capacity Review

- 6.3.1. A review of road link capacity has been undertaken to review if sufficient spare capacity exists to accommodate the proposed peak construction traffic flows.
- 6.3.2. The NESA Manual, formerly part of the Design Manual for Roads and Bridges (DMRB), [Ref. 1.16] has been used to estimate the theoretical capacity for the study area roads for a 12 hour period. This has then been compared to the base + committed development and base + committed development + peak daily construction traffic and a review of the spare road link capacity undertaken. The assessment is summarised below in **Table 6.2**.

Table 4.2: Percentage Impact Summary

Ref No	Description	2029 Base + Committed Development Daily Flows	2029 Base + Committed Development + Peak Construction Traffic Daily Flows	Theoretical Road Link Capacity (12 hrs)	Spare Link Capacity
1	A34	71,335	71,344	81,600	12.57%
2	M40 North	110,478	110,506	136,800	19.22%
3	M40 South	71,209	71,243	136,800	47.92%
4	A41	34,172	34,302	81,600	57.96%
5	A41 Bicester	23,776	23,985	36,000	33.37%
6	A41 West	13,169	13,417	28,800	53.41%
7	A41 East	12,086	12,198	28,800	57.65%
8	Station Road/ Dewes Lane	1,099	1,458	19,200	92.41%

Ref No	Description	2029 Base + Committed Development Daily Flows	2029 Base + Committed Development + Peak Construction Traffic Daily Flows	Theoretical Road Link Capacity (12 hrs)	Spare Link Capacity
9	Snake Lane/ Fidlers Field	124	483	19,200	97.48%
10	Claydon Road	1,518	1,877	19,200	90.22%
11	Granborough Road	354	459	3,360	86.35%

6.3.3. The results indicate that ample spare link capacity exists across the study area network and that the road network can accommodate the temporary uplift in traffic associated with the Proposed Development.

6.3.4. To assist in the operation of the network, minor intervention works are proposed. These are detailed in the **Outline CTMP [EN010158/APP/7.5]**. The works include the following:

- The potential resurfacing of Snake Lane/Fidler's Field;
- The widening of a narrow section of road to the east of the junction of the Claydon Road junction at Shipton Lee;
- Minor road widening and the provision of laybys on Granborough Road.

6.3.5. Swept path drawings and proposal drawings are provided in the **Outline CTMP [EN010158/APP/7.5]**.

6.4. Trunk Road Impact

6.4.1. The impact on the trunk road network (M40 and A34) is less than 0.05% and as such, no significant impact on the operation of the trunk road network is predicted.

6.4.2. The volume of traffic through Junction 9 of the M40 is 72 vehicles per day. This equates to an average of six vehicles per hour, over a typical 12 hour working day and well below the threshold for capacity assessments.

6.5. A41 / Station Road Junction Assessment

6.5.1. A LinSig assessment of the A41 and Station Road / Dewes Lane junction has been undertaken as requested by Buckinghamshire Council.

- 6.5.2. Peak hour traffic flows were obtained from the 2025 baseline traffic figures quoted in the nearby Littleton Green development (22/03384/AOP) Transport Assessment report. The AM and PM peak hours data were taken from this report as HS2 construction works are currently preventing new traffic surveys undertaken.
- 6.5.3. The 2025 traffic flows were then factored to create the 2029 traffic flows.
- 6.5.4. Committed development traffic for the A41 during the peak hours has been obtained from the Grendon Springhill 2 Prison (22/00125/REF) Transport Assessment.
- 6.5.5. To provide a robust assessment of the potential traffic effects, the following assumptions have been made in addition to the Proposed Development peak construction traffic generation and distribution estimates:
- The HGV traffic is restricted to traffic movements over a 10 hour window, rather than a 12 hour window. This increases HGV traffic flows within each peak hour; and
 - The vast majority of all staff movements to site will be onsite by 0700hrs. To provide a robust assessment for the network peak, a total of 20% of daily Car and LGV movements has been assumed to travel in both network peak hours.
- 6.5.6. The assumed traffic flows have been included to the baseline with the committed development traffic flows. The LinSig assessment decks are attached in Annex 4.
- 6.5.7. The assessments note that the Degree of Saturation (Deg Sat) is less than 90% on all arms, indicating that there is sufficient capacity at the junction in both peak periods.

6.6. Operational Impact

- 6.6.1. The traffic impact of the operational phase is minimal and below the trigger for an assessment.

6.7. Decommissioning Impact

- 6.7.1. Prior to decommissioning of the Proposed Development, a traffic assessment would be undertaken, and appropriate traffic management procedures followed.
- 6.7.2. The decommissioning phase would result in fewer trips on the road network than the construction as it is considered likely that elements of infrastructure such as access tracks would be left in place and structures

may be broken up onsite to allow transport by a reduced number of HGV trips.

- 6.7.3. The growth of background traffic, created through wider development in the area, will increase the future baseline traffic flows. With a larger baseline and smaller development traffic generation, the potential traffic impact is therefore considered to be significantly below that reported for the construction phase.

7. Proposed Mitigation

7.1. Construction Mitigation

- 7.1.1. Given the importance of effective traffic management with construction projects, an **Outline CTMP [EN010158/APP/7.5]** has been prepared and submitted as part of this DCO Application.
- 7.1.2. The CTMP will also include an Onsite Access Management Plan (OAMP) to safely manage the interactions between PRow, bridleway and path users and construction traffic/activities.
- 7.1.3. A Staff Travel Plan to promote sustainable travel to and from the construction site is also included in the CTMP.
- 7.1.4. The proposed mitigation package would be secured through the draft DCO Application.

7.2. Operational Mitigation

- 7.2.1. The Site access junctions and tracks will be well maintained and monitored during the operational life of the Proposed Development. Regular maintenance will be undertaken to keep the Proposed Development access track drainage systems fully operational and to ensure there are no run-off issues onto the public road network.
- 7.2.2. Due to the level of traffic associated with the operational phase, being less than the assessed construction phase, no physical traffic management measures are considered necessary.
- 7.2.3. In line with best practice, car/LGV sharing for staff during the operation phase will be undertaken to reduce single occupancy trips as far as is practical.

7.3. Decommissioning Mitigation

- 7.3.1. Mitigation during the decommissioning stage will be similar to that proposed in the **Outline CTMP [EN010158/APP/7.5]**, albeit with reduced traffic generation as some elements of the Proposed Development are likely to be retained, including sections of access tracks, access junctions, landscaping, areas of ecological enhancement, etc.
- 7.3.2. A DTMP would be prepared prior to the decommissioning stage being commenced. This will ensure that all relevant transport receptors and issues are accounted for in preparing the traffic management measures at that stage, likely to undertaken up to 60 years following installation.

- 7.3.3. The DTMP would be secured within the DCO Application, potentially as a standalone document or as part of the Decommissioning Environmental Management Plan (DEMP).

8. Summary and Conclusions

- 8.1.1. Pell Frischmann has been instructed by Rosefield Energyfarm Limited (the Applicant) to produce a Transport Assessment for a solar energy development located to the northwest of Quainton, Buckinghamshire.
- 8.1.2. Baseline traffic data established a base point for determining the impact during the construction phase and was factored to future levels to help determine the effect of construction traffic on the local road network.
- 8.1.3. The construction traffic would result in a temporary increase in traffic flows on the road network surrounding the Proposed Development. The peak of construction in terms of vehicular movements will be 359 daily journeys (218 Car/LGV and 141 HGV journeys). Over the course of a typical 12 hour working day on the Site, this would equate to approximately 14 two-way HGV movements per hour at the peak of construction activities.
- 8.1.4. A series of mitigation measures and management plans have been proposed to help mitigate and offset the impacts of the construction, operational and decommissioning phase traffic flows. It is proposed that these can be secured by condition with the local planning authorities.
- 8.1.5. No link capacity issues are expected on any of the roads assessed due to the additional movements associated with the Proposed Development. The effects of construction traffic are temporary in nature and are transitory.

Annex 1: Committed Development Review

Project / Planning Reference	Description of other existing and/or approved development	Relevant Authority	Status	Significant Trip Generator	Development Coincides with Construction Phase	Within Study Area	Has Publicly Available Data	Comment	Included in Cumulative Sensitivity Review
19/A0981/NON	Proposed non-material amendment to permission for Ground mounted solar farm, etc relating to 19/00983/APP.	BC	Approved	No.	Possible	No	No	n/a	Exclude
19/00983/APP	Ground mounted solar farm, ancillary infrastructure and associated works including the diversion of public rights of way and landscape planting	BC	Approved	No	Possible	No	Yes	10 HGV movements per day on East Claydon Road	Exclude
22/00125/REF	Outline planning application for a new category C prison (up to 67,000 sqm GEA)	BC	Approved (following appeal)	Yes	Possible	Yes	Yes	No construction traffic available. Operational traffic of 575 in / 575 Out per day. 33% A41 E and 47% A41 W.	Included

Project / Planning Reference	Description of other existing and/or approved development	Relevant Authority	Status	Significant Trip Generator	Development Coincides with Construction Phase	Within Study Area	Has Publicly Available Data	Comment	Included in Cumulative Sensitivity Review
CM/0016/21	Application for the construction of solar array / solar park comprising of ground mounted solar PV panels and associated works at Calvert Landfill Site.	BC	Awaiting Decision	n/a	n/a	n/a	n/a	n/a	Exclude
23/03875/APP Planning Inspectorate Case Reference: APP/J0405/W/25/3360815	Development of a battery energy storage system (BESS)	BC	Refused – Under Appeal (July 2025)	n/a	n/a	n/a	n/a	n/a	Exclude
24/00407/APP	Erection of 10 no. dwellings and associated green infrastructure	BC	Awaiting Decision	n/a	n/a	n/a	n/a	n/a	Exclude
Hybrid Bill	High Speed Rail 2 ('HS2')	BC	Ongoing	n/a	n/a	n/a	n/a	n/a	Exclude
TWA/18/APP/04	East West Rail	BC	Ongoing	No	No	Yes	No	Complete by the start of Rosefield Construction	Exclude

Project / Planning Reference	Description of other existing and/or approved development	Relevant Authority	Status	Significant Trip Generator	Development Coincides with Construction Phase	Within Study Area	Has Publicly Available Data	Comment	Included in Cumulative Sensitivity Review
22/00119/HS2	A site restoration scheme relating to land approximately 50m south of the discontinued train line and East of the overbridge along Addison Road near Steeple Claydon Village.	BC	Approved	Yes	Yes	Yes	Yes		Included
23/03784/HS2	Plans and Specifications submission under Schedule 17 to the High Speed Rail (London - West Midlands) Act 2017 (the Act) for works comprising of: A41 Bicester Road Overbridge Parapets	BC	Approved	No	Possible	Yes	No	n/a	Exclude
23/03641/HS2	Development of Sheephouse Wood Bat Mitigation Structure (SWBMS); etc and location of the permanent fencing.	BC	Withdrawn	n/a	n/a	n/a	n/a	n/a	Exclude
25/00524/DIS	Submission of details for approval pursuant to Requirement 1 of Plans and Specifications approval reference 23/02697/HS2	BC	Awaiting Determination	n/a	n/a	n/a	n/a	n/a	Exclude

Project / Planning Reference	Description of other existing and/or approved development	Relevant Authority	Status	Significant Trip Generator	Development Coincides with Construction Phase	Within Study Area	Has Publicly Available Data	Comment	Included in Cumulative Sensitivity Review
	(appeal reference APP/HS2/23) relating to dimensions, material, finish and colour of the mesh panels to the Bat Mitigation Structure and particulars of the detail between the mesh panels and the adjacent concrete arched panels								
21/03707/HS2	The proposed development: Calvert Cutting (Part of); Twyford Embankment (Part of); etc	BC	Approved	Possible	Possible	Yes	No	No traffic data available	Exclude
22/03796/HS2	Building Works, a Road Vehicle Park, Earthworks, Transformers, etc	BC	Approved	Possible	Possible	Yes	No	No traffic data available	Exclude
CM/0027/23	Creation of access road, revised drainage lagoon, landscaping, drainage and other associated infrastructure.	BC	Awaiting Decision	n/a	n/a	n/a	n/a	n/a	Exclude

Project / Planning Reference	Description of other existing and/or approved development	Relevant Authority	Status	Significant Trip Generator	Development Coincides with Construction Phase	Within Study Area	Has Publicly Available Data	Comment	Included in Cumulative Sensitivity Review
23/01939/SO	EIA Screening Opinion for a proposed solar farm with associated works on land at Wings Farm, Marston Road, Granborough, MK18 3JX - Claydone Soar	BC	Approved - EIA Not required	Possible	Possible	Possible	No	Not yet determined	Exclude
22/03873/F Planning Inspectorate Case Reference: APP/C3105/W/24/335306 9	Installation and operation of a renewable energy generating station comprising ground-mounted photovoltaic solar arrays.	CDC	Recommended by officer but refused by committee. under Appeal.	Yes	Possible	Yes	Yes	Generates an addition 11 LGV and 21 HGV movements at peak on the A41.	Exclude
21/01224/OUT	Outline planning application for Automotive Experience Quarter comprising Commercial, Business and Services uses (Class E), Light Industrial (Class B2), Local Community and Learning Uses (Class F) and vehicle circuits (Sui Generis) with all matters reserved aside from that of access).	CDC	Approved	Yes	Possible	No	Yes	No traffic distributed to Rosefield study network	Exclude

Project / Planning Reference	Description of other existing and/or approved development	Relevant Authority	Status	Significant Trip Generator	Development Coincides with Construction Phase	Within Study Area	Has Publicly Available Data	Comment	Included in Cumulative Sensitivity Review
24/00949/F	Siting of battery storage facility; substation for the connection of the BESS to the grid; ancillary equipment; security fencing; landscaping and vehicular access alterations.	CDC	Approved	Yes	Possible	No	Yes	No traffic distributed to Rosefield study network	Exclude
21/04112/OUT Planning Inspectorate Case Reference: APP/C3105/W/22/330148 5	Outline application for the erection of up to 65 dwellings, including up to 8 live-work dwellings	CDC	Approved via Appeal.	Yes	Possible	No	Yes	No traffic distributed to Rosefield study network	Exclude
21/03558/OUT	OUTLINE - Residential development for up to 250 dwellings	CDC	Pending Decision	n/a	n/a	n/a	n/a	Not yet determined.	Exclude
24/02595/AEL	Consultation on new overhead electricity line Under Section 37 of The Electricity Act 1989 (as amended)	CDC	No Objection	Possible	Possible	Possible	No	n/a	Exclude
24/02796/SO	EIA Screening Request for proposed Battery Energy Storage System (BESS)	BC	Not EIA Development.	n/a	n/a	n/a	n/a	Not yet determined.	Exclude

Project / Planning Reference	Description of other existing and/or approved development	Relevant Authority	Status	Significant Trip Generator	Development Coincides with Construction Phase	Within Study Area	Has Publicly Available Data	Comment	Included in Cumulative Sensitivity Review
24/03004/APP	Hybrid application for the redevelopment of the site comprising outline planning permission, with all matters reserved except access, for a drive thru restaurant	BC	Pending Decision	n/a	n/a	n/a	n/a	Not yet determined.	Exclude
24/03305/APP	1x drone cage enclosure (10mx10mx10m) at Wellington Drive Westcott Venture Park Westcott Buckinghamshire	BC	Approved	No	Possible	Yes	No		Exclude
24/03472/APP	Four no. commercial stables, ancillary facilities, parking, landscaping and internal road	BC	Pending Decision	No	n/a	n/a	n/a	Not yet determined.	Exclude
24/03426/AOP	Outline application (all reserved apart from access) for approx. 220 residential dwellings, pre-school/ nursery, SuDS and open space off Bourton Road, Buckingham, MK18 7R.	BC	Pending Decision	Yes	n/a	n/a	n/a	Not yet determined.	Exclude

Project / Planning Reference	Description of other existing and/or approved development	Relevant Authority	Status	Significant Trip Generator	Development Coincides with Construction Phase	Within Study Area	Has Publicly Available Data	Comment	Included in Cumulative Sensitivity Review
24/03259/F	The erection of two Use Class B8 floorspace units Access from the existing Symmetry Park estate road.	CDC	Pending Decision	Yes	n/a	n/a	n/a	Not yet determined.	Exclude
24/03817/AOP	Outline planning application for up to 70 dwellings, including vehicular access, pedestrian and cycle lines, public open space, landscaping, drainage and associated works.	BC	Pending Decision	Yes	n/a	n/a	n/a	Not yet determined.	Exclude
25/00013/DCO East West Rail Case Reference: TR040012	EWR DCO: Bedford to Cambridge and Western improvements	BC	Scoped, Report shared.	Yes	Possible	Yes	No	At scoping, no traffic data as yet.	Exclude
25/00524/DIS	Requirement 1 of Plans and Specifications approval reference 23/02697/HS2 (appeal reference APP/HS2/23)	BC	Approved	No	Possible	Yes	No	n/a	Exclude
25/00439/SCOP	EIA scoping opinion for a proposed residential-led development	CDC	Scoped, Report shared.	Yes	n/a	n/a	n/a	Not yet determined.	Exclude

Project / Planning Reference	Description of other existing and/or approved development	Relevant Authority	Status	Significant Trip Generator	Development Coincides with Construction Phase	Within Study Area	Has Publicly Available Data	Comment	Included in Cumulative Sensitivity Review
23/01610/OUT	Outline application cross boundary with Buckinghamshire LPA (application reference 23/02180/AOP) for a Sustainable Urban Extension comprising residential development of up to 1,265 dwellings (Use Class C3), a mixed-use local centre etc	MKCC	Pending Decision	Yes	n/a	n/a	n/a	Not yet determined.	Exclude
25/00883/AOP	Demolition of existing buildings and commercial redevelopment with residential development, including affordable housing, along with associated access and infrastructure.	BC	Pending Decision	Yes	n/a	n/a	n/a	Not yet determined.	Exclude

Annex 2: Trip Generation

Application Document Ref: EN010158/APP/6.4.43
Planning Inspectorate Scheme Ref: EN010158

Annex 3: AIL Route Survey Report

P e l l F r i s c h m a n n

Rosefield Solar Farm

Route Survey Report

July 2025

107130

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Report Ref.		250709 Rosefield Rsr				
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Rev	Suit	Description	Date	Originator	Checker	Approver
0		Issue	09/07/2025			
Ref. reference. Rev revision. Suit suitability.						

Prepared for

Rosefield Energyfarm Limited

Prepared by

Pell Frischmann Consultants Limited

93 George Street
Edinburgh
EH2 3ES

Pell Frischmann

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Executive Summary

Pell Frischmann Consultants Limited (PF) has been commissioned by Rosefield Energyfarm Limited (the Applicant) to undertake a Route Survey Review (RSR) to examine the issues associated with the transport of Abnormal Indivisible Loads (AIL) associated with the construction and development of the proposed Rosefield Solar Farm, located to the southwest of Winslow, within the Buckinghamshire Council administrative area.

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

The access review has been based upon a candidate transformer and has been undertaken on the basis of a 16 axle grid frame trailer. Due to the transport configurations being classified as Special Order, a full Police escort would be required.

The route from the M1 corridor to the proposed substation site access junction is considered feasible for all loads, subject to the provision of the outlined mitigation works and permissions.

The report is presented to the Applicant for consideration. Various road modifications and interventions are required to successfully access the site. If these are assessed, approved and undertaken, access to the site is considered feasible.

1 Introduction

Pell Frischmann Consultants Limited (PF) has been commissioned by Rosefield Energyfarm Limited (the Applicant) to undertake a Route Survey Review (RSR) to examine the issues associated with the transport of Abnormal Indivisible Loads (AIL) associated with the construction and development of the proposed Rosefield Solar Farm, located to the southwest of Winslow, within the Buckinghamshire Council administrative area.

The RSR has been prepared to help inform the Applicant on the likely issues associated with the development of the site with regards to off-site transport and access for AIL traffic and examines the issues associated with transport along the whole of the access route from the M1 corridor to the substation site access junction.

The access review identifies the key issues associated with AIL deliveries and notes that remedial works, either in the form of physical works or as traffic management interventions will be required to accommodate the predicted loads.

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

It is the responsibility of the transformer supplier to ensure that the entirety of the proposed access route is suitable and meets with their satisfaction (depending upon contract). The transformer supplier will be responsible for ensuring that the finalised proposals meet with the appropriate levels of health and safety consideration for all road users and are in line with the relevant legislation at the time of delivery.

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2 Definitions & Terminology

2.1 Definition of Abnormal Indivisible Load

The transport of Abnormal Indivisible Loads (AIL) is a reserved matter for the UK Parliament and all legislation relating to AIL movement is not devolved. Devolved government agencies such as Transport Scotland, Welsh Government Transport Directorate and DfI Road are consultees, rather than executive agencies.

The UK Department for Transport, of which National Highways (NH) is an executive agency, states that the strict definition of an AIL refers to a load which cannot, without undue expense or risk of damage, be divided into two or more loads for the purpose of carriage on roads which, owing to its dimensions or weight, cannot be carried on a vehicle which complies with the 'standard vehicle regulations' as follows:

- The Road Vehicles (Construction and Use) Regulations 1986 (as amended)
- The Road Vehicles (Authorised Weight) Regulations 1998 (as amended)
- The Road Vehicles Lighting Regulations 1989 (as amended)

All equipment should be stripped of their ancillaries before they are transported. NH will only accept that further dismantling is not required where it cannot be economically achieved due to the requirement for its construction within factory environments or where extremely high tolerances have to be maintained.

2.2 Legislation

Conventional heavy goods vehicles have an operating weight limit of 44 tonnes. The category known as AIL covers those vehicles where the gross weight exceeds 44 tonnes.

An AIL is defined as that which cannot be carried under Construction and Use (C&U) Regulations. Items which, when loaded on the load carrying vehicle exceed the weights encompassed by the C&U Regulations, but do not exceed Special Order Permission Limits are governed by Special Types General Order (STGO) Categories 1 to 3 depending on size.

Where dimensions exceed 6,100 mm in width, 30,000 mm in rigid length or 150 tonnes gross weight, Special Order from NH is required.

Special Order category AIL movements are authorised by the NH Abnormal Loads team, an executive agency of the DfT, based in Birmingham.

2.3 Water Preferred Policy

The DfT has adopted a 'water-preferred' policy for the transport of AIL. This means that, where an application is sought for the movement of a Special Order or VR1 category load (more than 5.0 m width) by road, the Department, via NH and devolved agencies, can turn down the application where it is feasible for a coastal or inland waterway route to be used instead of road.

