Proposed Solar & Battery Energy Storage System, Land to the West of Nether Drumgley, Forfar

Technical Appendix 10.1: Transport & Access Statement

May 2025

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1. Introduction

1.1. ECS Transport Planning Ltd (ECS) has been commissioned by Trio Power Limited (hereafter referred to as the 'Applicant') to prepare a Transport & Access Statement (T&AS) in support of a Section 36 application for the construction and operation of solar farm and battery energy storage system (BESS) (hereafter referred to as the 'Proposed Development') on land to the west of Nether Drumgley, west of Forfar, Angus.

1.2. This study has been undertaken to provide details of the proposed traffic management measures that are to be implemented during the construction, operation and decommissioning phases of the development. These measures seek to mitigate any impacts related to construction traffic.

1.3. The findings of this study are based on a site visit, existing highway infrastructure observations and discussions with Angus Council Roads Department (ACRD). Consideration has also been given to the requirements of local and national government transport planning guidance and policies.

1.4. This study includes a construction management strategy to enable and manage all types of Heavy Goods Vehicles (HGV) to and from the site during construction; this is to improve the safety and reliability of deliveries to site, reducing congestion and minimising the environmental impact. The routing and volume of traffic has been assessed at each stage together with the access requirements and potential impacts on key receptors.

1.5. The subsequent chapters of this report are structured as follows:-

- Proposed Development & Access Strategy;
- Construction – Traffic & Routing;
- Environment Impact Assessment;
- Construction Traffic Management Plan;
- Residual Impacts; and
- Summary & Conclusions.

2. Proposed Development and Access Strategy

Existing Site & Surrounding Area

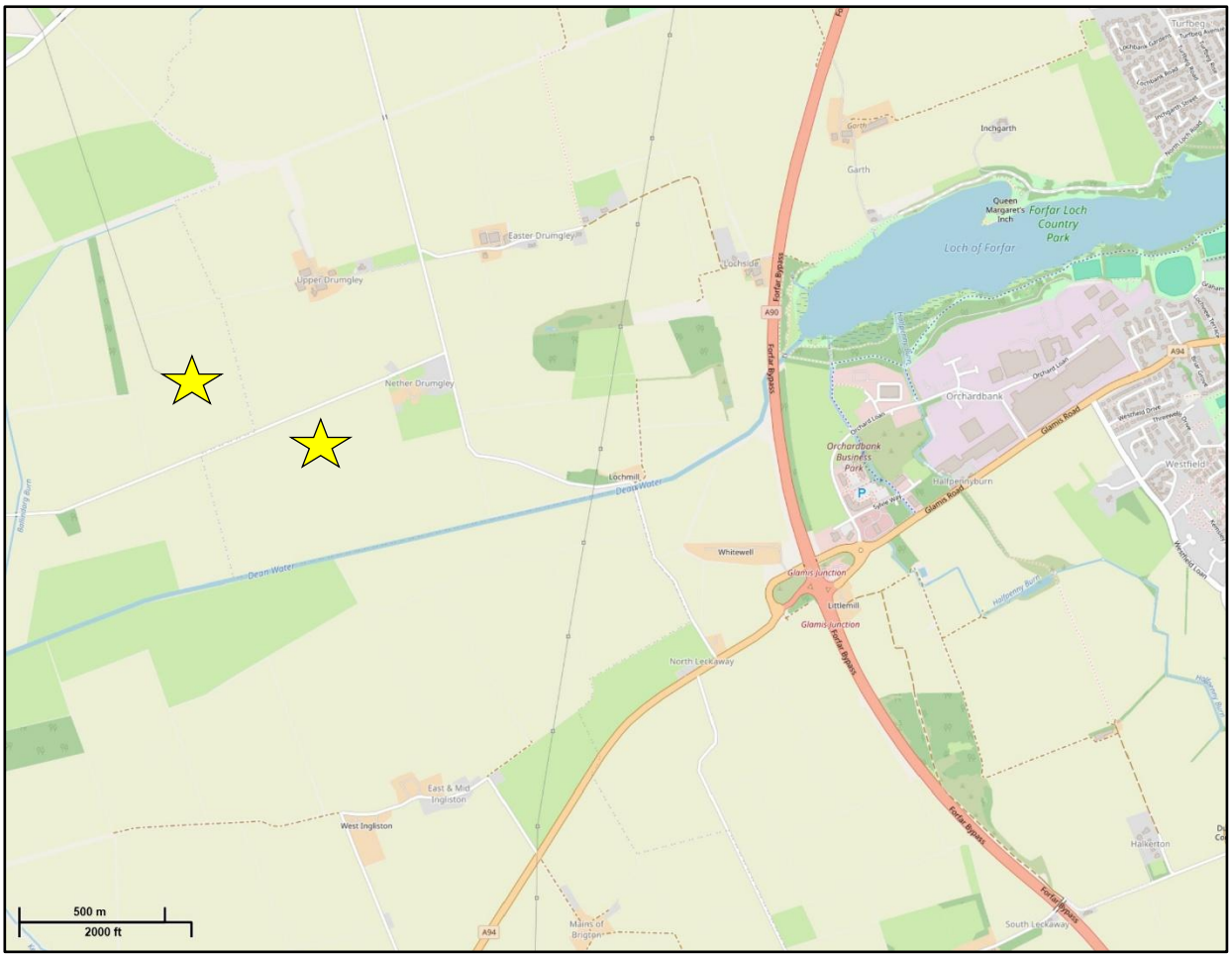
2.1. The Site is situated approximately 2.5km west of Forfar and is currently agricultural land located to the west of Nether Drumgley accessed via a private single track road which connects to the U364 public road to the east.