NH advise that this decision is based on a number of factors including whether the load is divisible, the availability of a suitable route, the amount of traffic congestion that is likely to be caused and the justification for the load to be moved.

The NH Abnormal Loads Team is the department responsible for the authorisation of Special Order AIL and government policy is that the closest available port of access should be used for the delivery of such oversized items.

2.4 Third-Party Land & Land Ownership

A review of third-party land should be undertaken by the developer to ensure that no additional land rights are required to enable deliveries or mitigation works. PF accepts no responsibility for the accuracy of land ownership assumptions, all of which should be confirmed across the entire access route by a qualified land agent, engaged by the Applicant.

The limits of road adoption can vary depending upon the location of the site and the history of the road agencies involved. The adopted area is generally defined as land contained within a defined boundary where the road

agency holds the maintenance rights for the land. In urban areas, this is usually defined as the area from the edge of the footway across the road to the opposing footway back edge.

In rural areas, the area of adoption can be open to greater interpretation as defined boundaries may not be readily visible. In these locations, the general rule is that the area of adoption is between established field boundary lines or a maximum 2 m from the road edge. This can vary between area and location.

2.5 Abbreviations

- AIL Abnormal Indivisible Load
- C&U Construction and Use
- DfI DfI Road Service, Northern Ireland
- DfT UK Department for Transport
- ESDAL Electronic Service Delivery for Abnormal Loads
- NH National Highways
- OS Ordnance Survey
- PF Pell Frischmann Consultants Limited
- POE Port of Entry
- RSR Route Survey Review
- SPA Swept Path Assessment
- STGO Special Types General Order
- SWC Super Wing Carrier
- TS Transport Scotland
- WG Welsh Government

3 Candidate Turbine

The Applicant has indicated that they wish to consider the worst-case components associated with the substation required on site. The transformer is considered to be the worst case load, given its weight and overall rigid length when transported.

The details of the components have been provided by the Applicant and are detailed in **Table 3-1** below.

Table 3-1: Turbine Component Summary

Component	Length [m]	Width [m]	Height / min. Diameter [m]	Weight (t)
Transformer	7.500	3.307	5.150	198

A drawing of the proposed component when loaded on a grid frame trailer is provided in Appendix A.

4 Port of Entry

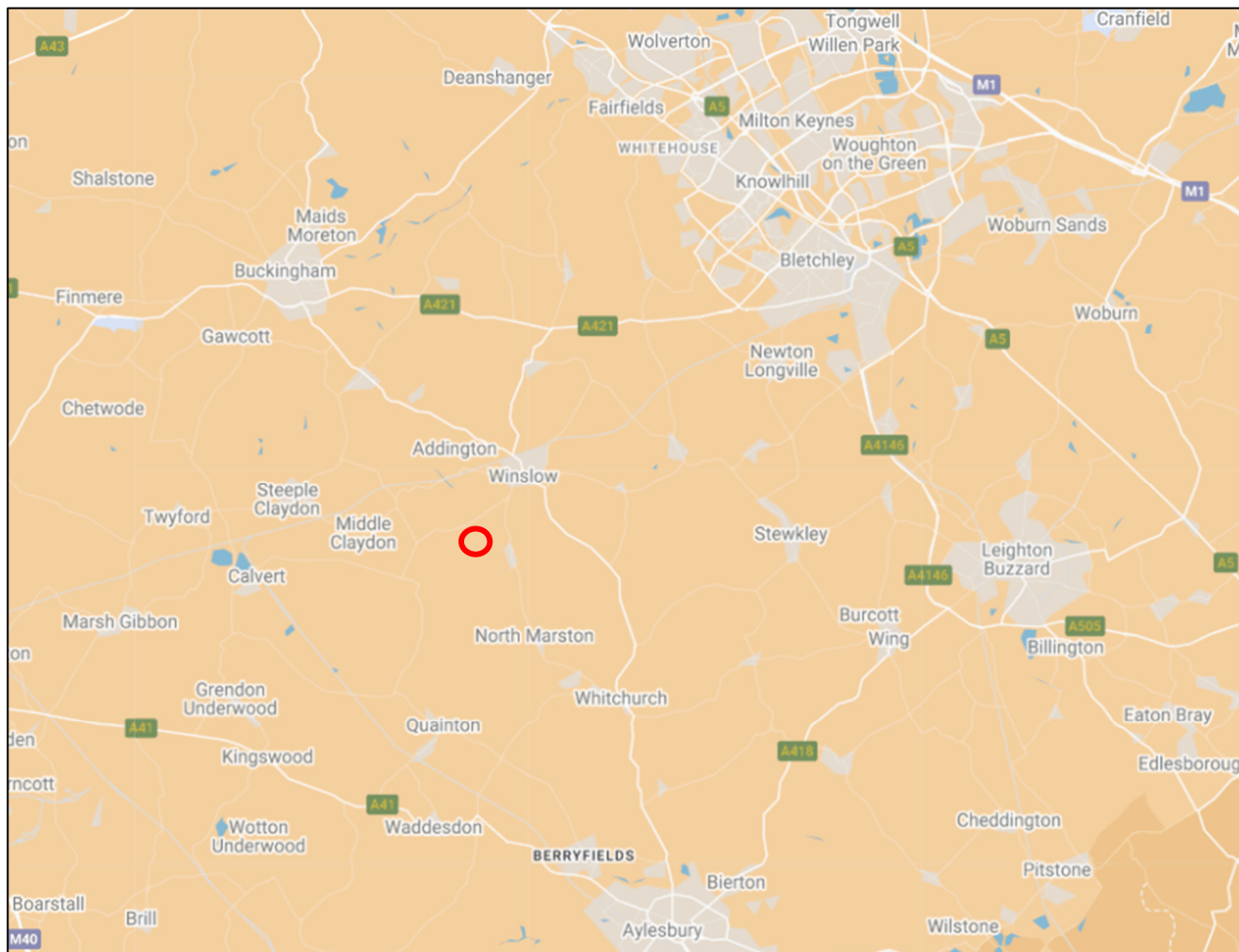
There are several options for the Port of Entry of the transformer, should it be manufactured outside of the UK. Alternatively, the transformers may be sourced from a UK based supplier, where road transport will be achievable.

To avoid incorrect assumptions, the route survey commences on the M1 corridor, where strategic access from a variety of port options or industrial locations is considered achievable.

5 Site Location

The proposed development site is located to the southwest of Winslow. Within the wider development area, the electrical substation for the proposed substation is to be located in close proximity to the existing National Grid East Claydon Substation. **Figure 5-1** below illustrates the proposed substation.

Figure 5-1: Site Location Plan



6 Weight Review

A weight review has been undertaken via the Electronic Service Delivery for Abnormal Loads (ESDAL) contacts database using the National Highways website www.esdal.com.

All of the relevant road and structure operators are noted in **Table 6-1**, and all have been contacted to ascertain if there are any relevant constraints that should be noted. Where comments are received, these are included within **Table 9-1** and **Appendix D**. Where no comments have been received, this does not confirm the suitability or otherwise of the structures and a full review will be required with the relevant agencies.

Table 6-1: ESDAL Contacts

Organisation	Email Address
Milton Keynes	abloads@milton-keynes.gov.uk
National Highways	eastregionabnormalloads@nationalhighways.co.uk
Historic Rail Eastate	rsgbrb@jacobs.com
Buckinghamshire Council	bucks@abloads.com
Network Rail	AbnormalLoadsEnquiries@networkrail.co.uk

7 Access Route

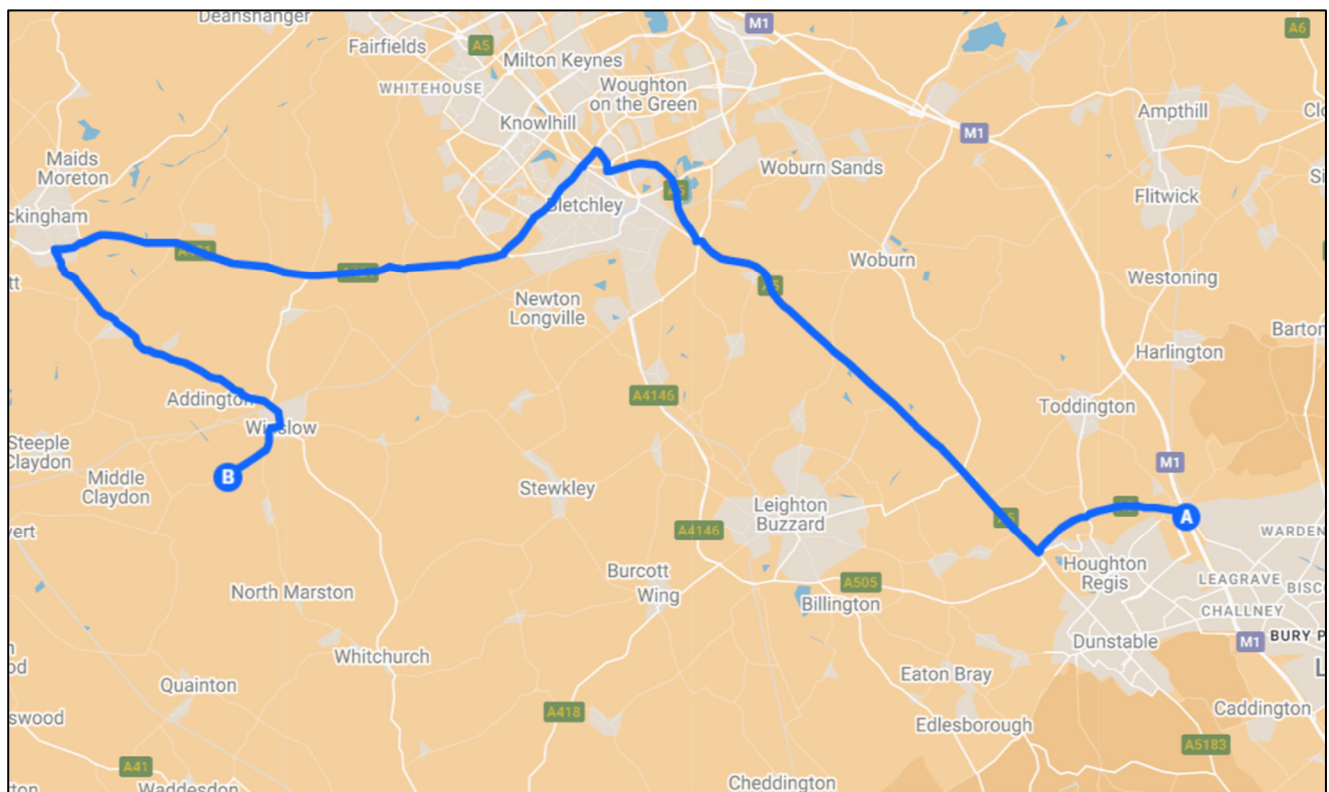
The proposed AIL access route is based upon the National Highways High and Heavy Load Map¹, with particular focus on route HR143, that provides access from Winslow to the nearby East Claydon substation.

The proposed access route to the site access junction is as follows:

- Loads would depart the M1 at Junction 11a;
- Loads will join the A5 and will bypass Dunstable before turning north on the A5;
- Loads would depart the A5 at the Redmoor Roundabout and would join the A421 Grafton Street northbound;
- At the junction of Grafton Street and Standing Way, loads would turn left and would proceed on the A421 Standing Way towards Buckingham;
- At the A421 / A413 Roundabout in Buckingham, loads will turn left and will proceed southbound towards Winslow;
- In Winslow, loads will proceed southbound on High Street before turning right onto Vicarage Way;
- At the roundabout of Vicarage Way / Burleys Road, loads will turn left and will continue south of Burleys Road / Granborough Road;
- To the south of Winslow, loads will turn right onto East Claydon Road;
- Loads will continue westbound on East Claydon Road, with a new AIL only site access junction located in the southern verge.

The proposed access route is illustrated in **Figure 7-1**.

Figure 7-1: Proposed Access Route



¹ <https://nationalhighways.co.uk/media/rd1xmfj/high-and-heavy-load-grids-map-for-abnormal-loads.pdf>

8 Delivery Equipment

To provide a robust assessment scenario based upon the known issues along the access route, it has been assumed that all blades would be loaded onto a 16 axle grid frame trailer to reduce the need for mitigation in constrained sections of the route, shown in **Figure 8-1**.

Figure 8-1: Example Grid Frame Trailer



As the loads are classified as Special Order, due to a rigid length in excess of 30 m, a full Police Escort would be required along the full length of the route.

9 Route Constraints

9.1 Route Constraint Assessment

The constraints noted during the review are provided in **Table 9-1** below. These cover all constraints from the port access gate through to the site access junction and are classified in terms of risk to delivery as follows (N.B. the below list is not exhaustive):

High Risk

- Building / overbridge conflict
- Third-party land owner(s) access permission
- Permanent road works
- Reprofiting / ground works
- Bridge upgrades
- Overhead line removal / relocation
- Tree clearance

Medium Risk

- Land searches to confirm extent of available adopted land
- Topographical survey
- Detailed junction / access track design
- Structural assessment / overbridging
- Overhead line survey
- Vertical elevation check
- Bridge parapet removals
- Street furniture removals
- Tree / vegetation pruning
- Vegetation clearance
- Use of dedicated abnormal load bypass / access track
- Shunt / contraflow manoeuvre
- Trailer interchange
- Carriageway surface repairs

Low Risk

- Temporary load bearing surface to be laid
- Existing load bearing surface to be utilised
- Parking restrictions
- Loads to be raised above obstruction using trailer hydraulics

Risk has been assessed in terms of enabling works time, potential cost and complexity. Please note that risk category is based upon the risk noted at the time of survey and is subjective. The developer is required to consider all risks, prior to deliveries commencing.

Full details of the mitigation measures are shown on the swept path assessment drawings included in **Appendix C**.

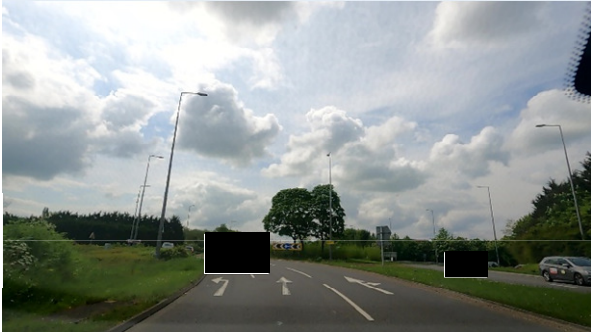
9.2 Route Constraint Tables

Table 9-1 details constraints from the M1 through to the proposed site access junction on Route 1.

Table 9-1: Route Constraint Points and Details

POI	Key Constraint	Details
1	M1 Junction 11 Roundabout 	Loads will depart the M1 at Junction 11 and will take the second exit at the slip road roundabout, proceeding westbound. A swept path assessment has been undertaken and no physical mitigation measures are required.
2	A5 / B5120 Roundabout 	Loads will proceed ahead on the A5, taking the second exit at the roundabout. A swept path assessment has been undertaken and no physical mitigation measures are required.
3	A5 / Watling Street Roundabout 	Loads will turn right onto the A5 northbound at the roundabout, taking the third exit. A swept path assessment has been undertaken and no physical mitigation measures are required. To the north of the junction, a crossing D-island should have its street furniture removed to allow loads to safely oversail the island.
4	A5 / Woburn Road Roundabout 	Loads will proceed ahead at the junction, taking the second exit and continuing on the A5 northbound. A swept path assessment has been undertaken and no physical mitigation measures are required.

POI	Key Constraint	Details
5	A5 Kelly's Kitchen Roundabout 	Loads will proceed ahead on the A5, taking the third exit at the roundabout. A swept path assessment has been undertaken and no physical mitigation measures are required.
6	A5 Redmoor Roundabout 	Loads will depart the A5 and will enter the grade separated Redmoor Roundabout. Loads will take the third exit. A swept path assessment has been undertaken and no physical mitigation measures are required.
7	A421 Bleak Moor Roundabout 	Loads will take the first exit at the roundabout and will join the A421 westbound. A swept path assessment has been undertaken and indicates that minor vegetation trimming works will be required on the inside verge, within the limits of existing highways adoption.
8	A421 Elfield Roundabout 	Loads will take the second exit at the roundabout and will proceed westbound. A swept path assessment has been undertaken. Loads will oversail the verge of the central island of the junction. The loads will be raised to clear the island, using the hydraulic setting on the trailer.

POI	Key Constraint	Details
9	A421 Emerson Roundabout 	Loads will take the second exit at the roundabout and will proceed southwest bound. A swept path assessment has been undertaken and no physical mitigation measures are required.
10	A421 Wind Hill Mill Roundabout 	Loads will take the second exit at the roundabout and will proceed southwest. A swept path assessment has been undertaken and no physical mitigation measures are required.
11	A421 / B4034 Roundabout 	Loads will take the second exit at the roundabout and will proceed southwest. A swept path assessment has been undertaken and no physical mitigation measures are required.
12	A421 Bottledump Roundabout 	Loads will take the second exit at the roundabout and will proceed southwest. A swept path assessment has been undertaken and indicates that minor vegetation trimming works will be required on the southwest verge, within the limits of existing highways adoption.

POI	Key Constraint	Details
13	A421 / Whaddon Road Roundabout 	Loads will take the second exit at the roundabout and will proceed westbound. A swept path assessment has been undertaken. Loads will oversail the verge of the central island of the junction. The loads will be raised to clear the island, using the hydraulic settings on the trailer.
14	A421 / B4033 Roundabout 	Loads will take the second exit at the roundabout and will proceed westbound. A contraflow transit of the junction is proposed to reduce the need for intrusive works. A swept path assessment has been undertaken and indicates that minor vegetation trimming works will be required on the northwest verge, within the limits of existing highways adoption.
15	A421 / A413 Roundabout 	Loads will take the first exit at the roundabout and will continue westbound. A swept path assessment has been undertaken and indicates that minor tree canopy trimming works will be required on the entry arm of the junction, within the limits of existing highways adoption.
16	A421 / A413 London Road Roundabout 	Loads will undertake a contraflow transit of the junction to reduce the need for physical works. Loads will join London Road and will proceed southbound. A swept path assessment has been undertaken and indicates that no physical mitigation works are required. During deliveries, oncoming traffic should be held back from the junction to allow the load to move in safety.

POI	Key Constraint	Details
17	A413 London Road / Needlepin Way Northern Junction 	Loads will proceed southbound through the junction, taking the second exit. A swept path assessment has been undertaken. Loads will oversail the verge of the central island of the junction. The loads will be raised to clear the island, using the hydraulic settings on the trailer. One chevron sign should be relocated on the eastern verge.
18	A413 London Road / Needlepin Way Southern Junction 	Loads will proceed southbound through the junction, taking the second exit. A contraflow transit of the junction is proposed to reduce the need for physical mitigation measures. A swept path assessment has been undertaken. Loads will oversail the verge of the central island of the junction. The loads will be raised to clear the island, using the hydraulic settings on the trailer.
19	A413 Bends, Padbury 	Loads will proceed southeast bound on the A413. Loads will require access to both traffic lanes during deliveries and the advance escorts should hold traffic back from the bend during deliveries.
20	A413 Bends, Southeast of Padbury 	Loads will proceed southeast bound on the A413. Loads will require access to both traffic lanes during deliveries and the advance escorts should hold traffic back from the bend during deliveries.

POI	Key Constraint	Details
21	A413 High Street Crossing 	The central crossing island and its associated street furniture should be removed to enable access for the proposed loads. A temporary crossing facility will be provided to ensure pedestrian safety during deliveries. A review of overhead utilities should be undertaken prior to deliveries being made.
22	High Street / Vicarage Road Junction 	Loads will turn right at the junction, with loads joining Vicarage Road. A swept path assessment on a detailed topographical base plan has been undertaken. On the eastern verge, a load bearing surface is required. Two bollards, two traffic signal poles and shop signs should be removed. Underground services should be protected. On the southern boundary, a load bearing surface should be laid. Underground services should be protected. In the inside of the turn, a load bearing surface is required. One lighting column should be removed along with two road signs and one bike stand. Parking on Vicarage Road should be suspended during load deliveries.
23	Vicarage Road / Burleys Road Roundabout 	Prior to the junction, two pedestrian crossing islands should be removed along with their associated street furniture. This will loads to over-run and oversail the island positions. Temporary crossing facilities would be provided during delivery periods. Loads will turn left at the mini-roundabout and will turn to proceed southbound on Burleys Road. The splitter islands on the entry and exit arms will be over-run. The entry island bollard / marker will need to be removed. The tree canopy on the entry should be trimmed. A load bearing surface in the western verge of Burleys Road is required. One road sign will need to be removed. Parking in the northern parking bay will need to be removed during deliveries. Parking on the eastern verge should be suspended during deliveries. Loads will continue southbound and will join Granborough Road.

POI	Key Constraint	Details
24	Granborough Road / East Claydon Road Junction 	Loads will turn right and will join East Claydon Road. A swept path assessment has been undertaken and indicates that no physical mitigation works are required.
25	Proposed AIL Access Gate 	Loads will turn left into a new AIL only access that provides direct access to the proposed substation development. A swept path of the turn from the public road has been undertaken.

10 Swept Path Assessment Terminology

The detailed Swept Path Assessment (SPA) drawings for the locations assessed are provided in **Appendix B** for review. The drawings illustrate tracking undertaken for the worst-case loads at each location.

The colours illustrated on the swept paths are:

- **Grey / Black** – Ordnance Survey (OS) / topographical base mapping,
- **Green** – vehicle body outline (body swept path),
- **Red** – tracked pathway of the wheels (wheel swept path); and
- **Purple** – the oversail tracked path of the load where it encroaches out with the trailer (load swept path).

Where mitigation works are required, the extents of the overrun and oversail areas are illustrated and fully detailed on the SPA drawings. Additional land areas to those indicated in the SPA drawings may be required to facilitate the construction of the proposed physical mitigation measures depending on the site conditions and topography. The extent of any additional areas required to construct the mitigation works highlighted within this study and the detailed design of said mitigation works is beyond the scope of this study and should be confirmed on detailed topographical survey data.

Where provided by the client, topographical data has been utilised. Please note that PF cannot accept liability for errors on the data source, be that OS base mapping, aerial mapping, historic topographical surveys or client supplied data. Where applicable, mapping has been augmented with aerial imagery for illustration only. The accuracy of this mapping cannot be confirmed by PF.

11 Summary

11.1 Summary of Route Survey Review

Pell Frischmann Consultants Limited (PF) has been commissioned by The Applicant to undertake a Route Survey Review (RSR) to examine the issues associated with the transport of wind turbine Abnormal Indivisible Loads (AIL) associated with the construction and development of the proposed Rosefield Solar Farm, located to the southwest of Winslow, within the Buckinghamshire Council administrative area.

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The route from the M1 to the proposed site access junction is considered feasible for all loads, subject to the provision of the outlined mitigation works and permissions.

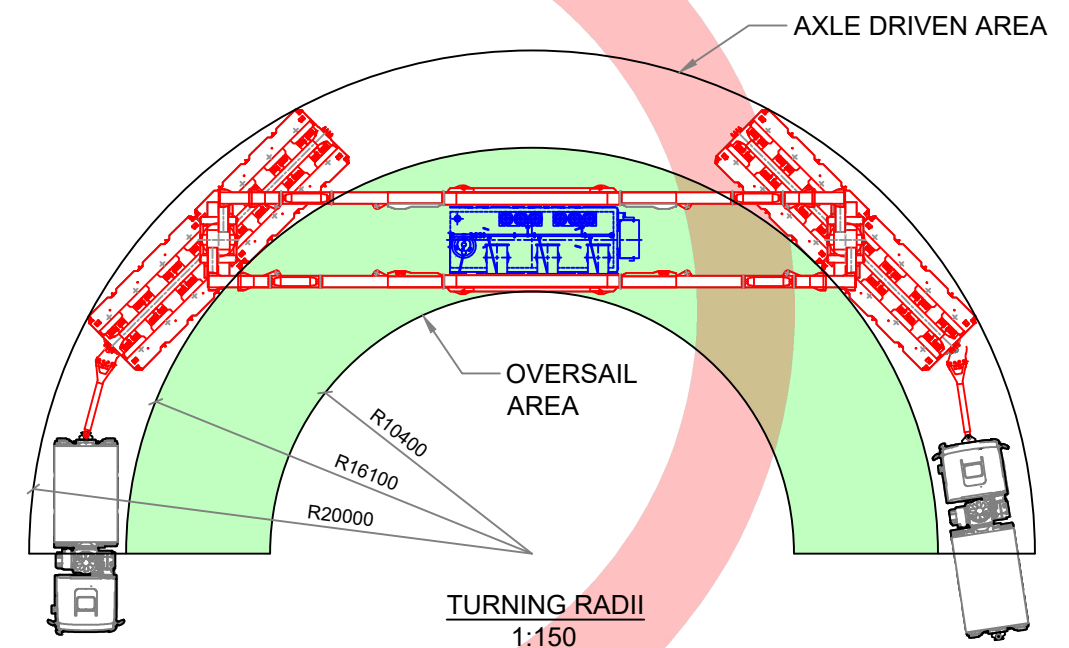
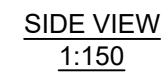
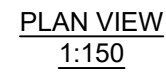
The report is presented to the Applicant for consideration. Various road modifications and interventions are required to successfully access the site. If these are assessed, approved and undertaken, access to the site is considered feasible.

11.2 Further Actions

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

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

Appendix A Indicative Transport Details



FOR INFORMATION ONLY

LOAD TABLE		CLIENT REFERENCE DOCUMENTS			REVISION HISTORY					
Applied Load Weight (Te)	198.00	REV	DATE	DOCUMENT REFERENCE No.	REV	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED
Girder Frame Tare Weight (Te)	42.00				A	26/10/23	First issue Preliminary Only	AJR		
Axles Tare Weight (Te)	52.36				A					
Auxiliary Steel Work Weight (Te)	1.44				B					
Transport Gross Weight (Te)	293.80				C					
Load per Bogie (Te)	146.90									
Load per Axle (Te)	18.36									

MORRISON
Energy Services

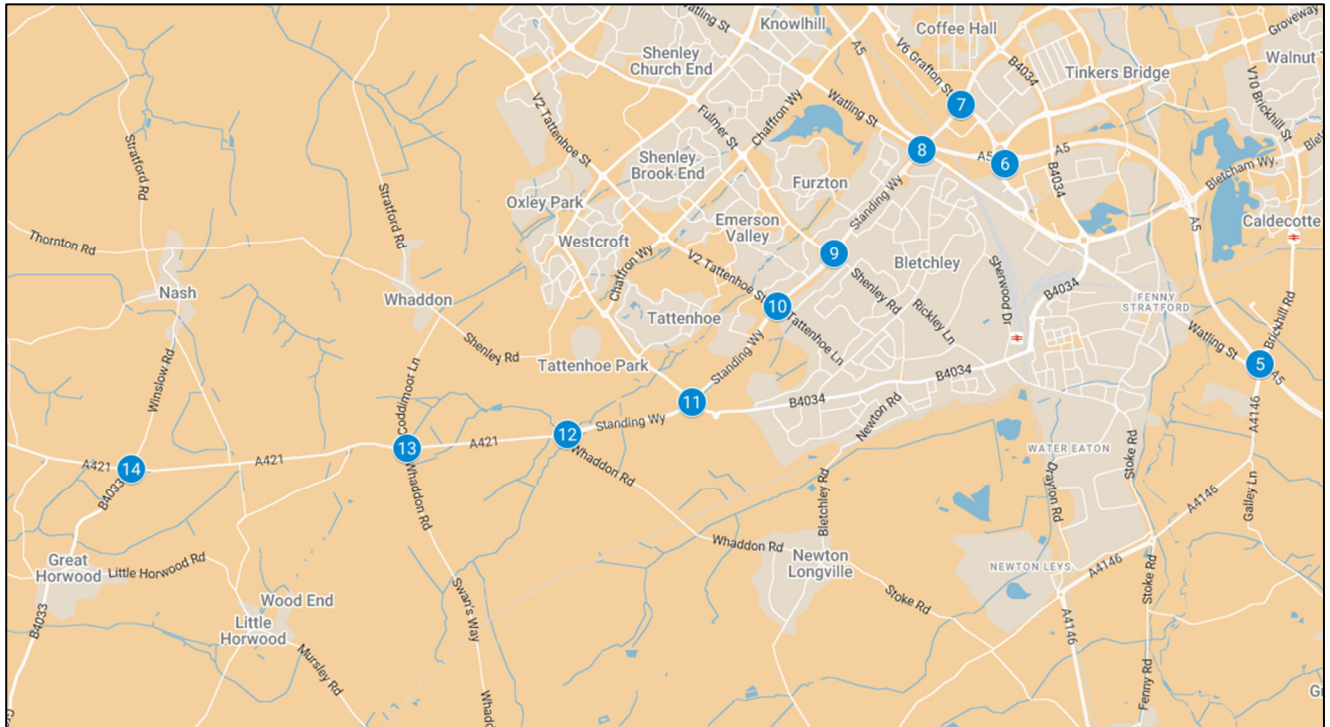
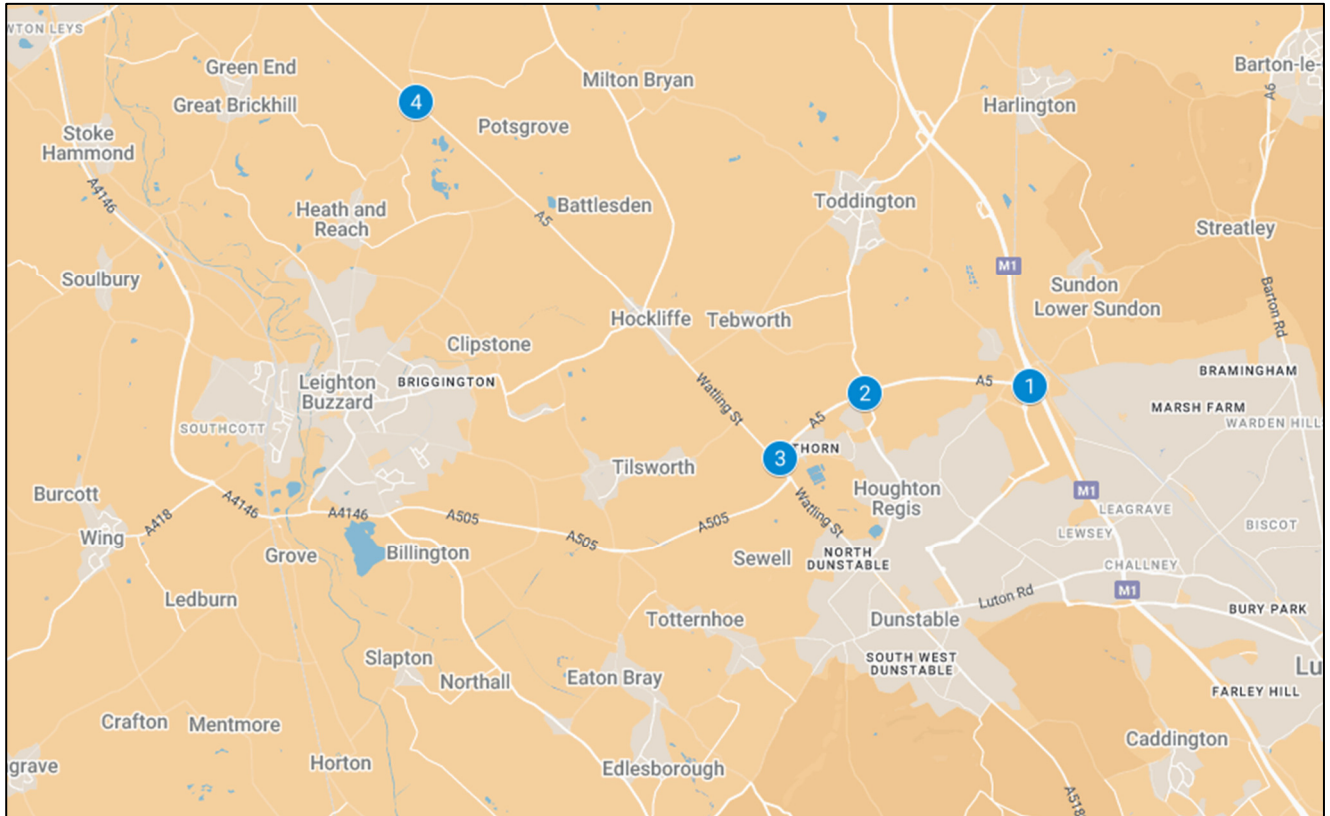
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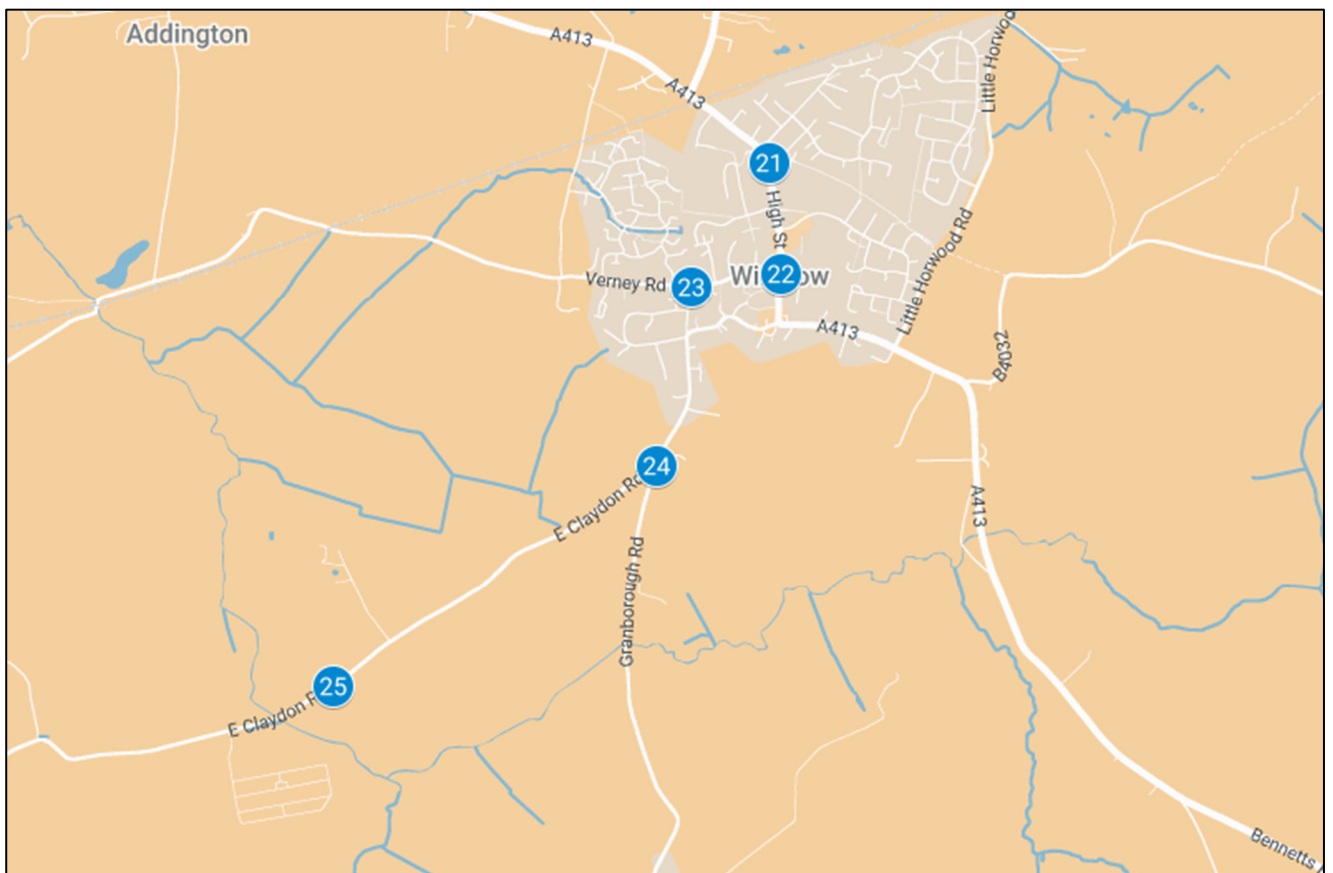
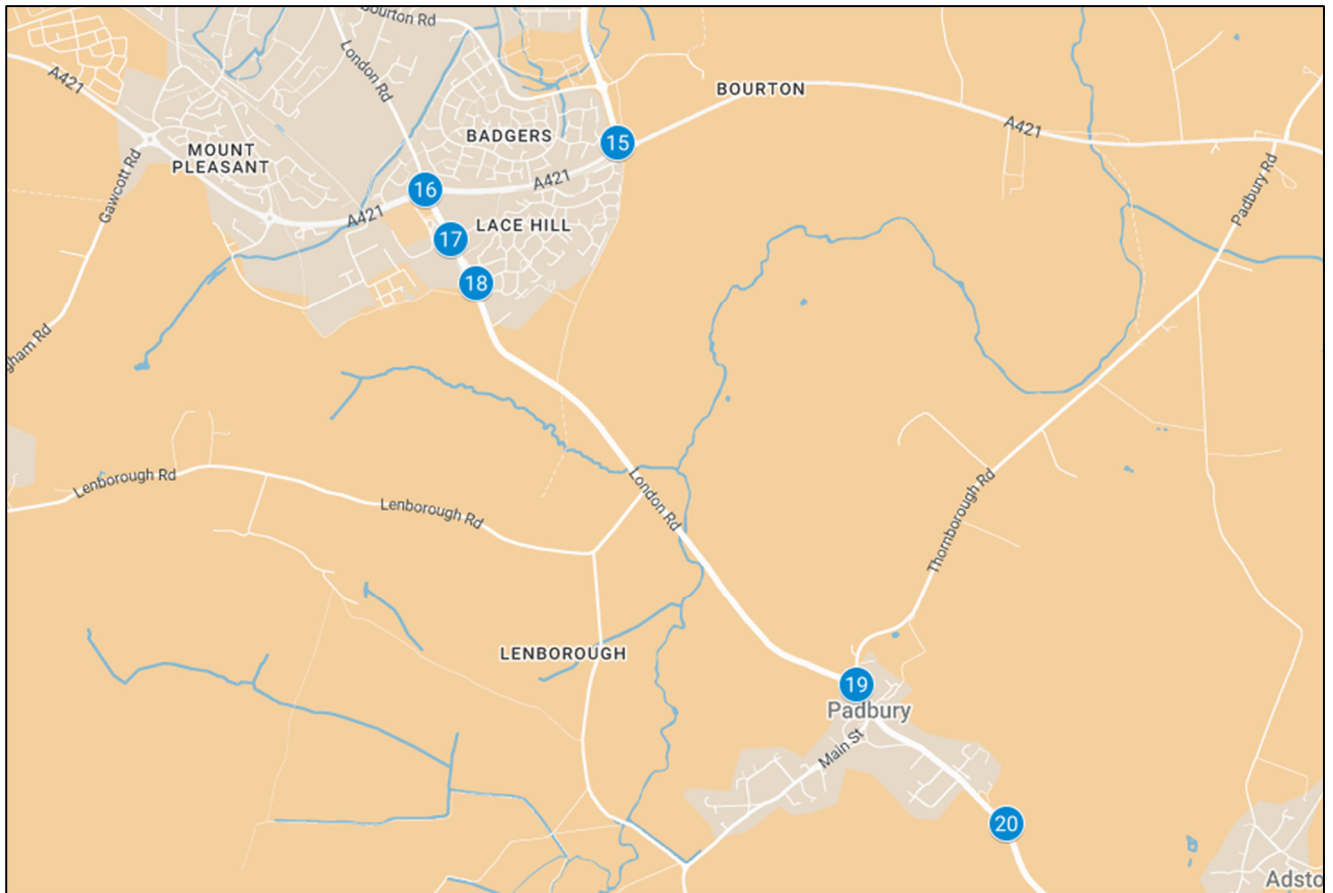
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Project	Longfield		
Title	Indicative Transformer Delivery Vehicle		
Scale (A3) DNS	Sheet No. 1	Total No. 1	
Dwg. No			

Appendix B Points Of Interest

An electronic version of the POI plans can be found here:

<https://www.google.com/maps/d/edit?mid=1SJwTNFLdygbl2CUVZSkdCEaoikeIDp0&usp=sharing>





Appendix C Swept Path Assessments



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Pell Frischmann 93 GEORGE STREET, EDINBURGH, EH2 3ES Tel: +44 (0)131 240 1270 Email: pfredinburgh@pellfrischmann.com	Project		ROSEFIELD SOLAR FARM			Name	Date	Scale		1:1000 @ A3	
					Drawn	GB	10/07/2025	File No. 250708 Rosefield AIL tracking.dwg			
					Designed	GB	08/07/2025				
					Checked	SW	09/07/2025	Drawing Status		Draft	
Client		ROSEFIELD SOLARFARM LIMITED		Drawing Title		CANDIDATE TRANSFORMER		Point of Interest		1	
Key Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail		SPA Location		M1 JUNCTION 11A WESTERN ROUNDABOUT		Drawing No.		Notes:		Revision	
						SK01		1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only. 3. Do not scale from this drawing.		0	



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Pell Frischmann 93 GEORGE STREET, EDINBURGH, EH2 3ES Tel: +44 (0) 131 240 1270 Email: pfredinburgh@pellfrischmann.com	Project		ROSEFIELD SOLAR FARM			Name	Date	Scale				
					Drawn	GB	10/07/2025	1:1000 @ A3				
					Designed	GB	08/07/2025	File No. 250708 Rosefield AIL tracking.dwg				
					Checked	SW	09/07/2025	Drawing Status				
Client	ROSEFIELD SOLARFARM LIMITED		Drawing Title		CANDIDATE TRANSFORMER		Point of Interest		3	Draft		
							Drawing No.		Notes:		Revision	
Key	Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail		SPA Location		A5 / WATLING STREET ROUNDABOUT		SK03		1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only. 3. Do not scale from this drawing.		0	



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						Drawn	GB	10/07/2025	1:1000 @ A3				
						Designed	GB	08/07/2025	File No. 250708 Rosefield AIL tracking.dwg				
						Checked	SW	09/07/2025	Drawing Status				
Client		ROSEFIELD SOLARFARM LIMITED		Drawing Title		CANDIDATE TRANSFORMER		Point of Interest		6	Draft		
								Drawing No.		Notes:		Revision	
Key		Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail		SPA Location		A5 REDMOOR ROUNDABOUT		SK06		1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only. 3. Do not scale from this drawing.		0	



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				Drawn	GB	10/07/2025	1:1000 @ A3	
				Designed	GB	08/07/2025	File No. 250708 Rosefield AIL tracking.dwg	
				Checked	SW	09/07/2025	Drawing Status	
Client	ROSEFIELD SOLARFARM LIMITED	Drawing Title	CANDIDATE TRANSFORMER	Point of Interest		7	Draft	
				Drawing No.	Notes: 1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only. 3. Do not scale from this drawing.		Revision	
Key	Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	A421 BLEAK HALL ROUNDABOUT	SK07			0	