2.2. The developable area comprises two land parcels on either side of the private access road, surrounded by agricultural fields and woodland. The total area of the Site is approximately 87 hectares.

2.3. The site is located within a predominantly rural area, characterised by a mix of agricultural land and natural landscapes. The existing land use is mainly agricultural, with small sections of woodland. The site is bordered by trees to the west, while the other boundaries are more open.

2.4. The location of the site is indicated by the yellow stars within *Figure 1* below.

Figure 1: Site Location



2.5. The land is accessed directly from the private access road at present as there is generally no boundary fencing.

2.6. *Figure 2 – 5* below, show the existing site and surrounding area including the private access road. *Figures 2 & 3* show the eastern area of the site and the existing private access road, respectively. *Figure 4* is a view of the private access road at the bridge over the burn. *Figure 5* shows the private access road at the eastern extent where it joins the U364 Drumgley Road.

Figure 2: Eastern Area of Site

Figure 3: Private Access Road

Figure 4: Access Road and Bridge

Figure 5: Access Road at U364 Junction

Development Proposals

2.7. The Proposed Development will comprise a ground-mounted solar photovoltaic (PV) array and associated infrastructure with an installed capacity of 49.9 MW. The array will comprise PV modules arranged in rows with a maximum height of 2.87m above ground level (AGL).

2.8. The Proposed Development also includes a Battery Energy Storage System (BESS) with a capacity of 35 MW. The BESS will store excess energy generated by the solar PV array and release it during periods of high demand or low generation.

2.9. The infrastructure associated with the Proposed Development will include:

- PV module mounting frames;
- battery units housed in containers;
- inverters;
- transformers;
- high voltage (HV) switchgear and control equipment;
- cabling and interconnectors;
- on-site substation and control building;
- customer station compound;
- spares container;
- site access and tracks;
- security fencing and CCTV; and
- temporary construction compound.

Solar Photovoltaic Modules and Mounting Frames

2.10. The solar PV modules will stand approximately 1.2 m AGL at their minimum point and will be angled up to 20° to the horizontal and arranged in rows. The maximum panel height will be up to 2.87 m AGL.

2.11. Each PV module will be fixed and mounted upon a prefabricated alloy metal frame. The frames will be anchored to the ground via steel piles that will be driven to approximately 1.5 m into the ground. The framed mounting system would be pile driven, therefore no foundations would be required.

Inverters, Transformers

2.12. The Proposed Development will include string inverters, typically mounted to the underside of the PV modules (approximately 24 modules per string) to convert the Direct Current (DC) produced by the PV modules, into an Alternating Current (AC) for export. Transformer stations (approximately 4) will be installed in various locations across Site, to ensure voltage compatibility for export to the local electricity distribution network.

BESS Containers

2.13. There will be approximately 24 BESS containers in the Proposed Development measuring approximately 8.3 m in length by 3.1 m width, with indicative height of 2.6 m (including the platform height). Six associated Power Conversion System (PCS) units will be located adjacent to the BESS containers, to allow the batteries to switch between inverter and charger modes. They measure approximately 9.2 m in length by 5.4 m width with an indicative height of 2.3 m. The BESS and PCS units will be located in a compound within the eastern land parcel.

2.14. Transformers and BESS units are situated in areas of the Proposed Development with negligible flood risk.

On-site Cabling

2.15. Low voltage electrical cabling is required to connect the PV modules to the inverter. Alternating Current (AC) cabling from the inverters will connect to the transformers and the on-site substation via underground trenches.

On-site Substations, Spares and Communications Building

2.16. The Proposed Development will include a distribution network operator (DNO) substation compound, customer (private) substation compound, a communications and spares container, and an additional standalone spares container.

2.17. The DNO substation will consist of electrical infrastructure required to facilitate the export of electricity from the Proposed Development to the distribution network. The building will measure approximately 3.6 m in length by 2.5 m width, with an indicative height of 2.6 m.

2.18. The customer (private) substation will measure approximately 8.1m in length by 2.6m width, with an indicative height of 2.7 m.

2.19. The communications and spares container provides space for operational monitoring and maintenance equipment. This building will measure approximately 6.1 m in length by 2.4 m width, with an indicative height of 2.9 m.

2.20. The additional standalone spares container will measure approximately 12.2 m in length by 2.4 m width, with an indicative height of 2.9 m.

Temporary Construction Compound

2.21. A temporary construction compound will be required during the construction period of the Proposed Development. This will be located near the Site entrance, south of the proposed BESS area total laydown area is anticipated to be approximately 3,000 m2 (0.3 ha) and the main construction compound will incorporate a temporary laydown and vehicle parking area.

2.22. On completion of construction works, it is proposed that all temporary structures be removed, and the compound area be restored.

Welfare Container and Water Tank

2.23. The Proposed Development will include a welfare container and associated water tank. The welfare container will measure approximately 6.1 m in length by 2.4 m width, with an indicative height of 2.9m. The associated water tank will be 300m3 in volume with an indicative height of 7.5 m.

Security Fencing and CCTV

2.24. Fencing will be constructed around the Proposed Development for health and safety and security reasons. The fencing will stand up to 2.4 m AGL and is proposed to comprise of security palisade fencing.

2.25. The entrance of the site will comprise of a 5 m wide double leaf access gate. This will stand up to 2.4 m AGL and is proposed to comprise rectangular hollow section frame and palisade gates.

2.26. Closed Circuit Television (CCTV) will be deployed as a security measure. The CCTV will be mounted on galvanised steel posts each measuring approximately 4.5 m in height. The CCTV cameras will be located just inside the proposed security fencing with the exact locations to be confirmed prior to construction. They will be installed at discreet locations and will be oriented away from external landowners and dwellings.

Site Access and On-site Tracks

2.27. The Site is bounded to the north by a private road which provides access to the Haughs of Cossans in the west and connects to Drumgley Road, at Nether Drumgley, in the east. The Site benefits from various field

accesses with the private road which is a lightly trafficked single track road with passing places mainly serving agricultural holdings.

2.28. The private road connects to Drumgley Road via a simple priority junction which has been designed to accommodate large agricultural vehicles. Drumgley Road is also a single track road with passing places and provides the shortest route to the strategic road network, namely, to the south via the A94 and onwards to the Forfar Junction of the A90(T).