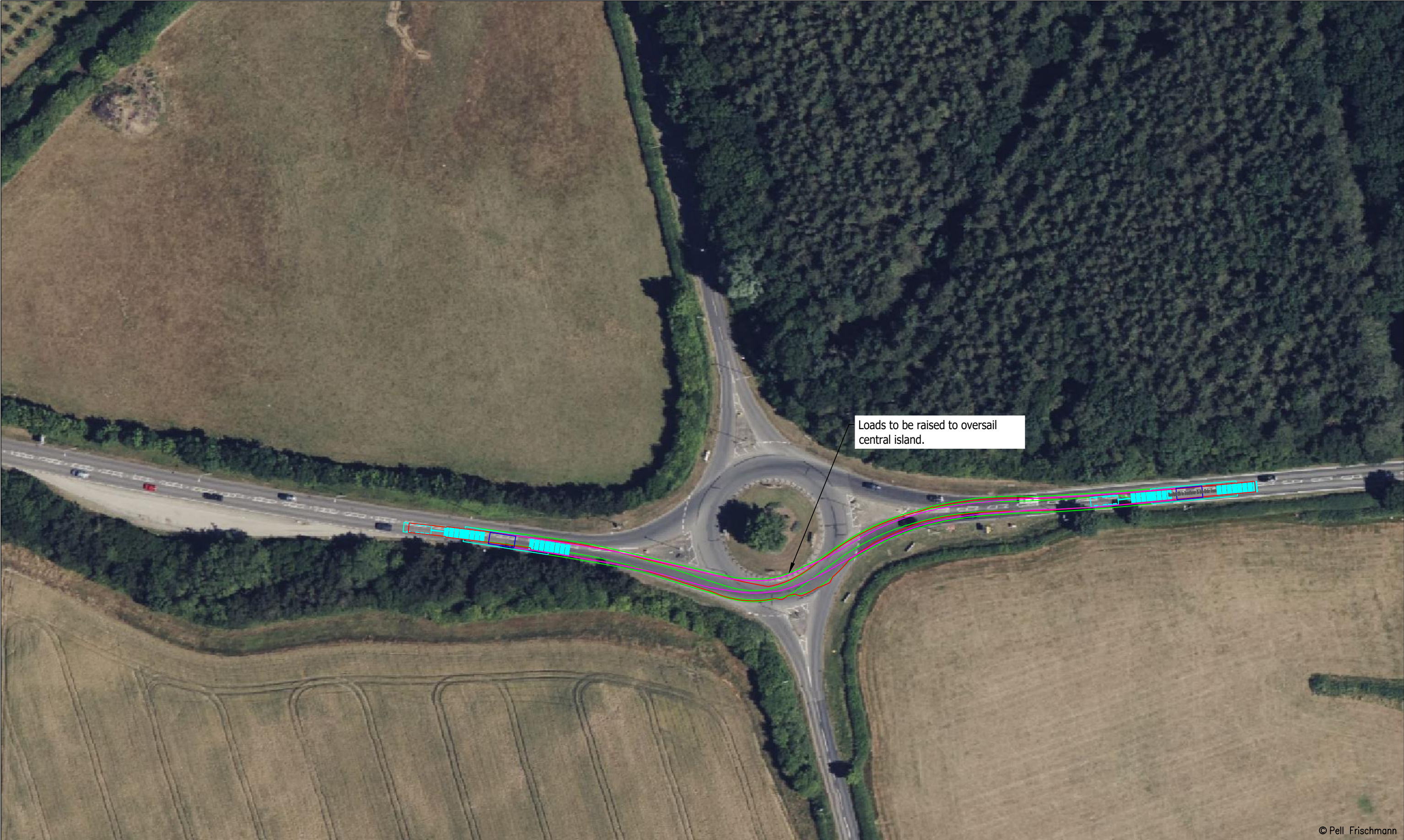
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Pell Frischmann 93 GEORGE STREET, EDINBURGH, EH2 3ES Tel: +44 (0)131 240 1270 Email: pfredinburgh@pellfrischmann.com	Project	ROSEFIELD SOLAR FARM			Name	Date	Scale		1:1000 @ A3			
				Drawn	GB	10/07/2025	File No. 250708 Rosefield AIL tracking.dwg					
				Designed	GB	08/07/2025						
				Checked	SW	09/07/2025	Drawing Status				Draft	
Client	ROSEFIELD SOLARFARM LIMITED	Drawing Title	CANDIDATE TRANSFORMER		Point of Interest		10					
					Drawing No.	Notes:				Revision		
Key	Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	A421 WIND MILL HILL ROUNDABOUT		SK10		1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only. 3. Do not scale from this drawing.				0	



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					Drawn	GB	10/07/2025	1:1000 @ A3			
					Designed	GB	08/07/2025	File No. 250708 Rosefield AIL tracking.dwg			
					Checked	SW	09/07/2025	Drawing Status			
Client	ROSEFIELD SOLARFARM LIMITED		Drawing Title		CANDIDATE TRANSFORMER		Point of Interest		12	Draft	
							Drawing No.		Notes:		Revision
Key							SK12		1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only. 3. Do not scale from this drawing.		0
Wheel SPA	Body SPA	Load SPA	Indicative	Over-run	Over-sail	SPA Location		A421 BOTTLEDUMP ROUNDABOUT			



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					Drawn	GB	10/07/2025	1:1000 @ A3			
					Designed	GB	08/07/2025	File No. 250708 Rosefield AIL tracking.dwg			
					Checked	SW	09/07/2025	Drawing Status			
Client	ROSEFIELD SOLARFARM LIMITED		Drawing Title		CANDIDATE TRANSFORMER		Point of Interest		13	Draft	
							Drawing No.		Notes:		Revision
Key							SK13		1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only. 3. Do not scale from this drawing.		0
Wheel SPA	Body SPA	Load SPA	Indicative	Over-run	Over-sail	SPA Location		A421 / WHADDON ROAD ROUNDABOUT			



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			Drawn	GB	10/07/2025	File No. 250708 Rosefield AIL tracking.dwg		
			Designed	GB	08/07/2025			
			Checked	SW	09/07/2025	Drawing Status Draft		
Client ROSEFIELD SOLARFARM LIMITED	Drawing Title CANDIDATE TRANSFORMER		Point of Interest		14			
			Drawing No. SK14	Notes: 1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only. 3. Do not scale from this drawing.			Revision 0	
Key Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location A421 / B4033 ROUNDABOUT							



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			Drawn	GB	10/07/2025	File No. 250708 Rosefield AIL tracking.dwg		
			Designed	GB	08/07/2025			
			Checked	SW	09/07/2025	Drawing Status Draft		
Client ROSEFIELD SOLARFARM LIMITED	Drawing Title CANDIDATE TRANSFORMER		Point of Interest		15			
			Drawing No. SK15		Notes: 1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only. 3. Do not scale from this drawing.		Revision 0	
Key Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location A421 / A413 ROUNDABOUT							

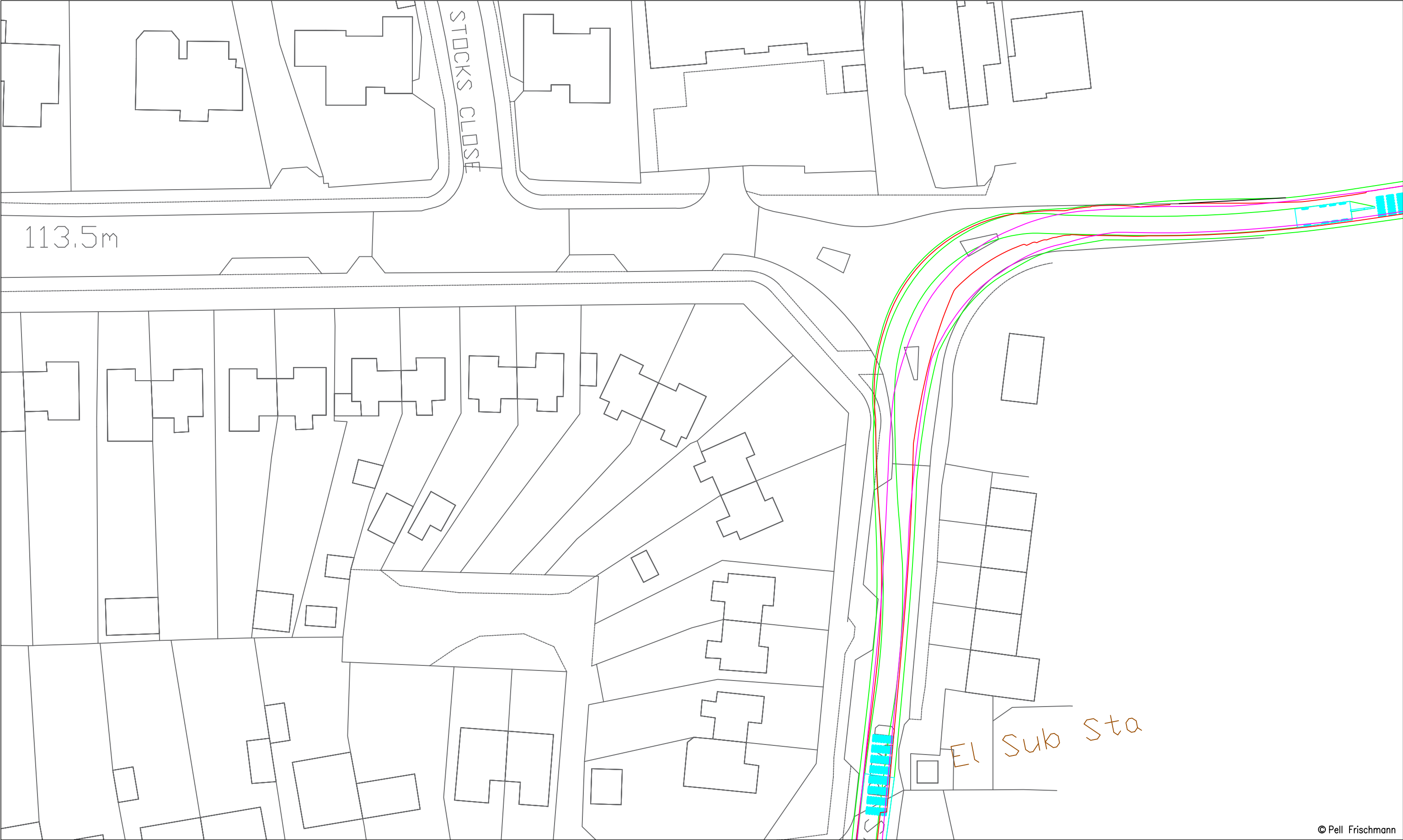


Pell Frischmann 93 GEORGE STREET, EDINBURGH, EH2 3ES Tel: +44 (0)131 240 1270 Email: pfedinburgh@pellfrischmann.com	Project		ROSEFIELD SOLAR FARM			Name	Date	Scale		1:1000 @ A3				
					Drawn	GB	10/07/2025	File No.		250708 Rosefield AIL tracking.dwg				
					Designed	GB	08/07/2025							
					Checked	SW	09/07/2025	Drawing Status		Draft				
Client	ROSEFIELD SOLARFARM LIMITED				Drawing Title		CANDIDATE TRANSFORMER		Point of Interest		16			
Key	Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location		A421 / LONDON ROAD ROUNDABOUT		Drawing No.		SK16		Notes:		Revision		
										1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only. 3. Do not scale from this drawing.		0		

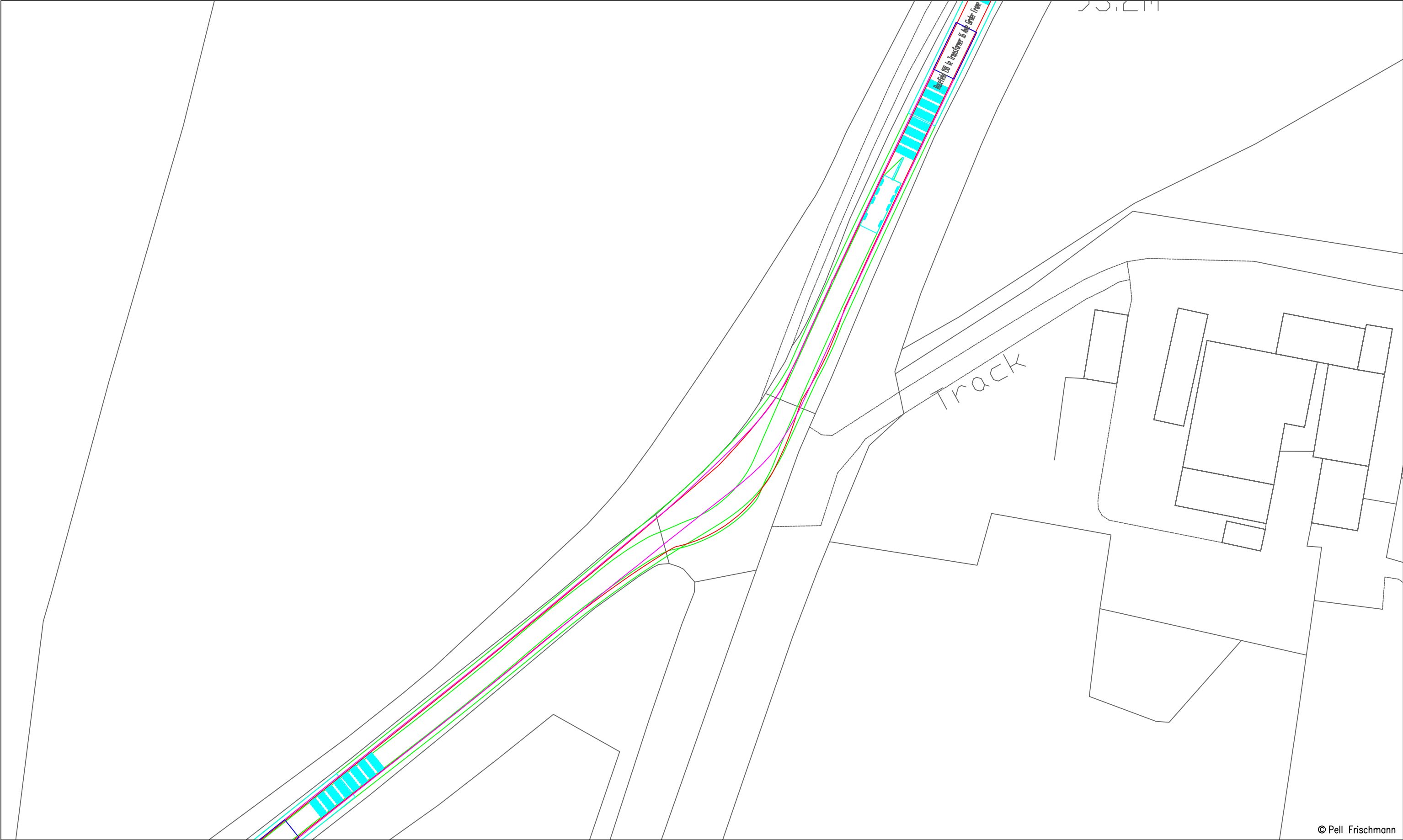


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					Drawn	GB	10/07/2025	File No. 250708 Rosefield AIL tracking.dwg				
					Designed	GB	08/07/2025					
					Checked	SW	09/07/2025	Drawing Status			Draft	
Client	ROSEFIELD SOLARFARM LIMITED		Drawing Title		CANDIDATE TRANSFORMER		Point of Interest		17			
							Drawing No.		Notes:		Revision	
Key	Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail		SPA Location		A421 / NEEDLEPIN WAY NORTHERN ROUNDABOUT		SK17		1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only. 3. Do not scale from this drawing.		0	



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					Drawn	GB	10/07/2025	File No. 250708 Rosefield AIL tracking.dwg							
					Designed	GB	08/07/2025								
					Checked	SW	09/07/2025	Drawing Status					Draft		
Client		ROSEFIELD SOLARFARM LIMITED		Drawing Title		CANDIDATE TRANSFORMER		Point of Interest		23					
Key Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail		SPA Location		VICARAGE ROAD / BURLEYS ROAD JUNCTION, WINSLOW		Drawing No.		Notes:		Revision					
						SK20		1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only. 3. Do not scale from this drawing.		0					



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				Drawn	GB	10/07/2025	1:500 @ A3		
				Designed	GB	08/07/2025	File No. 250708 Rosefield AIL tracking.dwg		
				Checked	SW	09/07/2025	Drawing Status		
Client	ROSEFIELD SOLARFARM LIMITED	Drawing Title	CANDIDATE TRANSFORMER	Point of Interest		24		Draft	
				Drawing No.	Notes: 1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only. 3. Do not scale from this drawing.			Revision	
Key	Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	GRANBOROUGH ROAD / EAST CLAYDON ROAD JUNCTION		SK21		0		



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				Drawn	GB	10/07/2025	1:500 @ A3	
				Designed	GB	08/07/2025	File No. 250708 Rosefield AIL tracking.dwg	
				Checked	SW	09/07/2025	Drawing Status	
Client	ROSEFIELD SOLARFARM LIMITED	Drawing Title	CANDIDATE TRANSFORMER	Point of Interest		25	Draft	
				Drawing No.	SK22	Notes: 1. All mitigation is subject to confirmation through a test run. 2. This is not a construction drawing and is intended for illustration purposes only. 3. Do not scale from this drawing.	Revision 0	
Key	Wheel SPA Body SPA Load SPA Indicative Over-run Over-sail	SPA Location	EAST CLAYDON ROAD AIL ACCESS JUNCTION					

Appendix D ESDAL Responses

From: Abnormal Loads - Milton Keynes Council
Sent: 25 January 2024 12:02
To: [REDACTED]
Subject: RE: East Claydon Transformer

Hi [REDACTED]
Sorry for the delay. We have reviewed the proposal and it appears acceptable.

When we know the dates of the movement we will need to run it past our streetworks team.

Regards

[REDACTED]
Senior Engineer Structures (Asset Mgt., Maint)
To speak to me use: Microsoft Teams or [REDACTED]
Milton Keynes City Council | Civic, 1 Saxon Gate East | Milton Keynes | MK9 3EJ
www.milton-keynes.gov.uk

From [REDACTED] On Behalf Of Abnormal Loads Enquiries
Sent: 26 January 2024 11:59
To: [REDACTED]
Subject: RE: East Claydon Transformer

Hi [REDACTED]
We have reviewed your notification, please find our report below.

Bridge: OXD/B/18
Address: Buckingham Road
City: Winslow
Easting/Northing: 476690 228346
[View on map](#)

Outcome: Our engineers have completed calculations based upon your proposed load and are unable to clear you to cross the above bridge. Please do not cross this structure.

We check the load carrying capacity of Network Rail owned road over rail bridges affected. We do not check anything else, including:

- * Load carrying capacity of level crossings
- * Clearance to bridge parapets
- * Clearance under a rail bridge
- * Clearance to overhead wires at level crossings

Many Thanks

[REDACTED]
Abnormal Loads Clerk
Abnormal Loads Help

ABNORMAL LOADS MANAGEMENT SERVICE

BUCKINGHAMSHIRE COUNCIL

Aylesbury Vale Area Office, Corrib Industrial Park, Griffin Lane, Aylesbury, Bucks HP19 8BP



**Transport for
Buckinghamshire**

Movement no 118081

Tel 01483 811822

Mail bucks@abloads.com

10/02/2024 14:37:46

To: Pell Frischmann for [REDACTED]

Email address:

Message copied to:

Haulier's reference and vehicle FEASIBILITY - M1 Jct11a to East Claydon, Winslow - Transformer - 4+16 axles
no: / (no vehicle reg'n no)

Origin / destination: M1 Jct11a to East Claydon Road, East Claydon, Winslow

Proposed first date of travel: 00:00:00 01/03/2024

**Movement no 118081: FEASIBILITY STUDY (COMPLETED) - PRIVATE & CONFIDENTIAL -
PRELIMINARY REPORT - M1 Jct11a to East Claydon, Winslow - Transformer - 4+16 axles**

Dear Sirs

FEASIBILITY STUDY (COMPLETED) - PRIVATE & CONFIDENTIAL - PRELIMINARY REPORT - M1
Jct11a to East Claydon, Winslow - Transformer - 4+16 axles

I acknowledge receipt of your FEASIBILITY movement notification as detailed above. Apologies for the delay in replying we don't appear to have received your original email of 27/11/23 which is strange as you're certainly in our database (I did some work with you in Essex CC for example).

Based purely on the vehicle configuration details you submitted AND CURRENT structural information available I am pleased to confirm that the FEASIBILITY notification regarding East Claydon, Winslow, has now been registered, structures checked, and, subject to the agreement of the Police and any other Bridge authorities involved, the movement may take place once you / or the Haulier has notified us.

PLEASE NOTE - This authority accepts that the abnormal load vehicle will proceed at REDUCED HEIGHT when passing under structures along the route where appropriate. Should height limits be included in this response they should only be referenced for guidance purposes and it should be noted that they are an indication of 'safe clearance'.

Under STGO legislation it is your / or the Hauliers responsibility to survey the route to ensure its complete suitability for the ACTUAL vehicle (paying particular attention to the height clearance of possible overhead obstacles) and RE-NOTIFY with full details at the time of travel in line with the Special Order process or DIRECTLY to THIS AUTHORITY.