2.29. The Drumgley Road / A94 junction is of a good standard which can accommodate large vehicles. The A94 is a high standard single carriageway which is only circa 400m from the A90(T). The proximity of the trunk road is ideal from a traffic impact perspective given it is a strategic route designed to accommodate larger vehicle types.

2.30. Each of the land parcels in the Proposed Development will have two access points from the local road, one for each of the PV array sections.

2.31. The BESS area will be accessible via two separate access points at the north-eastern and north-western points of the compound.

2.32. Internal access tracks will be established to allow for construction and ongoing access/maintenance to the electrical infrastructure on site.

2.33. The onsite tracks will have a typical 4 m running width, wider on bends and at junctions and will be surfaced with local compacted aggregates to match surrounding farm tracks.

2.34. The Proposed Development essentially has two key component parts (with ancillary infrastructure such as access tracks, substation building, fencing etcetera); an array of solar panels and installation of a BESS facility.

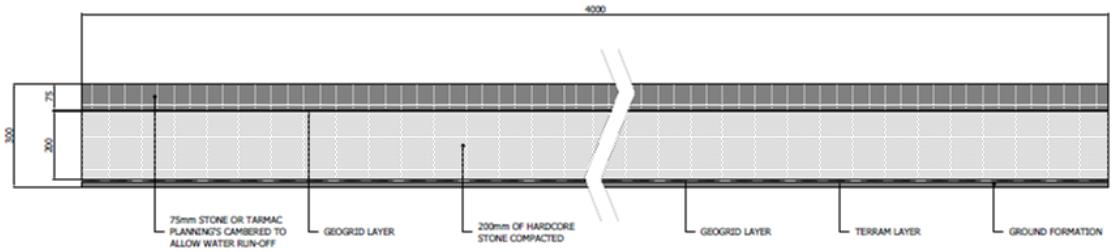
2.35. A typical standard detail for an access track is shown in *Figure 6* overleaf. The depth of the track could vary depending on ground conditions and loads, but is likely to be circa 400mm. The proposed top surface would be compacted stone given the route will have limited use following construction. Some of the new access track within the site requires to be 'floated' over deeper areas of peat. Typical construction details are included in the drawings package accompanying the application.

2.36. A review of accident data for the previous 5 years has highlighted that there has been no recorded road traffic accident on the U364 adjacent to the site boundary or at the junction with the A94 to the southeast. There has been 5 accidents on the Glamis Junction of the A90(T), 3 slight and 2 serious severity accidents, four of which are on the connector road between the two roundabouts which provide access to the A90(T) slips with the other on the northbound merge.

2.37. Given the level of traffic which passes through the trunk road junction, the number of accidents is considered to be relatively standard. Furthermore, the last accident was in 2021 which demonstrates that they do not represent a recurring cluster which would warrant further investigation.

2.38. Once operational, the site will be managed by minimal staff and will not result in a material increase in traffic on the public road network.

Figure 6: Access Track Standard Detail



3. Construction - Traffic & Routing

3.1. On-site works, including pre-construction activities, will include the following:-

- Laying of the access track and setting up the construction compound;
- Construction of a gated entrance and security fence;
- Forming cable trenches;
- Installing transformer station and battery pack foundations;
- Installing solar frames and inverters;
- Laying underground cables and electrical connections;
- Commissioning; and
- Site clean-up.

3.2. To enable access into the site for construction traffic a crushed stone / aggregate track will be constructed. In addition, temporary track matting systems may be used to provide vehicular access to other areas of the site as required. These would be removed following construction.

3.3. All construction traffic will access the site via the private access road and the proposed gated priority access junctions. Temporary contractors parking and compound areas will be erected near to the site junction with the access track. The compound will provide storage for plant and equipment. The compound will also contain a set down area for deliveries and facilities for employees.

3.4. Construction hours at the site are likely to be limited to typical working hours of 8am - 7pm Monday – Friday and 8am – 1:00pm Saturday.