Kind Regards

[REDACTED]

Abnormal Loads Manager

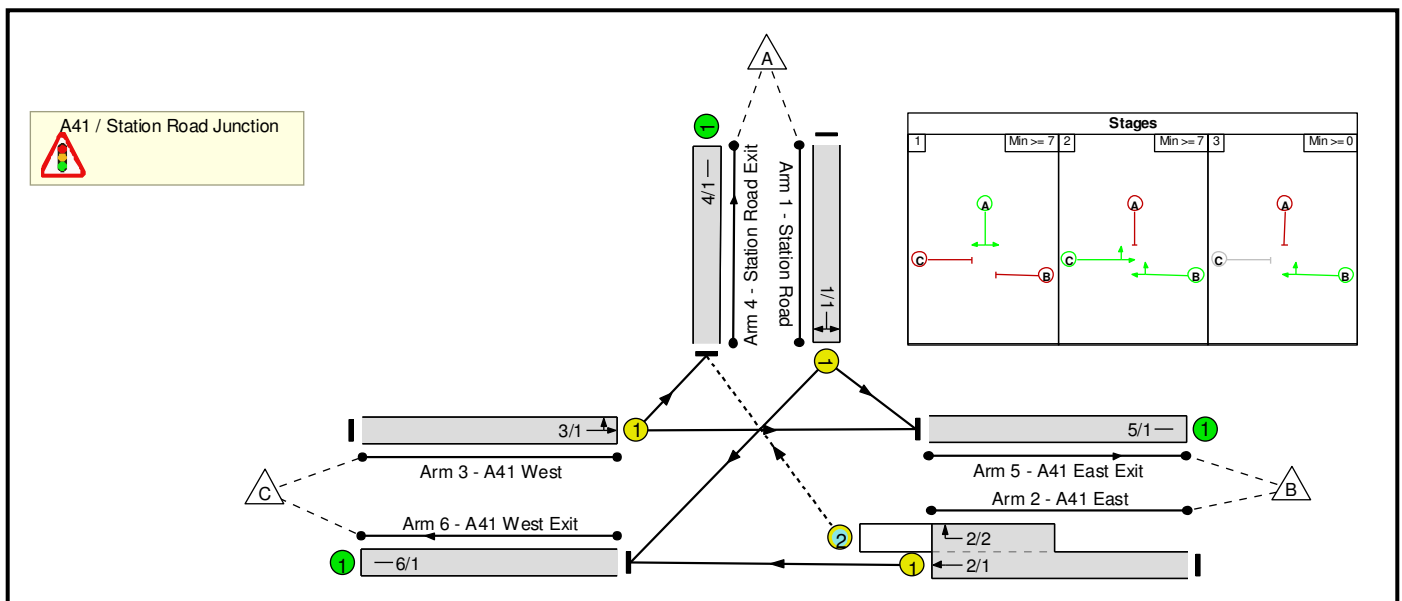
PLEASE NOTE - Buckinghamshire Council Abnormal Loads is now managed by Cascade's AbLoads Service. Roadworks are published on www.one.network and General 'Highways' queries should be directed to roadclosures@buckscc.gov.uk

Annex 4: LinSig Modelling

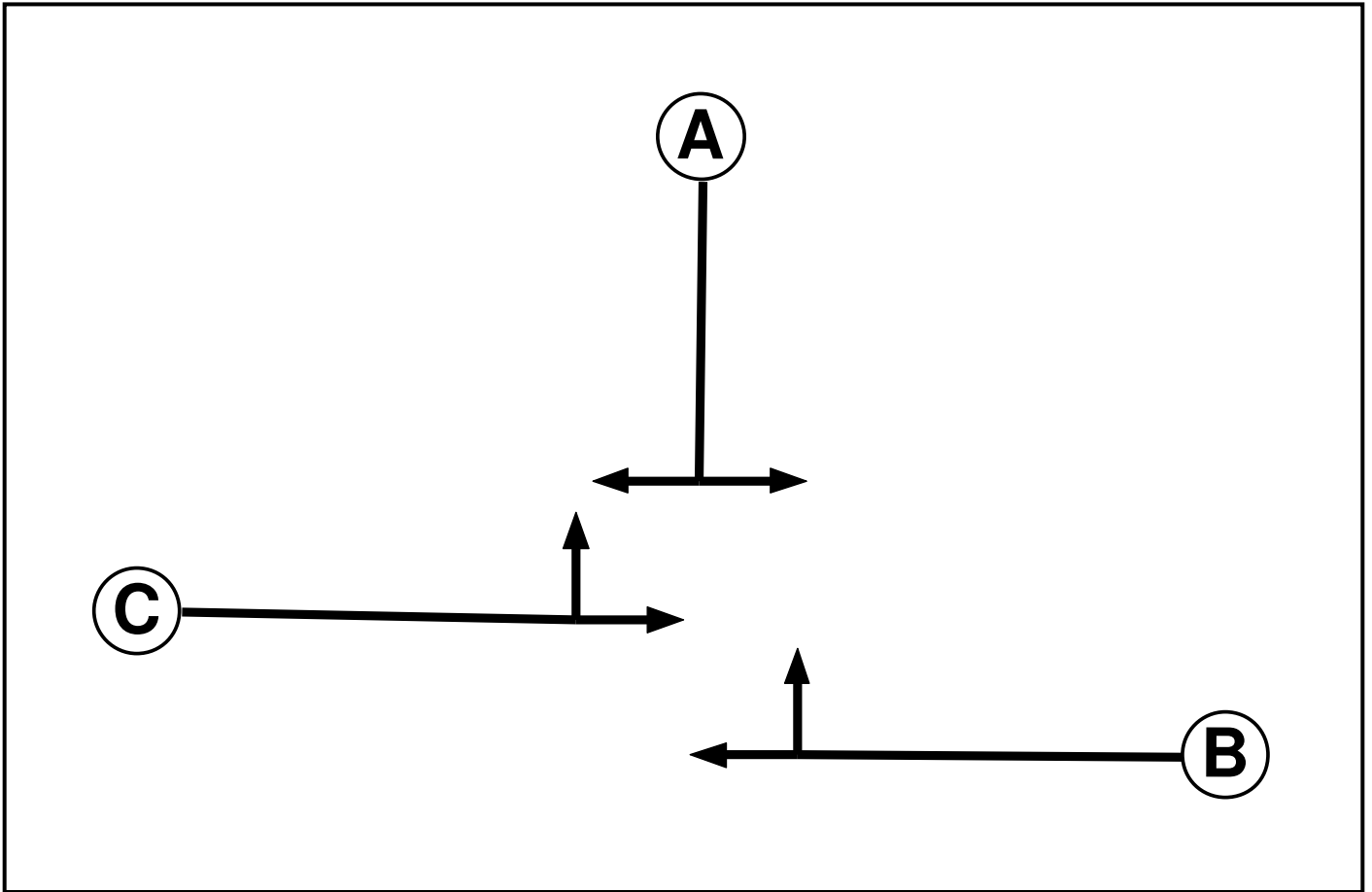
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Rosefield_A41-Station Rd Junction.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7

Full Input Data And Results

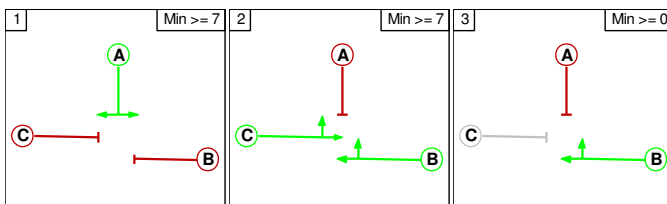
Phase Intergreens Matrix

Terminating Phase	Starting Phase			
		A	B	C
	A		5	5
	B	5		-
	C	6	-	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B C
3	B

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage			
		1	2	3
	1		5	5
	2	6		0
	3	5	2	

Give-Way Lane Input Data

Junction: A41 / Station Road Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/2 (A41 East)	4/1 (Right)	1439	0	3/1	1.09	All	4.00	-	0.50	4	2.00

Lane Input Data

Junction: A41 / Station Road Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Station Road)	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Left	12.00
											Arm 6 Right	20.00
2/1 (A41 East)	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Ahead	Inf
2/2 (A41 East)	O	B	2	3	6.8	Geom	-	3.20	0.00	Y	Arm 4 Right	Inf
3/1 (A41 West)	U	C	2	3	60.0	Geom	-	2.80	0.00	Y	Arm 4 Left	15.00
											Arm 5 Ahead	Inf
4/1 (Station Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (A41 East Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A41 West Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2029 AM (Incl Prison+Construction Traffic)'	08:00	09:00	01:00	
2: '2029 PM (Incl Prison+Construction Traffic)'	17:00	18:00	01:00	

Scenario 1: '2029 AM' (FG1: '2029 AM (Incl Prison+Construction Traffic)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	24	95	119
	B	33	0	685	718
	C	63	607	0	670
	Tot.	96	631	780	1507

Traffic Lane Flows

Lane	Scenario 1: 2029 AM
Junction: A41 / Station Road Junction	
1/1	119
2/1 (with short)	718(In) 685(Out)
2/2 (short)	33
3/1	670
4/1	96
5/1	631
6/1	780

Lane Saturation Flows

Junction: A41 / Station Road Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Station Road)	3.25	0.00	Y	Arm 5 Left	12.00	20.2 %	1788	1788
				Arm 6 Right	20.00	79.8 %		
2/1 (A41 East)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/2 (A41 East)	3.20	0.00	Y	Arm 4 Right	Inf	100.0 %	1935	1935
3/1 (A41 West)	2.80	0.00	Y	Arm 4 Left	15.00	9.4 %	1877	1877
				Arm 5 Ahead	Inf	90.6 %		
4/1 (Station Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A41 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A41 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2029 PM' (FG2: '2029 PM (Incl Prison+Construction Traffic)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

	Destination				
		A	B	C	Tot.
Origin	A	0	30	41	71
	B	16	0	510	526
	C	41	834	0	875
	Tot.	57	864	551	1472

Traffic Lane Flows

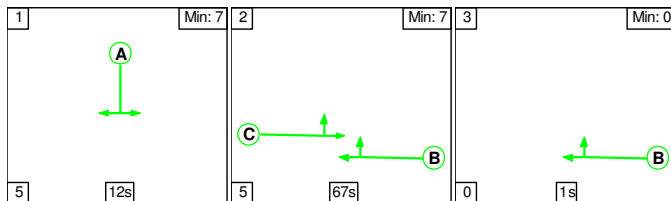
Lane	Scenario 2: 2029 PM
Junction: A41 / Station Road Junction	
1/1	71
2/1 (with short)	526(In) 510(Out)
2/2 (short)	16
3/1	875
4/1	57
5/1	864
6/1	551

Lane Saturation Flows

Junction: A41 / Station Road Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Station Road)	3.25	0.00	Y	Arm 5 Left	12.00	42.3 %	1770	1770
				Arm 6 Right	20.00	57.7 %		
2/1 (A41 East)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
2/2 (A41 East)	3.20	0.00	Y	Arm 4 Right	Inf	100.0 %	1935	1935
3/1 (A41 West)	2.80	0.00	Y	Arm 4 Left	15.00	4.7 %	1886	1886
				Arm 5 Ahead	Inf	95.3 %		
4/1 (Station Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A41 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A41 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2029 AM' (FG1: '2029 AM (Incl Prison+Construction Traffic)', Plan 1: 'Network Control Plan 1')

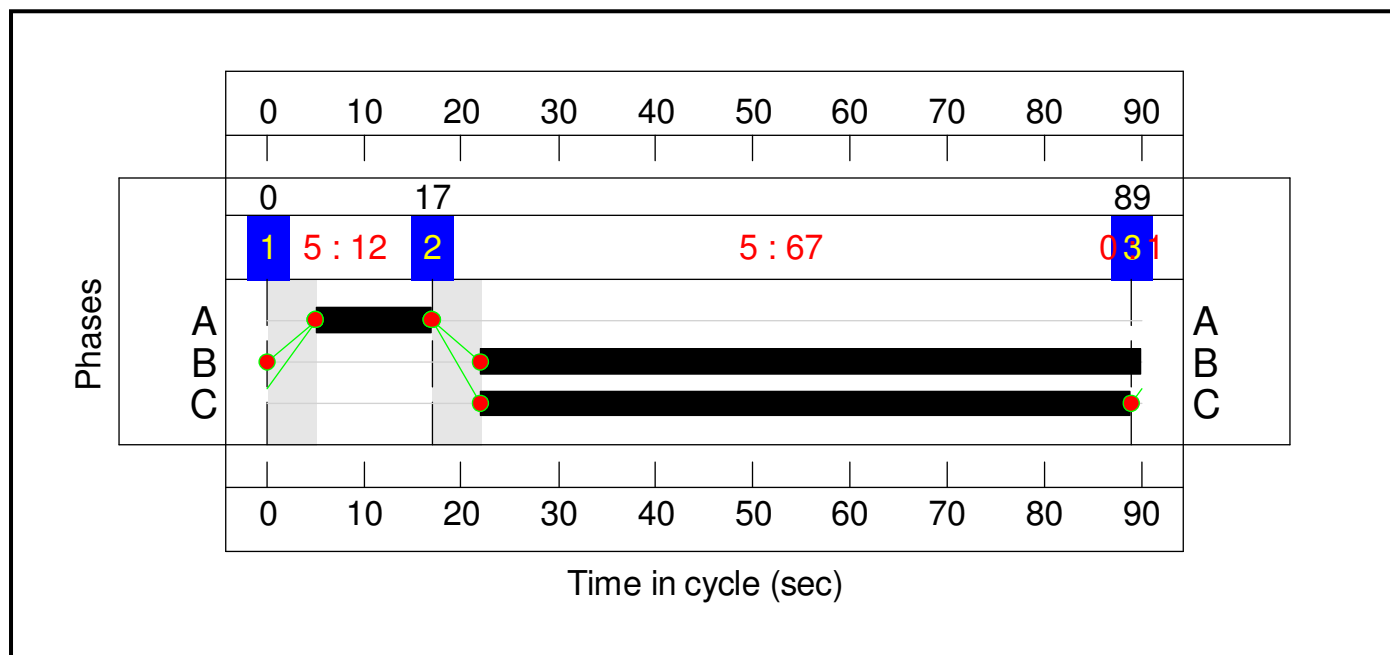
Stage Sequence Diagram



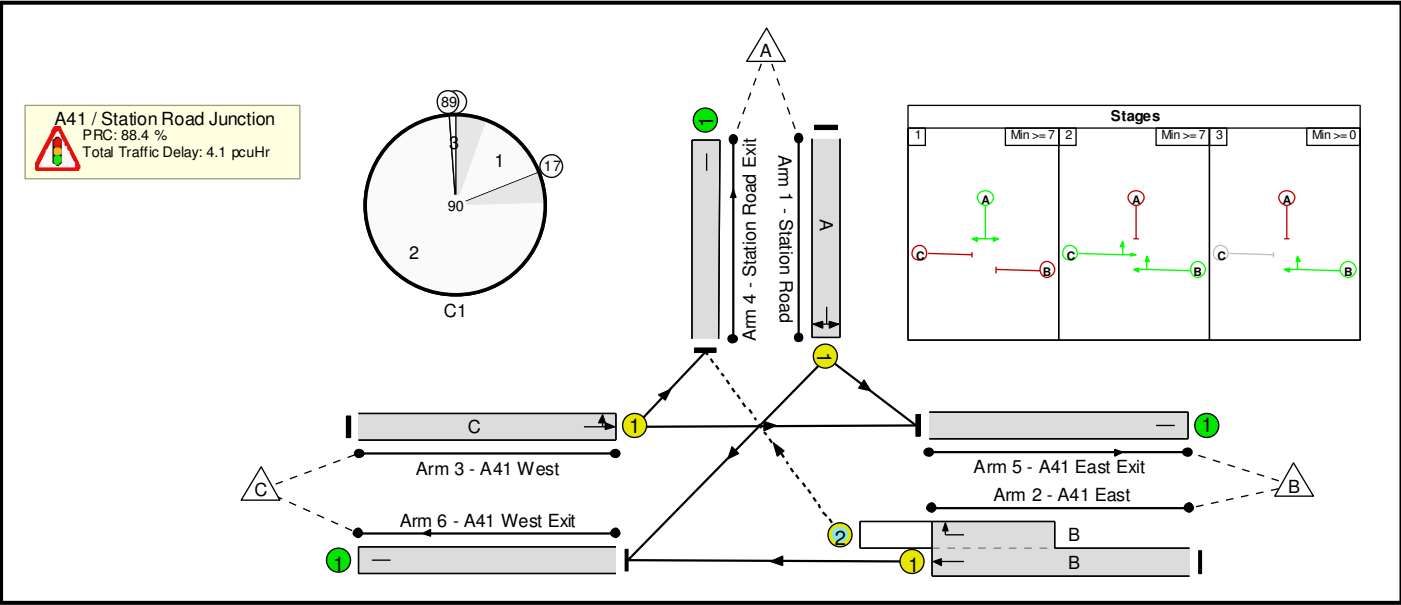
Stage Timings

Stage	1	2	3
Duration	12	67	1
Change Point	0	17	89

Signal Timings Diagram



Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	47.8%
A41 / Station Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	47.8%
1/1	Station Road Left Right	U	N/A	N/A	A		1	12	-	119	1788	258	46.1%
2/1+2/2	A41 East Right Ahead	U+O	N/A	N/A	B		1	68	-	718	1915:1935	1434+69	47.8 : 47.8%
3/1	A41 West Left Ahead	U	N/A	N/A	C		1	67	-	670	1877	1418	47.2%
4/1	Station Road Exit	U	N/A	N/A	-		-	-	-	96	Inf	Inf	0.0%
5/1	A41 East Exit	U	N/A	N/A	-		-	-	-	631	Inf	Inf	0.0%
6/1	A41 West Exit	U	N/A	N/A	-		-	-	-	780	Inf	Inf	0.0%

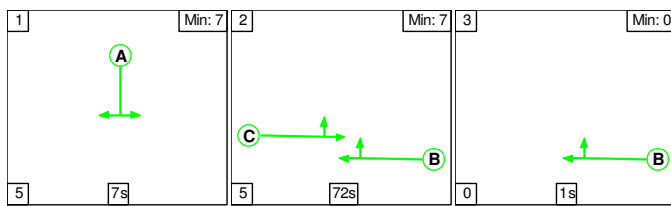
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	32	0	1	2.7	1.3	0.0	4.1	-	-	-	-
A41 / Station Road Junction	-	-	32	0	1	2.7	1.3	0.0	4.1	-	-	-	-
1/1	119	119	-	-	-	1.2	0.4	-	1.6	48.2	2.7	0.4	3.1
2/1+2/2	718	718	32	0	1	0.7	0.5	0.0	1.2	6.2	6.1	0.5	6.5
3/1	670	670	-	-	-	0.8	0.4	-	1.2	6.6	6.3	0.4	6.8
4/1	96	96	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	631	631	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	780	780	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 88.4 Total Delay for Signalled Lanes (pcuHr): 4.05 Cycle Time (s): 90 PRC Over All Lanes (%): 88.4 Total Delay Over All Lanes(pcuHr): 4.05													

Full Input Data And Results

Scenario 2: '2029 PM' (FG2: '2029 PM (Incl Prison+Construction Traffic)', Plan 1: 'Network Control Plan 1')

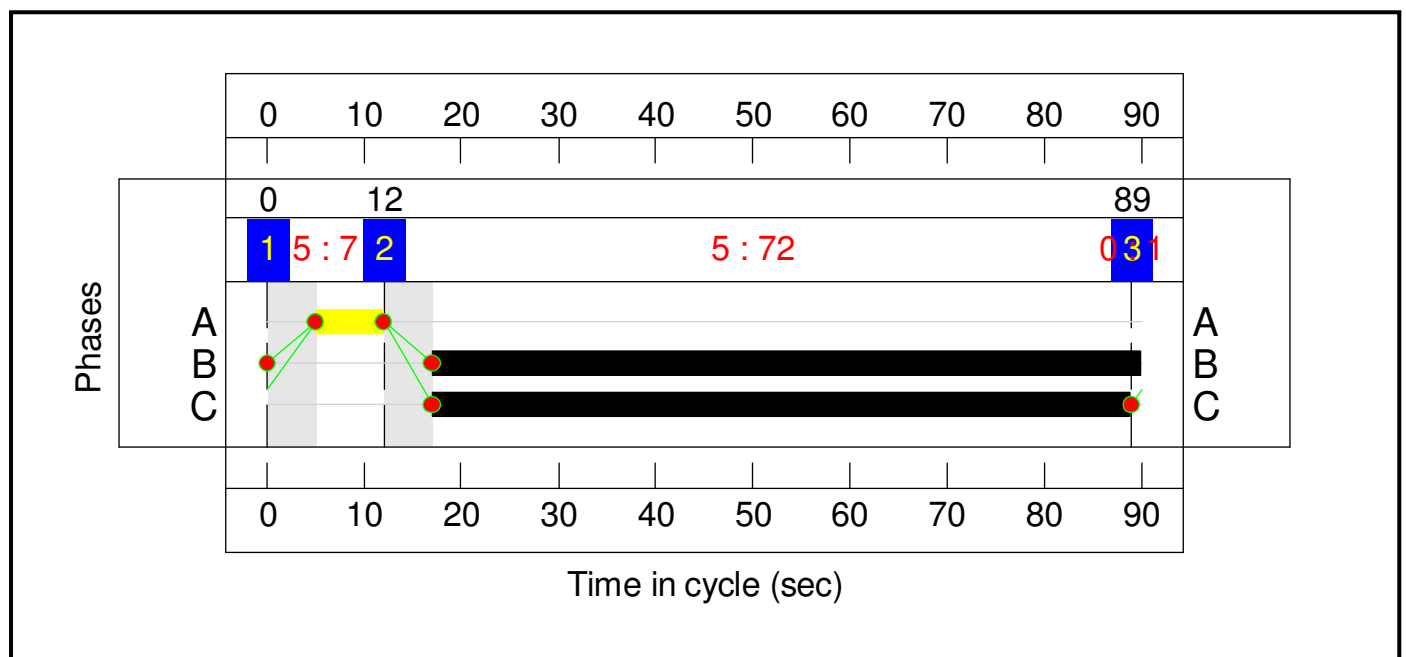
Stage Sequence Diagram



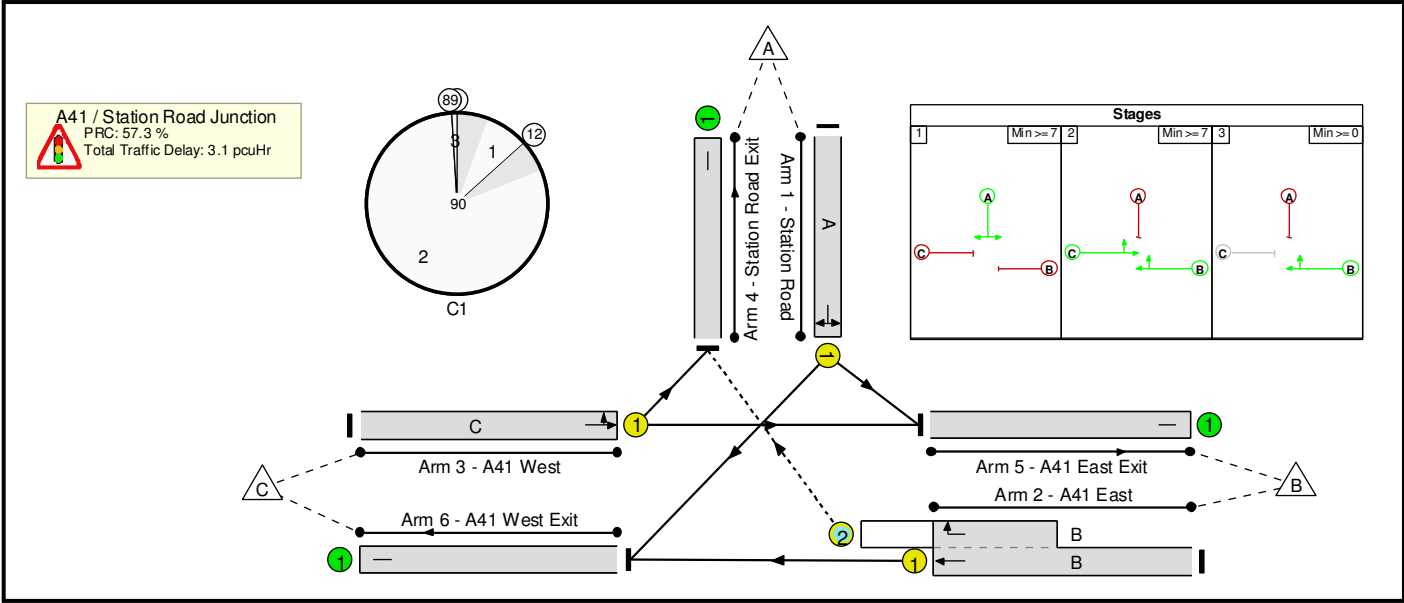
Stage Timings

Stage	1	2	3
Duration	7	72	1
Change Point	0	12	89

Signal Timings Diagram



Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Green s	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	57.2 %
A41 / Station Road Junction	-	-	N/A	-	-		-	-	-	-	-	-	57.2 %
1/1	Station Road Left Right	U	N/A	N/A	A		1	7	-	71	1770	157	45.1 %
2/1+2/2	A41 East Right Ahead	U+O	N/A	N/A	B		1	73	-	526	1915:1935	1556+49	32.8 : 32.8 %
3/1	A41 West Left Ahead	U	N/A	N/A	C		1	72	-	875	1886	1530	57.2 %
4/1	Station Road Exit	U	N/A	N/A	-		-	-	-	57	Inf	Inf	0.0%
5/1	A41 East Exit	U	N/A	N/A	-		-	-	-	864	Inf	Inf	0.0%
6/1	A41 West Exit	U	N/A	N/A	-		-	-	-	551	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Random + Oversat at Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Random + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	15	0	1	1.8	1.3	0.0	3.1	-	-	-	-
A41 / Station Road Junction	-	-	15	0	1	1.8	1.3	0.0	3.1	-	-	-	-
1/1	71	71	-	-	-	0.8	0.4	-	1.2	59.6	1.7	0.4	2.1
2/1+2/2	526	526	15	0	1	0.3	0.2	0.0	0.5	3.7	3.0	0.2	3.2
3/1	875	875	-	-	-	0.7	0.7	-	1.4	5.7	7.5	0.7	8.2
4/1	57	57	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	864	864	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	551	551	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Cycle Time (s):90 PRC for Signalled Lanes (%):57.3 PRC Over All Lanes (%):57.3 Total Delay for Signalled Lanes (pcuHr):3.11 Total Delay Over All Lanes(pcuHr):3.11													

Annex 5: Construction Access Review

Rosefield Solar Farm

Construction Access Review (Clean)

EN010158/APP/8.29.2
Revision 02
Deadline 5
July2026
Rosefield Energyfarm Limited



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Executive Summary

This document has provided further detail on the access strategy adopted for the Proposed Development.