Traffic Routing

3.5. The nearest access to the strategic road network is Glamis Junction of the A90(T), to the east of the proposed site. The Glamis Junction is a full diamond grade separated interchange which provides access to both north and south carriageways on the A90(T).

3.6. Traffic would exit the A90(T) and follow the A94 west for approximately 260m where the route connects to the U364 via a simple priority junction. The A94 is a high standard single carriageway subject to national speed limit restrictions at the junction but the speed limit does reduce to 40mph some 80m to the east which influences speeds. The route is appropriate to accommodate construction vehicles with no recognised issues with geometry for HGV's.

3.7. The first 100m of the U364 is single carriageway and then it reduces to single lane with passing places. The passing places are generally informal in nature and larger than a standard passing place to accommodate the movement of agricultural traffic.

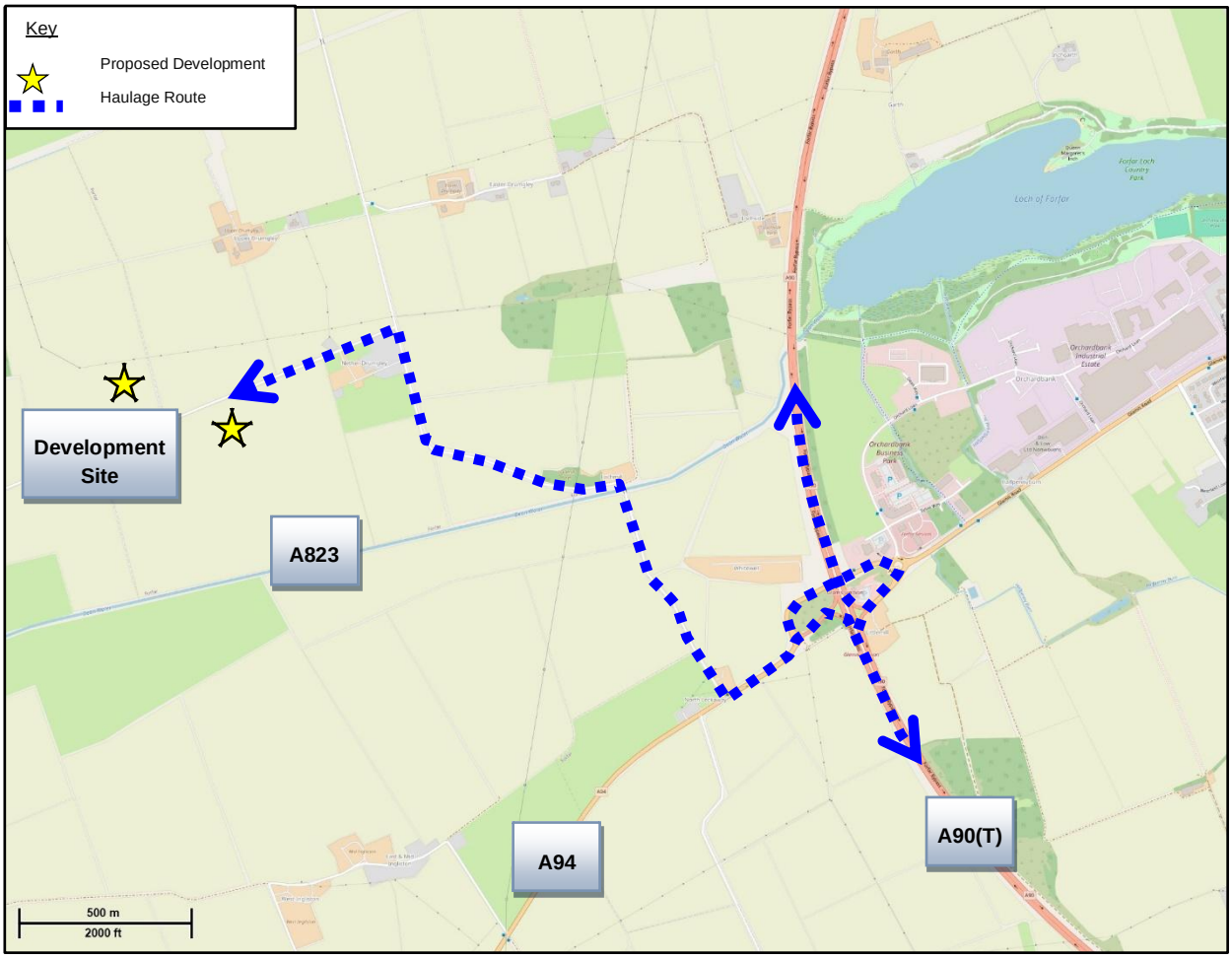
3.8. Traffic does require to cross the Dean Water and a single carriageway bridge is available. ACRD has advised that a structural assessment of the bridge is not available therefore, should the Proposed Development secure planning approval, a structural assessment of the bridge will be required.