A description of the access strategy has been provided along with a review of alternative access routes.

A traffic impact and focussed environmental review of two alternative access routes as proposed by TCS Bioscience Limited has been undertaken. Whilst additional mitigation can be provided, concerns about the practical access of HGV traffic in Winslow have been raised. This cumulative issue could present a risk to all road users.

A comparison between the proposed and alternative access route has been undertaken. Overall, the proposed access route is considered the most appropriate access route to site.

The use of the alternative access route would not preclude construction access associated with the construction of the proposed cable route. This would still require construction access from Granborough Road.

Details of biosecurity measures to protect livestock have been outlined. The Applicant is open on the exact detail of these measures and encourages discussion with all parties to identify suitable mitigation measures. Further biosecurity measures are provided in the **Outline Biosecurity Management Plan [EN010158/APP/8.39]**.

1. Introduction

1.1. Purpose of Report

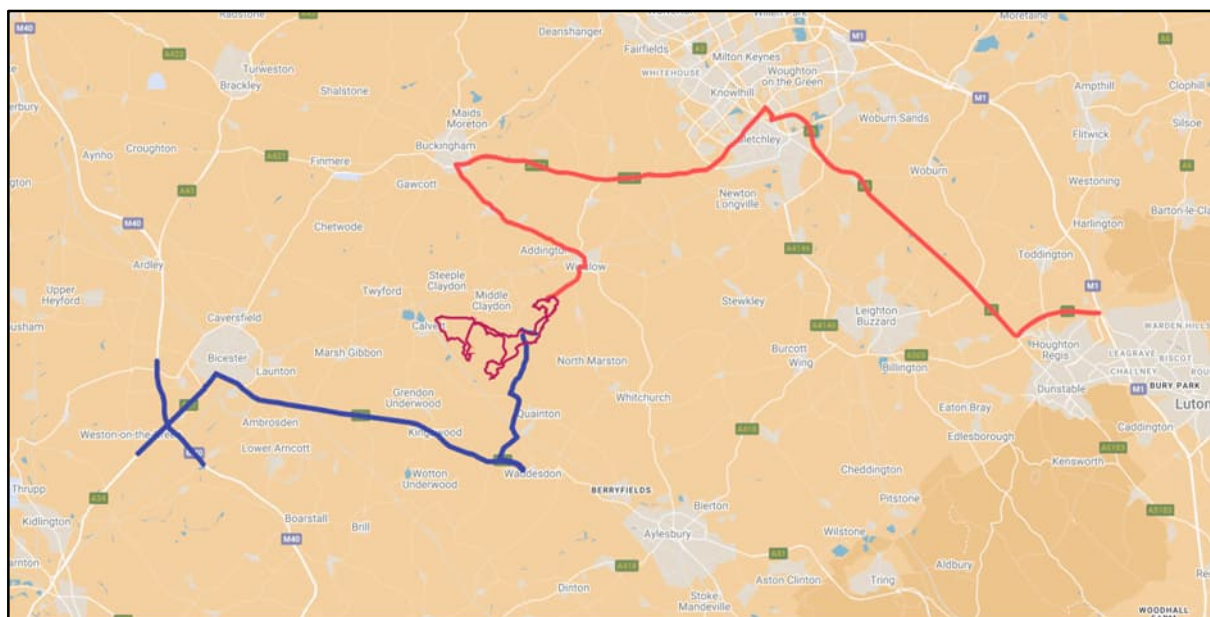
- 1.1.1. This Construction Access Review has been prepared on behalf of Rosefield Energyfarm Limited ('the Applicant') to review the construction transport access in relation to the Development Consent Order (DCO) Application for the construction and operation (including maintenance) of Rosefield Solar Farm (hereafter referred to as the 'Proposed Development').
- 1.1.2. This document has been updated at Deadline 5 and provides further details on alternative accesses following further engagement with TCS Biosciences Limited. References to other application documents have not been updated from the original submission. Please refer to the Guide to the Application **[EN010158/APP/1.2.11]** for the list of current versions of documents.
- 1.1.3. This document considers the proposed access route, the alternative access route raised by TCS Bioscience Limited (Ltd), proposed access management measures and suggested biosecurity measures.

2. Applicant's Proposed Access Strategy

2.1. Description of Route

- 2.1.1. All construction traffic, with the sole exception of Abnormal Indivisible Loads (AIL), is proposed to approach the Site from the A41, located to the south of the Proposed Development. Deliveries for construction materials will be made by Heavy Goods Vehicle (HGV) and Light Goods Vehicles (LGV).
- 2.1.2. Access from the A41 will be taken from South Station Road/Dews Way, Snake Lane/Fiddlers Field and Claydon Road. The proposed construction access route is illustrated in **Figure 1** (in blue) from the M40 corridor.
- 2.1.3. Construction traffic will originate from across the study area road network, with all traffic bypassing Bicester to the south. The Applicant's proposed access route avoids interaction with villages and urban areas and has been discussed and agreed with Buckinghamshire Council as the relevant highways authority.

Figure 1: Proposed Access Strategy



- 2.1.4. A principal access junction is to be built on Claydon Road, providing access to Parcels 1, 1a, 2 and 3 via a network of upgraded and new private access tracks.
- 2.1.5. Access to Parcel 3 will be taken from the south from a new junction on Granborough Road. This will be used by all construction traffic, with the sole exception of AIL traffic. AIL traffic is unable to use the A41 corridor due to a low rail bridge (to the north of Blackthorn). As such, the National

Highways High and Heavy Load route from Winslow, specifically designated to access the National Grid East Claydon Substation, is to be used.

- 2.1.6. It is expected that AIL traffic associated with the transport of Transformer components will commence from the M1 corridor and will proceed to the Site via Milton Keynes, Buckingham and Winslow. The AIL route is illustrated in red in **Figure 1**.

2.2. Abnormal Loads

- 2.2.1. As detailed above, AIL traffic will travel through to the Site using the National Highways High and Heavy Load route from Winslow.
- 2.2.2. It is expected that AIL traffic associated with the transport of Transformer components will commence from the M1 corridor and will proceed to the Site via the following route:
- Loads will depart the M1 at Junction 11a;
 - Loads will join the A5 and will bypass Dunstable before turning north on the A5;
 - Loads will depart the A5 at the Redmoor Roundabout and will join the A421 Grafton Street northbound;
 - At the junction of Grafton Street and Standing Way, loads will turn left and will proceed on the A421 Standing Way towards Buckingham;
 - At the A421/A413 Roundabout in Buckingham, loads will turn left and will proceed southbound towards Winslow;
 - In Winslow, loads will proceed southbound on High Street before turning right onto Vicarage Way;
 - At the roundabout of Vicarage Way/Burleys Road, loads will turn left and will continue south of Burleys Road/Granborough Road;
 - To the south of Winslow, loads will turn right onto East Claydon Road; and
 - Loads will continue westbound on East Claydon Road, with the Site access junction potentially located either to the west or east of the existing National Grid East Claydon substation.
- 2.2.3. A detailed Route Survey of the access route is provided within **ES Volume 4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4.2]**.

2.3. Barred routes

- 2.3.1. It is proposed that HGV traffic will not be allowed to travel through or access the Site passing through the following settlements:
- Botolph Claydon;

- East Claydon;
- Calvert;
- Steeple Claydon;
- Granborough;
- Quainton;
- Grendon Underwood;
- Edgcott;
- Marsh Gibbon; and
- Twyford.

2.3.2. Access routes through these settlements are not considered suitable for construction traffic (due to physical constraints, impacts on communities, sensitive receptors, etc) and traffic will be regulated and controlled to ensure that these routes are not used. Further details of the control measures are provided in the **Outline Construction Traffic Management Plan (Outline CTMP) [EN010158/APP/7.5.4]**.

2.4. Proposed operational and maintenance access strategy

- 2.4.1. During the operational phase of the Proposed Development, it is anticipated that the trip generation associated with maintenance will be minimal and that occasional access by LGV or 4x4 vehicles will be required.
- 2.4.2. The access route for operational traffic will be as per the construction access route.

2.5. Proposed decommissioning access strategy

- 2.5.1. At the end of the operational life of the Proposed Development, the Solar PV modules, BESS and all associated above ground equipment will be completely removed in line with a detailed Decommissioning Environmental Management Plan to be approved by the relevant authorities prior to the Site being restored.
- 2.5.2. At this stage, it is not possible to accurately forecast the traffic impacts during the decommissioning phase, as projections of the baseline data into the future will not be accurate.
- 2.5.3. The levels of traffic associated with the decommissioning of the Proposed Development will be less than that during construction since some of the below ground elements will be left in situ and the internal access tracks may be retained for use by the landowners, as detailed in a future detailed Decommissioning Environmental Management Plan which will include a Decommissioning Traffic Management Plan (DTMP) either as

part of the detailed Decommissioning Environmental Management Plan or as a stand-alone document.

- 2.5.4. The access route for decommissioning traffic will be as per the construction and operational access route.

2.6. Access Strategy Principles

- 2.6.1. The access strategy has been developed to provide an efficient and safe method of accessing the Site during all phases of the Proposed Development.
- 2.6.2. The principal considerations were:
- Providing a strategy that was safe for all road users and minimised interactions with vulnerable road users wherever possible;
 - Avoided bringing construction traffic through villages and built-up areas as much as possible;
 - Use the trunk and district distributor road network as far as possible before using unclassified roads;
 - Avoid passing sensitive receptors such as community halls, schools, hospitals, places of worship, retail areas, etc;
 - Avoided the need for significant environmental loss in the form of tree removal and hedge works;
 - Reduce the need for temporary works such as short-term tracks required to construct cable connections;
 - Provided close connectivity to the three land parcels to reduce unnecessary or long-distance travel between the development parcels;
 - Created a means of achieving a secure and discrete Construction (Design and Management) Regulations (CDM) works area; and
 - Avoided unnecessary impacts on local residents and businesses.
- 2.6.3. The proposed access route from the A41 fulfils these requirements in a more efficient manner than other access options that were considered.

2.7. Access Strategy Options

- 2.7.1. A number of alternative access options were considered and rejected based upon engineering, safety and access constraints, prior to considering the Stage 2 Design. These are summarised below in Table 2.1 with the reasons for not taking these options forward.

Table 2.1: Rejected Access Options

Ref No	Access Option	Reasons for Rejection
1	Access from the A41, but via Quainton and then proceeding via the proposed access route.	Potentially significant effects occurring in Quainton, a weak bridge on Station Road, impeding access, need for parking suspension in Quainton on Station Road and Lower Street, route passes two schools (Quainton CoE Combined School and Quainton Pre-school).
2	Access from the A41 to the east of Waddeston	Potentially significant effects occurring in Quainton and Waddeston, need for parking suspension in Quainton Lower Street, route passes two schools (Quainton CoE Combined School and Quainton Pre-school), impacts on users and businesses on Waddeston High Street.
3	Access from the A41 via Grendon Underwood, Edgcott and Calvert	Potentially significant effects occurring in Edgcott and Calvert. Use of the sinuous Edgcott Road by HGV traffic leading to a higher potential for road safety issues at bends. Cumulative traffic issues at Calvert.
4	Access from the A41 via the Greatmoor Energy from Waste access road	Unable to cross the HS2 construction area, preventing access during the construction and operational phases.

Ref No	Access Option	Reasons for Rejection
5	Access from the A41 via Marsh Gibbon and Steeple Claydon	Potentially significant effects occurring in Marsh Gibbon, Twyford / Charndon (depending upon route) and Steeple Claydon. Use of the sinuous roads in Marsh Gibbon by HGV traffic leading to a higher potential for road safety issues at bends.
6	Access from Aylesbury via Whitchurch and Winslow	Potentially significant effects in Whitchurch and Winslow. Concerns on the practical ability of prolonged two way HGV traffic to pass through Horn Street and Granborough Road (Winslow) due to geometric and parking constraints. Need for significant vegetation loss to form an access junction on East Claydon Road (as access via the National Grid East Claydon Substation is not available).

Ref No	Access Option	Reasons for Rejection
7	Access from Aylesbury via Whitchurch and Granborough	Potentially significant effects in Whitchurch, North Marston and Granborough. Concerns on the practical ability of prolonged two way HGV traffic to pass over the narrow, humped Claydon Brook bridge (to the north of Granborough). Need to widen the junction of Granborough Road (Winslow) and East Claydon Road to enable safe HGV access from the south. Need for significant vegetation loss to form an access junction on East Claydon Road (as access via the National Grid East Claydon Substation is not available).

Ref No	Access Option	Reasons for Rejection
8	Access from the A421 via Buckingham, Padbury and Winslow	Potentially significant effects arising in Padbury and Winslow. Route passes Padbury Pre-school and Padbury CE Primary School, Sir Thomas Freemantle School, Lond Road retail area (Buckingham) and Winslow High Street. The ability for repeat two-way HGV traffic passing through the junctions of High Street and either Vicarage Road or Horn Street in Winslow. Need for significant vegetation loss to form a two way access junction on East Claydon Road (as access via the National Grid East Claydon Substation is not available).

Ref No	Access Option	Reasons for Rejection
9	Access from the A421 via Buckingham, Padbury and Winslow via Furze Lane	Potentially significant effects arising in Padbury and Winslow. Route passes Padbury Pre-school and Padbury CE Primary School, Sir Thomas Freemantle School, Furze Down School and Lond Road retail area (Buckingham). The ability for repeat two-way HGV traffic passing through the junctions at either end of Furze Lane, Winslow. Need for significant vegetation loss to form a two-way access junction on East Claydon Road (as access via the National Grid East Claydon Substation is not available).

2.7.2. Route Options 8 and 9 are favoured by TCS Biosciences Ltd as raised at ISH1 and presented in Appendix F of their submission [\[REP3-067\]](#) and will be reviewed in further detail in the following chapters of this report.

2.8. Construction Traffic Generation

2.8.1. The traffic generation associated with the construction of the Proposed Development is detailed in **Chapter 5 of ES Volume 4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4.2]**. Please note all figures quoted in this report are two-way traffic flows.

2.8.2. The summary of the peak of construction traffic generation is summarised in **Table 2.2** below.

Table 2.2: Construction Peak Month Daily Traffic Flows

Ref No	Description	Cars & LGV	HGV	Total Traffic
1	A34	10	0	10
2	M40 North	10	18	28
3	M40 South	10	24	34

Ref No	Description	Cars & LGV	HGV	Total Traffic
4	A41	29	100	130
5	A41 Bicester	109	100	209
6	A41 West	109	138	247
7	A41 East	109	3	112
8	Station Road / Dewes Lane	218	141	359
9	Snake Lane / Fidlers Field	218	141	359
10	Claydon Road	218	141	359
11	Granborough Road	74	31	105

Please note that rounding errors may occur.

2.9. Operational Phase

2.9.1. During the operational phase, up to 24 LGV journeys per day are predicted to cater for cleaning of Solar PV panels and general site maintenance.

2.9.2. When longer term maintenance of equipment is required, HGV access will be necessary with up to 12 HGV trips potentially per day. The number of vehicle trips occurring during this phase will be well below the number of movements assessed for the construction phase and significantly below the overall IEMA guidance thresholds.

2.10. Decommissioning Phase

2.10.1. During decommissioning, the cabling, Solar PV modules, High Voltage (HV) equipment, foundations, etc. comprising the surface elements of the Proposed Development will be removed. Other elements such as sections of access tracks, access junctions, the grid connection ducting, landscaping, areas of ecological enhancement may be retained. The traffic generation associated with the decommissioning phase is therefore less than that associated with the construction phase.

2.11. Impact of Construction Traffic

2.11.1. The impact of construction traffic is assessed in **Chapter 5 of ES Volume 4, Appendix 15.1: Transport Assessment [EN010158/APP/6.4.2]**. The increase in traffic volumes is illustrated in percentage increases for each class of vehicle. This is illustrated in **Table 2.3**.

Table 2.3: Percentage Impact Summary

Ref No	Description	Cars & LGV	HGV	Total Traffic
1	A34	0.02%	0.00%	0.01%
2	M40 North	0.01%	0.12%	0.03%
3	M40 South	0.02%	0.31%	0.05%
4	A41	0.09%	4.58%	0.38%
5	A41 Bicester	0.49%	5.13%	0.88%
6	A41 West	0.96%	5.80%	1.88%
7	A41 East	1.06%	0.13%	0.93%
8	Station Road/Dewes Lane	25.88%	55.19%	32.72%
9	Snake Lane/Fidlers Field	234.59%	461.58%	290.87%
10	Claydon Road	17.12%	57.84%	23.68%
11	Granborough Road	27.32%	36.87%	29.56%

Please note that rounding errors may occur.

- 2.11.2. The highest total traffic movement increases occur on Station Road/Dewes Lane, Snake Lane/Fidlers Field and Granborough Road. This is expected, due to the relatively low baseline traffic flow on these roads.
- 2.11.3. With regards to Granborough Road, the increase in traffic will be 74 Car & LGV per day (37 inbound and 37 outbound), with the majority moving into the Site prior to 7am and departing after 7pm.
- 2.11.4. 31 HGV movements (16 inbound and 15 outbound) per day are anticipated. This equates to 2.5 HGV movements per hour, approximately one HGV every 24 minutes on Granborough Road.
- 2.11.5. To offset the impact of construction traffic on the road network, a series of measures are proposed through the **Outline CTMP [EN010158/APP/7.5.4]**. On Granborough Road, a series of minor road improvements are proposed in the form of corner widening and the provision of passing places.

2.12. Stakeholder Views on the Proposed Access Strategy

- 2.12.1. Engagement with National Highways and Buckinghamshire Council as the two relevant highway authorities has been undertaken. Both relevant highway authorities have been consulted on and have agreed the access strategy in principle, with respect to transport and access matters.
- 2.12.2. TCS Biosciences Ltd have objected to the proposed access from Granborough Road on the grounds that it may pose a risk to the quality of their biomedical products.

3. Review of TCS Biosciences' Ltd Alternative Access Route

3.1. Description of Alternative Access Route (Route 8)

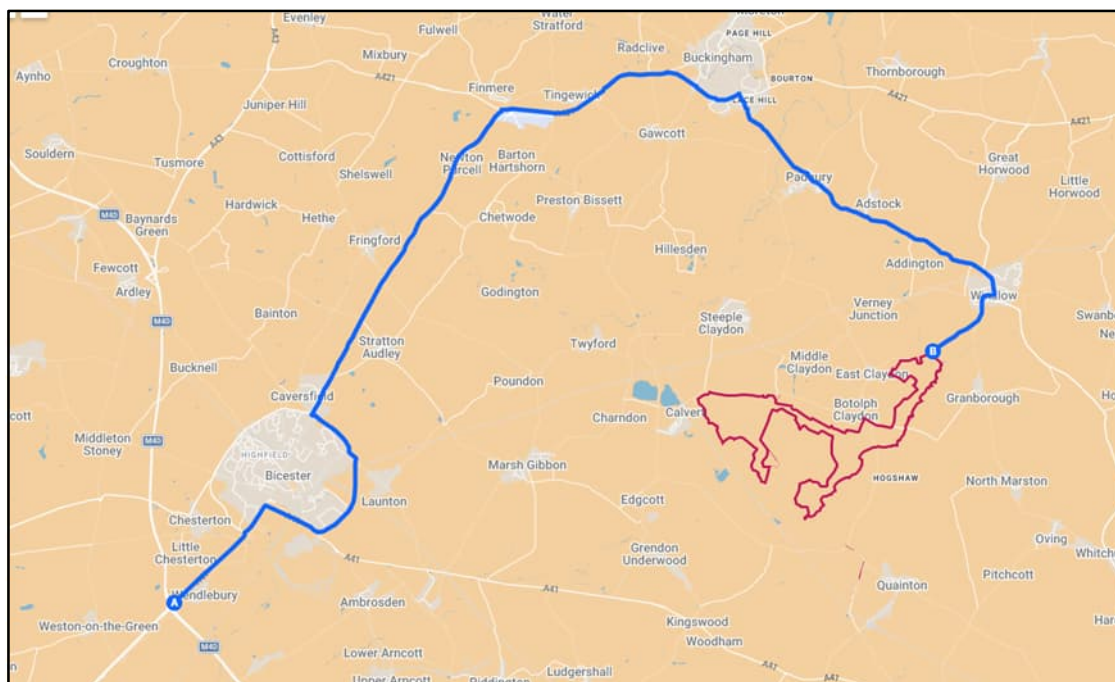
3.1.1. The alternative access route proposed by TCS Biosciences Ltd approaches the Proposed Development from the north and only accesses Parcel 3. In this scenario, access from the A41 would be maintained for access to Parcels 1, 1a and 2 via the proposed access route.

3.1.2. The alternative access route for Parcel 3 would be as follows:

- Depart the A41 at Bicester and proceed northbound on Wretchwick Way, Charbridge Lane and Skimmingdish Lane;
- Join the A4421 and proceed northbound, crossing HS2, through to the junction of the A421;
- Turn right onto the A421 eastbound, travelling into Buckingham;
- In Buckingham, turn right onto the A413, passing through the village of Padbury, before entering into Winslow;
- Proceed through Winslow, passing Sir Thomas Freemantle School, via Buckingham Road and the High Street;
- Turn right onto Vicarage Road, before turning left onto Burley Road. Proceed onto Granborough Road (Winslow) southbound; and
- Turn right onto East Claydon Road and proceed southwest prior to turning into the Proposed Development access junction.

3.1.1. The alternative access route is illustrated in **Figure 2** in blue. The Order Limits are illustrated in red.

Figure 2: Alternative Access Strategy



3.2. Traffic Impact of Alternative Access Review

- 3.1.3. A review of potential traffic impact has been undertaken for the alternative access route, using the peak construction traffic detailed in Table 2.2.
- 3.1.4. Traffic count data for the alternative access route has been collated from Department for Transport (DfT) resources and from the nearby Statkraft East Claydon Greener Grid Park application.
- 3.1.5. Baseline traffic flow data, factored to 2029 traffic flows is provided in Table 3.1 for the locations noted in **Figure 3**.

Table 3.1: 2029 Base Traffic Flows

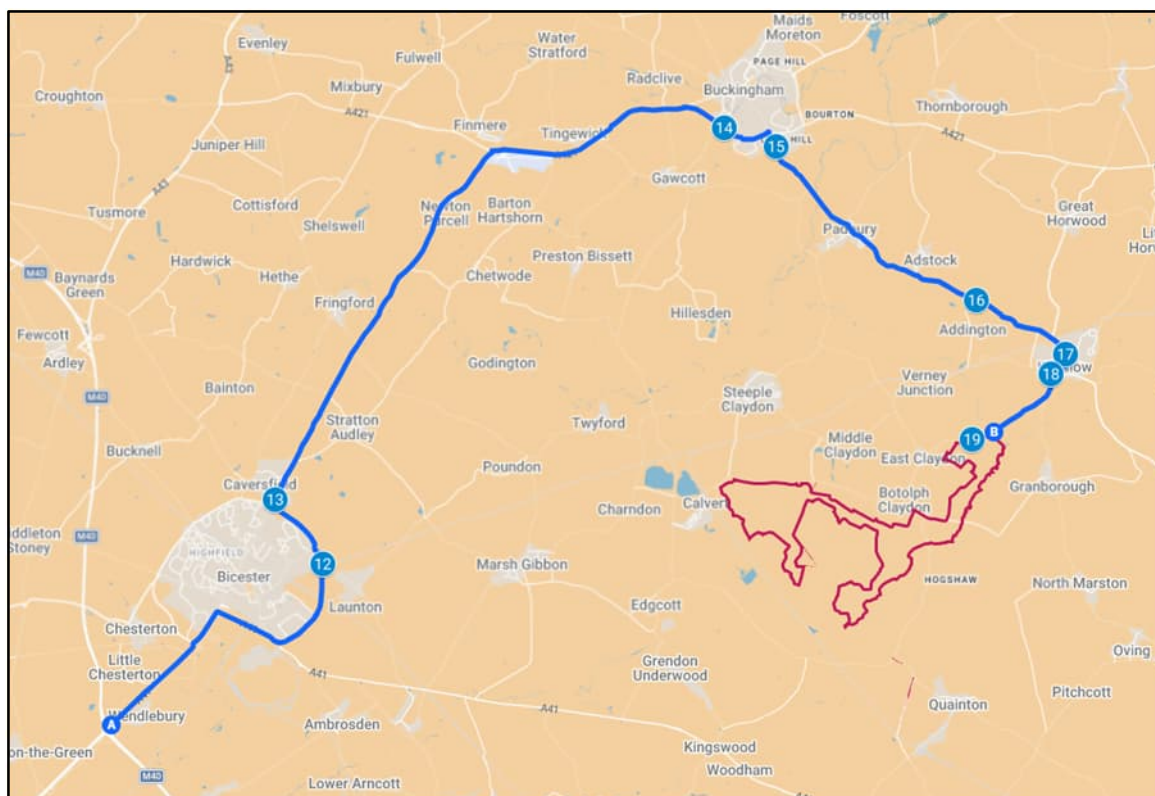
Ref No	Description	Cars & LGV	HGV	Total Traffic
12*	A4421 East of Bicester	12,118	725	12,843
13*	A4421 North of Bicester	13,330	733	14,064
14*	A421 Buckingham	25,345	1,570	26,915
15**	A413 London Road, Buckingham	9,614	421	10,034
16**	A413 between Padbury and Winslow	6,835	405	7,240

Ref No	Description	Cars & LGV	HGV	Total Traffic
17*	Winslow High Street	11,597	305	11,902
18**	Granborough Road (Winslow)	2,820	153	2,973
19**	East Claydon Road	1,405	61	1,465

* Data from the Department for Transport

** Data from East Claydon Green Grid Park

Figure 3: Count Site Location Plan



- 3.2. Further baseline data in the form of accident statistics for the alternative access route have also been obtained. The number, severity and location of accidents is considered to be average, although there is a cluster of accidents at the junction of the A421/London Road Roundabout in Buckingham, with nine recorded accidents in close proximity to the junction in the last five years.
- 3.3. Three accidents were clustered on bends on the A413 between Padbury and Winslow. One accident involved a fatality and involved a motorcyclist.
- 3.4. Recorded HGV accidents were generally low across the assessed area.
- 3.5. A review of the traffic impact associated with the alternative route has been undertaken and the results are summarised in Table 3.2.

Table 3.2: Predicted % increase in traffic volume during construction

Ref No	Description	Cars & LGV	HGV	Total Traffic
12	A4421 East of Bicester	0.61%	4.27%	0.82%
13	A4421 North of Bicester	0.56%	4.23%	0.75%
14	A421 Buckingham	0.29%	1.97%	0.39%
15	A413 London Road, Buckingham	0.77%	7.37%	1.05%
16	A413 between Padbury and Winslow	1.08%	7.65%	1.45%
17	Winslow High Street	0.64%	10.16%	0.88%
18	Granborough Road (Winslow)	2.62%	20.28%	3.53%
19	East Claydon Road	5.27%	51.21%	7.17%

Please note that rounding errors may occur.

- 3.2.1. A review of the likely effects associated with the alternative access route has been undertaken using the methodology outlined in **ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2]** [\[APP-058\]](#).
- 3.2.2. The sensitivity of receptors on the alternative access route has been estimated and is summarised in Table 3.3.

Table 3.3: Summary of receptor sensitivity (Route 8)

Receptor	Description	Reason
Users of Wretchwick Lane / Charbridge Lane / Skimmingdish Lane	Low	Where the road is Trunk or A-class, constructed to accommodate significant HGV composition.
Users of the A4421	Low	Where the road is Trunk or A-class, constructed to accommodate significant HGV composition.
Users of the A421	Low	Where the road is Trunk or A-class, constructed to accommodate significant HGV composition.

Receptor	Description	Reason
Users of the A431 in Buckingham	High	Where a location is a large rural settlement containing a high number of community and public services and facilities.
Users of the A431 between Buckingham and Winslow	Medium	Where the road is a local A or B class road, capable of regular use by HGV traffic. Includes roads where there is some traffic calming or traffic management measures.
Residents of Padbury / School Users	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Residents of Winslow / Shoppers and School Users	High	Where a location is a large rural settlement containing a high number of community and public services and facilities.
Granborough Road (Winslow) Users	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs. Includes roads with traffic control signals, waiting and loading restrictions, traffic calming measures.
Granborough Road (Winslow) Residents	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs. Includes roads with traffic control signals, waiting and loading restrictions, traffic calming measures.
East Claydon Road Users	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs. Includes roads with traffic control signals, waiting and loading

Receptor	Description	Reason
		restrictions, traffic calming measures.
East Claydon Road Residents	Low	Where a location includes individual dwellings or scattered settlements with no facilities.

- 3.2.3. An assessment using the Institute of Sustainability and Environmental Professionals (ISEP) (formerly Institution of Environmental Management and Assessment (IEMA)) Guidelines (2023), has been undertaken to inform a screening exercise to determine which links within the study area are to be considered for detailed analysis in the assessment:
- Rule 1: Include highway links where traffic flows are predicted to increase by more than 30% (or where the number of heavy goods vehicles (HGVs) is predicted to increase by more than 30%).
 - Rule 2: Include any other specifically sensitive areas where total traffic flows are predicted to increase by 10% or more.
- 3.2.4. Receptors that are classified as High or Medium have been considered against the ISEP rules noted above under Rule 2 where flows or HGV flows increase by more than 10%.
- 3.2.5. The process of review is the same as that described in **ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2]** [\[APP-058\]](#) and has considered the following potential effects:
- Severance;
 - Driver delay;
 - Pedestrian delay (incorporating delay to all non-motorised users);
 - Non-motorised user amenity;
 - Fear and intimidation;
 - Road safety;
 - Road safety audits; and
 - Large loads.
- 3.2.6. To address traffic impacts, the existing measures outlined in the **Outline CTMP [EN010158/APP/7.5.4]** would be implemented. In addition, the following further mitigation measures would be required:

- Inclusion of the alternative access route in the approved routes;
- Provision of additional road signage and public information along the alternative access route;
- A lowered speed limit in Padbury near the schools;
- A lowered speed limit outside Sir Thomas Freemantle School, Winslow;
- A lowered speed limit and potential additional crossing facilities on the High Street, Winslow;
- Traffic control to enable HGV access at the junction of High Street/Vicarage Road;
- Potential parking restrictions on Vicarage Road, Winslow to ease two-way traffic flows;
- Potential parking restrictions on Granborough Road (Winslow) to ease two way traffic flows; and
- Creation of a two way access junction on East Claydon Road.

3.2.7. A review of residual effects during the construction phase has been undertaken using the same process described in **ES Volume 2, Chapter 15: Transport and Access [EN010158/APP/6.2]** [\[APP-058\]](#). The residual effects are summarised in Table 3.4.

Table 3.4: Residual effects during construction

Receptor (sensitivity)	Magnitude of impact	Residual significance of effect	Effect duration
Users of the A431 in Buckingham (High)	Minor	Minor (Not significant)	Temporary during construction
Users of the A431 between Buckingham and Winslow (Medium)	Minor	Minor (Not significant)	Temporary during construction
Residents of Padbury / School Users (Medium)	Minor	Minor (Not significant)	Temporary during construction
Residents of Winslow / Shoppers and School Users (High)	Minor	Minor (Not significant)	Temporary during construction

Receptor (sensitivity)	Magnitude of impact	Residual significance of effect	Effect duration
Granborough Road (Winslow) Users (High)	Minor	Minor (Not significant)	Temporary during construction
Granborough Road (Winslow) Residents (High)	Minor	Minor (Not significant)	Temporary during construction
East Claydon Road Users (High)	Minor	Minor (Not significant)	Temporary during construction

3.2.8. The addition of further mitigation measures, secured under an extended Outline Construction Management Plan, could mitigate the potential effects, should these be agreed by Buckinghamshire Council as local highway authority and depending upon the infrastructure requirements highlighted in later sections of this report.

3.3. Cumulative Impact of Alternative Access Route (Route 8)

3.5.1. There are a number of cumulative projects that will interact with traffic if the alternative construction route were to be used. These include, but are not limited to:

- East Claydon Greener Grid Park (Statkraft);
- East Claydon Battery Storage System (Statera);
- East Claydon Substation (National Grid) – expected to be submitted in late 2026 / 2027; and
- Tuckey Solar Farm (Elgin Energy).

3.5.2. Whilst road capacity to accommodate these schemes will exist, joint traffic management measures will be necessary to manage competing HGV traffic flows, which will have a noticeable presence on Winslow High Street, Vicarage Road, Granborough Road (Winslow) and East Claydon Road, potentially resulting in additional air quality and noise effects.

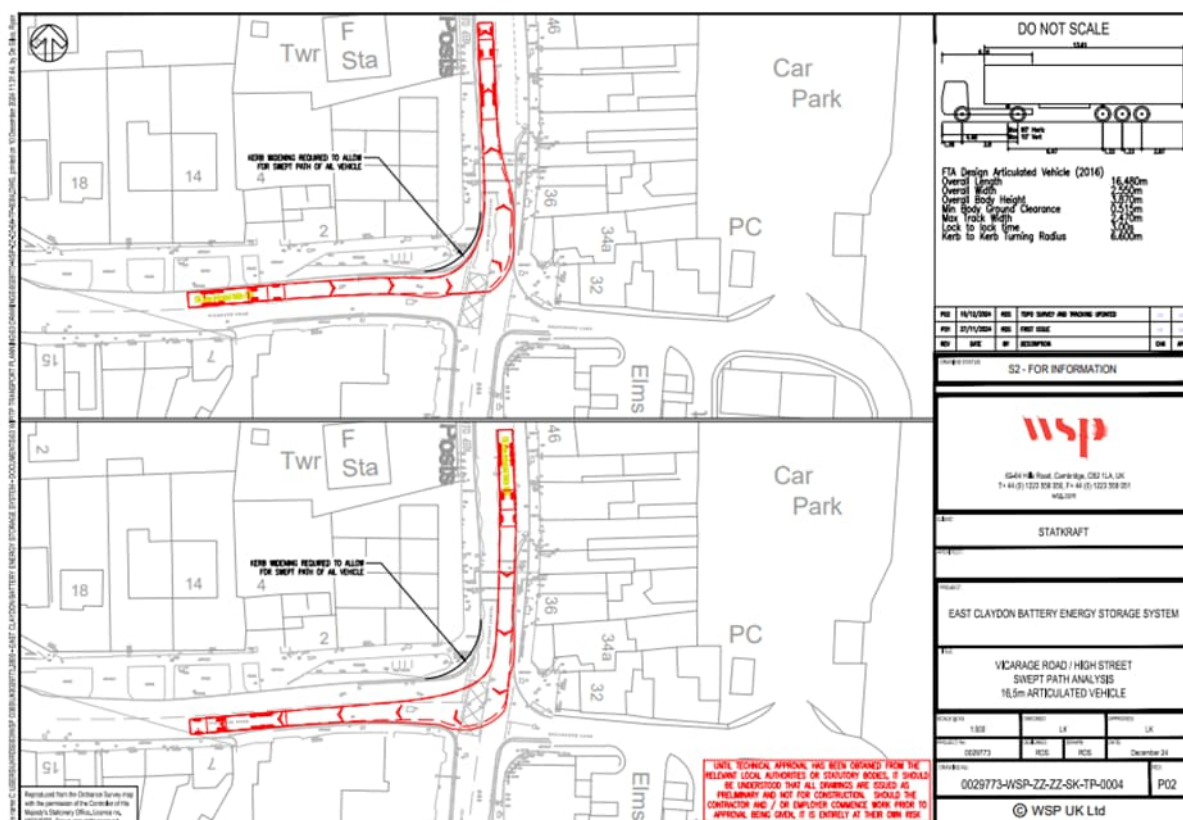
3.5.3. It is important to note that the cumulative schemes noted above **have no other alternative route** due to their location or AIL requirements and have to pass through Winslow to gain access to their respective sites. None of these schemes has an opportunity to access from the south via the A41 as the Proposed Development has.

- 3.5.4. Careful consideration of traffic management measures across all consented schemes will be required and it may be necessary to stagger some of the construction periods to cater for their respective uses (with respect to AIL and bulk load HGV access). The Applicant has committed to ongoing engagement with all relevant schemes and has signed a **Statement of Common Ground with HS2 [EN010158/APP/5.19] [APP1-130]** to that effect.
- 3.5.5. Given that the UK Government and Buckinghamshire Council have both declared climate emergencies, delays to the implementation of these schemes would be contrary to this agreed policy position.

3.4. Infrastructure Requirements of Alternative Access Review

- 3.5.6. A review of the alternative access route has been undertaken to consider the need for additional infrastructure works.
- 3.5.7. A review of the junction of High Street/Vicarage Road in Winslow has been undertaken considering articulated HGV traffic at the junction. Swept path assessments have noted that HGV traffic turning left from Vicarage Road onto the High Street require access to both traffic lanes, reducing the capacity of the road network and necessitating a corner modification as illustrated in the drawing extract from The East Claydon Greener Grid Park (Statkraft) Construction Traffic Management Plan provided in **Figure 4**.

Figure 4: Swept Path Assessment Plan



- 3.5.8. The proposed junction widening would not remove the need for HGV traffic to cross both lanes at this central junction and in close proximity to a pedestrian crossing. The movement through this junction remains a potential health and safety risk. Whilst it can be managed via traffic management, potentially involving banksmen, it is more preferable to design out the risk. The only effective way of undertaking this is to use the proposed access route that completely avoids construction traffic passing through Winslow.
- 3.5.9. A temporary traffic control system involving revised traffic signals could be installed, however this would reduce pedestrian accessibility and increase delays in Winslow. Not having a suitable control could lead to a detrimental impact on road safety, questioning the ability of multiple projects using the junction for daily, sustained HGV deliveries.
- 3.5.10. The alternative access route would require a different access junction on East Claydon Road, designed to accommodate two-way HGV flows and junction visibility splays. A junction layout plan has been developed and is provided in **Appendix A**.
- 3.5.11. The junction design will require the removal of up to two trees and the removal of up to 140m of hedgerows as illustrated in **Figure 5** below.

Figure 5: Approximate Area of Vegetation Loss



- 3.5.12. The vegetation loss would be permanent to accommodate the construction, operational and decommissioning phases of the Proposed Development, should the alternative access route be used. The extent of the removal is significantly more than that associated with the proposed AIL only access junction.

3.5. Cabling Access and the Alternative Access Route

- 3.5.1. The alternative access route would not remove the need for construction access on Granborough Road. An access junction would still be required to enable the formation of a temporary access track and cable trench to enable the installation of the cable corridor from Parcels 1 and 2 to the Rosefield Substation and then onto the National Grid East Claydon Substation connection point.
- 3.5.2. The creation of two construction access points at either end of the parcel is not considered sustainable or efficient as it will still require access from Granborough Road and potentially lead to the risks noted by TCS Biosciences Ltd and as well as resulting in wasted materials necessary in forming the cable works. This will increase carbon emissions associated with these temporary works.

3.6. Operational Access

- 3.6.1. Access between Parcels 1 & 2 and Parcel 3 would result in a 33.1-mile-long journey if either of the two alternative access routes are used. This is neither efficient in time nor in transport carbon production and would not preclude HGV access through Winslow during the operational phase.

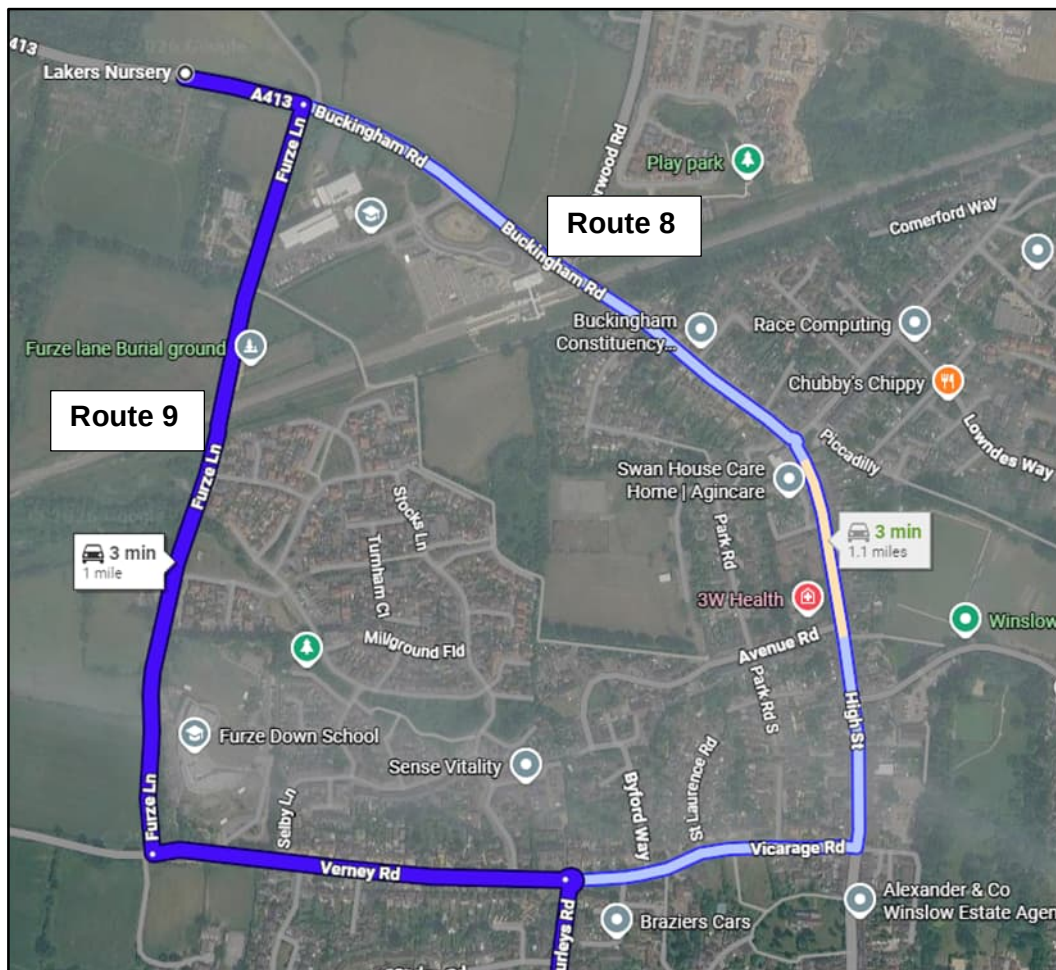
3.7. Review of Route 9

- 3.7.1. In further discussion with TCS Biosciences held at their offices on 21 July 2026, a further alternative route was tabled by TCS Biosciences. This

route is similar to Route 8, but with traffic using Furze Lane in Winslow, rather than the High Street.

3.7.2. The proposed route revision is illustrated in Figure 6.

Figure 6: Furze Lane Route



3.7.3. This route was not originally considered in the original submission stage as sections of the road were being reconstructed as part of the East – West Rail project. These works have since been completed and a reconstructed road bridge and localised road widening have been completed.

3.7.4. A review of the route was undertaken on the afternoon of 21 July 2026. This noted the following:

- The route does allow traffic to bypass the High Street in Winslow;
- The route passes Sir Thomas Freemantle School (secondary school), Furze Lane Burial Ground, Furze Down School (special educational

school) and residential properties on Verney Road. All are considered to be potentially significant receptors, especially Furze Down School;

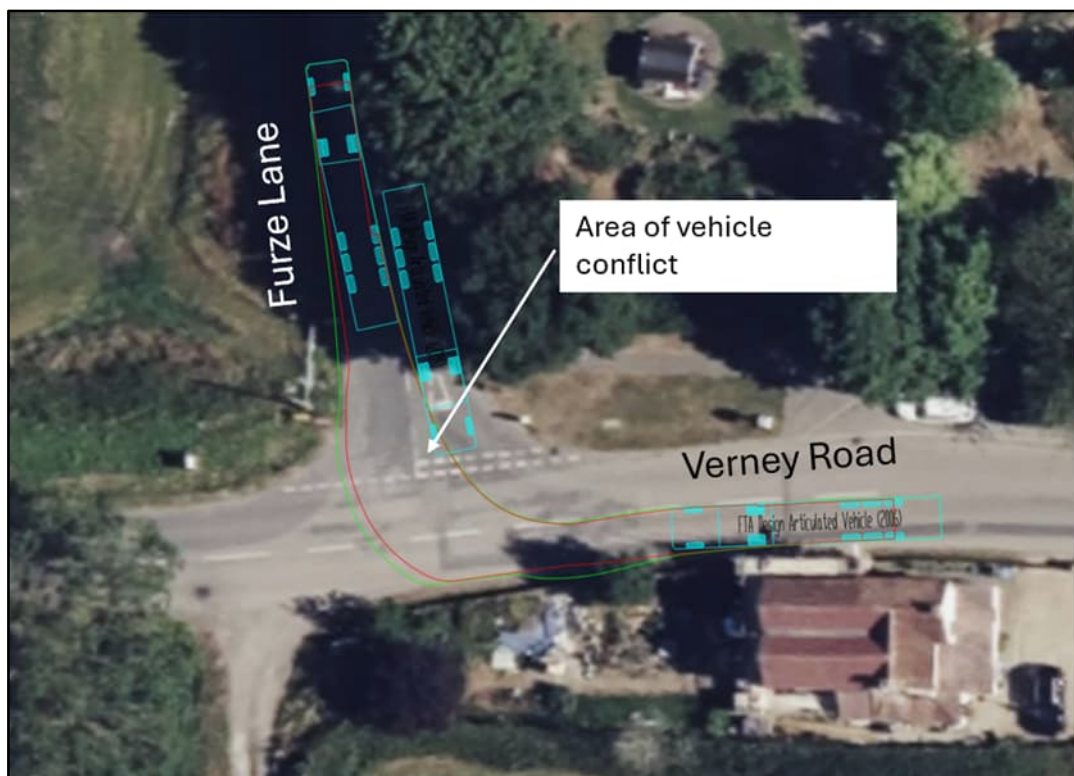
- The access junctions of the A413/Furze Lane and Furze Lane/Verney Road are considered to be constrained for HGV traffic; and
- Furze Lane varies in its length and only allows one traffic lane over the railway bridge under signal control. Other smaller sections of road do not allow for free two-way traffic movement.

3.7.5. A review of the ability for HGV traffic to pass each other at the two access junctions has been undertaken and the results noted in Figures 7 and 8 for the A413 and Verney Road junctions respectively.

Figure 7: A413 / Furze Lane Junction HGV Swept Path



Figure 8: Furze Lane / Verney Road Junction HGV Swept Path



- 3.7.6. Both Figure 7 and Figure 8 indicate that two-way HGV traffic is not able to move past each other at both junctions. This significantly limits the ability of Furze Lane to accommodate HGV traffic and the suitability of this route for construction traffic.
- 3.7.7. The proposed alternative route via Furze Lane has only been raised since Deadline 4. It has not been raised in earlier sessions by either Buckinghamshire Council or TCS Biosciences Ltd. Indeed, TCS Biosciences Ltd has maintained a position in Issue Specific Hearing 3 (ISH3) that the route via the High Street is a valid and approved route. This has since been shown to be an incorrect assumption.
- 3.7.8. The route via Furze Lane is not considered a viable route. It is not proposed for use by any of the other projects in the area including the consented Statera Energy, Tuckey Farm Solar Farm or Statkraft Greener Grid Park.
- 3.7.9. Whilst the Furze Lane route may have been used by some East – West Rail project traffic, it is not suitable for HGV traffic associated with the Proposed Development for road safety grounds at the two junctions. It still passes sensitive receptors, including a special educational needs school.

- 3.7.10. The Applicant does not consider that further consideration of this route is required, a view shared by other construction projects in the vicinity of the Proposed Development.

4. Comparison of Proposed and Alternative Access Routes

- 4.1.1. A comparison between the access routes has been undertaken to provide a comparison specifically on the Granborough Road access element using the access criteria detailed in Chapter 2 and general characteristics of the route.
- 4.1.2. The comparison is provided in Table 4.1 with a Red / Green summary noting if the alternative access route is either negative or positive when compared to the proposed access route.

Table 4.1: Access Comparison Summary

Criteria	Proposed Access Strategy	Alternative Access Strategy (Options 8 & 9)	Difference (Positive / Negative)
Length (From Bicester)	14.2 miles	20.1 miles	Negative
Settlements Affected (From Bicester)	1 (Kingswood)	3 (Buckingham, Padbury & Winslow)	Negative
Distance travelled on non -A Roads	5.2 miles	1.9 miles	Positive
Number of Sensitive Receptors Passed (From Bicester) including schools, places of worship, retail areas, etc	7	14	Negative
Distance travelled between Parcels 1&2 to Parcel 3 for construction and operational phase traffic	0.6 miles	33.1 miles	Negative
Loss of vegetation (parcel 3 only)	AIL access & Granborough Rd Junctions (hedgerow sections)	East Claydon Road & Granborough Rd Junctions (Hedgerow sections and two trees). Works also located closer	Negative

Criteria	Proposed Access Strategy	Alternative Access Strategy (Options 8 & 9)	Difference (Positive / Negative)
		to Claydon Brook watercourse	Negative
Removal of abortive works	No abortive works	Removal of cabling track and Granborough Rd Access junction	
Need for off-site works	Passing places on Granborough Rd.	Passing places on Granborough Rd, parking suspensions in Winslow and High Street / Vicarage Road junction works.	Negative
Need for mitigation measures	Outline CTMP report as published.	Outline CTMP report + additional measures outlined in this review	Negative
Ability to control in one CDM area	None – Site designed to operate as one	Two effective sites created with a 33.1 mile journey between them (travelling from East Claydon Junction to Main Site Access Junction).	Negative
Direct Business Impacts	Impact on TCS	Temporary impact on TCS	Negative

Criteria	Proposed Access Strategy	Alternative Access Strategy (Options 8 & 9)	Difference (Positive / Negative)
	Biosciences Ltd and agricultural users of Granborough Road	Biosciences Ltd, agricultural users of East Claydon Road and businesses in Winslow affected by parking restrictions and delays caused by cumulative HGV movements and agricultural users of Granborough Road	Negative
Cumulative Issues with other Projects / Consents	None on Granborough Road	Interactions with up to four energy projects on East Claydon Road alone. Excludes HS2 and EWR 2.	

- 4.1.3. The comparison table illustrates that the proposed access route is more appropriate than the alternative access route, based upon the balance of all relevant considerations. To assist TCS Biosciences Ltd and the Examining Authority to further consider the access arrangements that affect the fields of interest to TCS Biosciences Ltd, the following sections of this report detail how traffic can be separated from the livestock to further promote safe access and biosecurity.

5. Proposed Access Management and Transport Biosecurity Measures

5.1. Experience from Other Sites

- 5.1.1. EDF and PS Renewables are not aware of any instances where construction works associated with the construction of one of their solar, battery or wind farm sites has resulted in farm animal injury or distress.
- 5.1.2. Engagement with the trade bodies is ongoing to ascertain if such incidents have been recorded on other developer sites and what enhancements can be used to present TCS Biosciences Ltd the best possible measures to protect their livestock and business interests, whilst also accommodating access to the Proposed Development.

5.2. Public Road Access Management Strategy

- 5.2.1. As agreed with Buckinghamshire Council, a safe crossing point for livestock will be provided on Granborough Road to provide a safe and secure means of crossing the public road that TCS Biosciences Ltd currently does not have.
- 5.2.2. This will enable livestock to cross the road at the existing crossing points identified by TCS Biosciences Ltd without interference from construction or any other vehicular traffic / other road users.
- 5.2.3. The location of the proposed access junction does not interfere with access to the existing silage clamp facility. The junction is located to the east of the facility and has a separate access junction.
- 5.2.4. As secured in the Outline CTMP, biosecurity measures relevant to construction traffic will be developed in accordance with the **Outline Biosecurity Management Plan [EN010158/APP/8.39]**.
- 5.2.5. The Applicant has noted that the existing silage clamp is currently unsecured and is accessible to anyone on Granborough Road. The Applicant is willing to assist TCS Biosciences Ltd to make the facility more secure and enhance its biosecurity in line with the National Farmers Union guidelines by providing secure access gates and appropriate signage if required at the access junctions illustrated in **Figure 9**.
- 5.2.6. The Applicant can also enhance the existing access junction, by metalling the surface to help prevent road debris or mud being transported from or onto the public road.

Figure 9: Existing Silage Clamp Access



- 5.2.7. The Applicant is willing to discuss any further elements with TCS Biosciences Ltd and Buckinghamshire Council to reach an agreement on access from the public road at this location. Engagement to this effect is ongoing and the Applicant is grateful to TCS Biosciences Ltd for their time and engagement on this matter.

5.3. Construction Track Access Management Strategy

- 5.3.1. The junction from the public roads will be metalled for the initial sections to ensure that road debris and construction debris is not brought onto the access track network and vice versa. This area can be kept clean through the use of a road sweeper, which would also keep the section of Granborough Road clean between the two livestock access gates.
- 5.3.2. The location of the access junction on Granborough Road could be moved up to 50m to the east. The access track can then be aligned to follow the field edge as requested by TCS Biosciences Ltd, with respect to a set back buffer to account for environmental constraints from the nearby brook.
- 5.3.3. To enable both construction and livestock movements to co-exist, it is proposed to fence off the access track and provide a secure crossing point over the access track.
- 5.3.4. The Applicant has indicated that the alignment of the access track and the crossing point is flexible and is willing to work with TCS Biosciences Ltd to identify a route and crossing location that best fits their requirements.
- 5.3.5. To separate the access track, a buffer of 2m is proposed from the edge of the track. This would be delimited by a stock-proof fence. An outfence 4m

from the inner fence would then be provided, ensuring that livestock is at least 6m at all times from construction traffic, in excess of the separation between public roads and fields used currently.

- 5.3.6. The section between the inner and outer fences at 4m is wide enough to be subject to cutting maintenance as and when required and access to this can be arranged with TCS Biosciences Ltd on a needs basis.
- 5.3.7. Along the inner fences will be signage reminding staff that no litter is to be left and that animals cannot be fed under any circumstances and that staff should not leave their vehicles in this section. Staff will be advised that any breach of these site rules or crossing the inner fence will be a disciplinary matter, thus making the access track more secure than the existing Public Rights of Way (PRoW) that cross the farmland at present where no such signage is provided.
- 5.3.8. To enable a safe crossing, a level crossing style facility is proposed. The inner fence and outer fence will have gates suggested at 5m each to allow for a 10m wide crossing of the access track.
- 5.3.9. 10m wide crossings are double the width of the existing 4-5m wide field access points that appear to be used by TCS Biosciences Ltd presently.
- 5.3.10. The crossing would operate in the following manner:
- All gates would be locked at all times to ensure safety for all crossing users and livestock;
 - The inner track gates would be closed first, blocking site traffic from proceeding;
 - The inner fence gates would be swung approximately 90 degrees to provide a buffer to the inner track gates, thus keeping livestock isolated from traffic; and
 - The outer gates would then be opened, allowing livestock to cross in safety.
- 5.3.11. The right of way at the crossing would be for farm livestock movement as a default. Given the traffic arrival profile, engagement with TCS Biosciences Ltd would be undertaken on a regular basis to agree any peak crossing times, whenever this is practical.
- 5.3.12. The operation of this crossing will reduce the potential for interactions and would protect biosecurity.
- 5.3.13. The Applicant is willing to discuss the design in greater detail and is flexible in its location.

- 5.3.14. The control of the crossing can be managed by a banksman during the construction phase, or by TCS Biosciences Ltd, who would have a key to the gates. The operation of the gates can be monitored by cameras to help assume TCS Biosciences Ltd that processes are being followed.

5.4. Rights of Way Biosecurity

- 5.4.1. The Applicant takes biosecurity matters seriously and is willing to offer assistance to TCS Biosciences Ltd with measures to further protect against biosecurity threats from users of the promoted Midshires Way and North Buckinghamshire Way footpaths that are located on the Site and cross to the north of Field E23.
- 5.4.2. This support would be focussed on provision of signage and the Countryside Code to help prevent issues from occurring.
- 5.4.3. Both routes are promoted routes as noted in Long Distance Walker Associated website (<https://ldwa.org.uk/>) and other online resources.

5.5. Engagement Protocol

- 5.5.1. To ensure good relations during the construction period, a weekly meeting with TCS Biosciences Ltd and the construction team is proposed. This could have a standing agenda to review the following:
- Actions from the last meeting;
 - Update on biosecurity matters;
 - Construction progress update;
 - Issues and improvements to access;
 - Timing of any specific events;
 - General transport and construction update; and
 - Any other business.
- 5.5.2. This would also allow issues and matters to be addressed in a focused, private meeting, helping maintain relationships at the highest practical level and resolve any issues quickly.

6. Summary

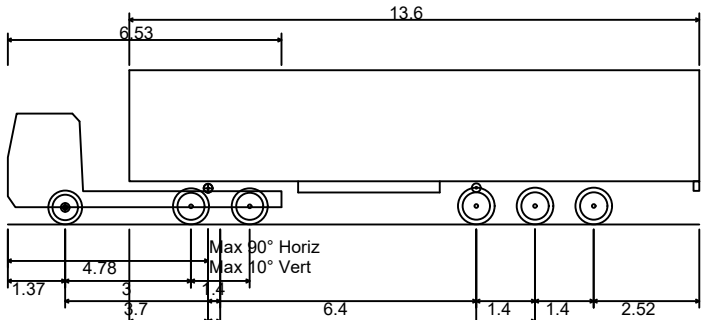
- 6.1.1. To assist the Examining Authority and TCS Biosciences Ltd, this document has provided further detail on the access strategy adopted for the Proposed Development.
- 6.1.2. A description of the access strategy has been provided along with a review of alternative access routes.
- 6.1.3. A traffic impact and focussed environmental review of the alternative access route has been undertaken. Whilst additional mitigation can be provided, concerns about the practical access of HGV traffic in Winslow have been raised. This cumulative issue could present a risk to all road users.
- 6.1.4. A comparison between the proposed and alternative access routes has been undertaken. Overall, the proposed access route is considered a superior option on balance and has a lower environmental impact.
- 6.1.5. The use of the alternative access route would not preclude construction access associated with the construction of the proposed cable route. This would still require construction access from Granborough Road.
- 6.1.6. As secured in the Outline CTMP, biosecurity measures relevant to construction traffic will be developed in accordance with the **Outline Biosecurity Management Plan [EN010158/APP/8.39]**.

Appendix 1: East Claydon Access Junction



- NOTES:
1. ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
 2. ALL WORKS TO BE EXECUTED IN ACCORDANCE WITH THE DMRB, THE MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAYS WORKS, DESIGN MANUAL FOR ROADS AND BRIDGES, AND TRAFFIC SIGNS MANUAL.
 3. ALL WORKS TO BE CARRIED OUT IN COMPLIANCE WITH THE REQUIREMENT OF THE STATUTORY AUTHORITIES AND CONSTRUCTION DESIGN MANAGEMENT REGULATIONS.
 4. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER IMMEDIATELY SO THAT CLARIFICATION CAN BE SOUGHT PRIOR TO COMMENCEMENT OF WORKS.
 5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING SERVICES AND DRAINAGE CONNECTIONS PRIOR TO COMMENCING WORKS.

- LEGEND:
- VEHICLE WHEELS
 - VEHICLE BODY
 - 4.5x x 160m VISIBILITY SPY



Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.500m
Overall Width 2.550m
Overall Body Height 3.681m
Min Body Ground Clearance 0.411m
Max Track Width 2.500m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.530m

02	20/04/26	Second Issue	JS	GB	GB
01	17/02/26	First Issue	JS	GB	GB
App	Date	Description	Drm	Chk	App

Rosefield Solar Farm



DOCUMENT:
PROPOSED ALTERNATIVE ACCESS ROUTE JUNCTION
SWEEP PATH ANALYSIS

TITLE:
ALTERNATIVE ACCESS ROUTE: EAST CLAYDON ROAD JUNCTION

PINS REFERENCE NUMBER:
EN010158/APP/8.26
FIGURE SK008

SCALE : 1:500 @ A1

0 7.5 15 Meters

REV:
P01

Appendix 2: Livestock Separation and Crossing Proposals



Outer and Inner crossing gates to provide buffer to stock crossing. Gates can be locked with key provided to TCS Biosciences or controlled by a dedicated banksman.

Access track

10m wide crossing area

New fence and gate to ensure stock cannot access public road via ungated silage clamp.

Stock 6m minimum from track edge

Access to silage clamp unaffected

Outer fence, 4m from inner fence

Inner fence, 2m from track edge

New gates to assist with biosecurity

New gates to assist with biosecurity

- NOTES:
1. ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
 2. ALL WORKS TO BE EXECUTED IN ACCORDANCE WITH THE DMRB, THE MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAYS WORKS, DESIGN MANUAL FOR ROADS AND BRIDGES, AND TRAFFIC SIGNS MANUAL.
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01	17/06/26	First Issue	JS	GB	GB
App	Date	Description	Drm	Chk	App

Rosefield Solar Farm



DOCUMENT:
PROPOSED FIELD CONTROL AND BIOSECURITY MEASURES

TITLE:
GRANBOROUGH ROAD ACCESS JUNCTION AND TRACK -
PROPOSED CONTROL MEASURES

PINS REFERENCE NUMBER:
EN010158/APP/8.26
FIGURE SK009

SCALE : 1:500 @ A1



REV:
P01



rosefieldsolarfarm.co.uk

8.2. References

- **Ref. 1:** Department for Energy Security and Net Zero. (2023). Overarching National Policy Statement for Energy (EN-1). Available online: <https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1>
- **Ref. 2:** Department for Energy Security and Net Zero (2023). National Policy Statement for Renewable Energy Infrastructure (EN-3). Available online: <https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3>
- **Ref. 3:** Department for Energy Security and Net Zero (2023). National Policy Statement for Electricity Networks Infrastructure (EN-5). Available online: <https://www.gov.uk/government/publications/national-policy-statement-for-electricity-networks-infrastructure-en-5>
- **Ref. 4:** Ministry of Housing, Communities and Local Government and Department for Levelling Up, Housing and Communities (2023) National Planning Policy Framework. Available online: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>
- **Ref. 5:** Vale of Aylesbury Local Plan (VALP) 2013 – 2033 Adopted Plan (2021). Available online: https://buckinghamshire-gov-uk.s3.amazonaws.com/documents/Aylesbury_local_plan_L46JWaT.pdf
- **Ref. 6:** Buckinghamshire Council (2016), 'Buckinghamshire's Local Transport Plan 4'. Available online at: <https://buckinghamshire-gov-uk.s3.amazonaws.com/documents/local-transport-plan-4.pdf>
- **Ref. 7:** Buckinghamshire Council (2016), 'Highways Development Management Guidance: Managing the transport and travel impact of new developments'. Available online at <https://buckinghamshire-gov-uk.s3.amazonaws.com/documents/highways-development-management-guidance.pdf>
- **Ref. 8:** Ministry of Housing, Communities and Local Government, Ministry of Housing, Communities & Local Government (2018 to 2021) and Department for Levelling Up, Housing and Communities (2014), 'Travel Plans, Transport Assessments and Statements'. Available online at: <https://www.gov.uk/guidance/travel-plans-transport-assessments-and-statements>
- **Ref. 9:** Institute of Environmental Management and Assessment, (2023), "Environmental Assessment of Traffic and Movement"
- **Ref. 10:** National Highways, et al, Design Manual for Roads and Bridges LA 104: Environmental assessment and monitoring. Available online: <https://www.standardsforhighways.co.uk/search/0f6e0b6a-d08e-4673-8691-cab564d4a60a>

- **Ref. 11:** Buckinghamshire Council (2024), 'Public rights of way map'. Available online at: <https://prow.buckscc.gov.uk/standardmap.aspx>
- **Ref. 12:** Buckinghamshire Council (2024), 'Buckinghamshire Greenway Map'. Available online at: <https://www.buckinghamshire.gov.uk/parking-roads-and-transport/walking-cycling-and-wheeling/plans-to-improve-walking-cycling-and-wheeling/the-buckinghamshire-greenway/>
- **Ref. 13:** Sustrans (2024), 'National Cycle Network Map'. Available online at: [REDACTED]
- **Ref. 14:** Crashmap (2024), [REDACTED]
- **Ref. 15:** Department for Transport (2024), 'Road traffic statistics'. Available online at: <https://roadtraffic.dft.gov.uk/#6/55.254/-6.053/basemap-regions-countpoints>
- **Ref. 16:** Depart for Transport, SIAS Limited, et al, (2013) 'The NESA Manual'



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