3.9. The private access road which currently provides access to the site connects to the U364 via a simple priority junction. The private access road provides access to a limited number of residential properties as

well as the farm adjacent to the site. The private access road has limited formal passing places as the fields are at a similar level to the road and do not have boundary treatment.

3.10. The route is shown in *Figure 7* below.

Figure 7: Haulage Routes



3.11. The U364 benefits from a number of existing informal passing places which are indicated on ECS drawing 24072-001 contained within *Appendix B* by red dots. These spaces generally provide a good level of intervisibility thereby reducing the potential for extensive reversing manoeuvres. However, it is accepted that additional passing places are required to the north of the Dean Water.

3.12. It is proposed to introduce widening on both sides of the road to provide a 5.5m wide carriageway which will enable vehicles to pass. The proposed passing place would be formed using grasscrete within the limits of the adopted verge. The grasscrete passing place will be informal, but generally 12m in length with 12m tapers. The general specification is detailed below:

Construction to consist of the following:-

- 40mm / 14mm CG Surface Course
- 80m DBM Combined Binder Course & Roadbase

- 300mm Well Compacted GSB Type 1 Laid to Falls
- Geotextile Separation Layer Subsoil
- Laid to Falls to ensure all surface water sheds to back of Passing Place.

3.13. The exact specification and location of the passing places will be agreed in writing with the local authority prior to the development starting on site. An indicative location for the passing places is shown on ECS drawing 24072-001 by the blue dots.

Pedestrian / Cycle Considerations

3.14. The private road to the Site is designated as a core path by Angus Council known as the Drumgley to Glamis Station route linking the U364 in the east with the A928 in the west. Despite the core path designation, there is generally very limited pedestrian or cycle activity directly adjacent to the site given the rural nature of the surroundings. Measures to manage the interaction of construction traffic will be addressed within the CTMP.

3.15. As a result, the minimal increase in traffic during construction is unlikely to result in a material impact on pedestrians or cyclists.

Estimated Vehicle Generation

3.16. Traffic generation has been estimated using information from contractors with experience of solar and BESS installation.

Site Mobilisation and Demobilisation

3.17. At the commencement of the project, plant, equipment and welfare facilities will be brought to the Site and the Temporary Construction Compound (TCC) will be formed. This is expected to require up to 20 HGV deliveries or 40 two-way HGV movements at the commencement of the project.

3.18. During Site demobilisation, the majority of this equipment will be removed from Site. Vehicle movements for demobilisation will result from empty HGVs and low loaders travelling to Site and then departing loaded.

Junctions and Access Tracks and Hardstanding

3.19. The internal access tracks within the site will be 4m and extend to 2,958m. Therefore, the total surface area of hardstanding's, including tracks, is estimated to be 11,932m^2.

3.20. For the purposes of this assessment, it has been assumed that all access tracks will be formed to a depth of 0.40 m using (Type 1 aggregate plus 6F5 aggregate). This results in roughly 4,733m^3 of material required to construct the access tracks.

3.21. Aggregate will be imported via tipper lorry with an assumed volumetric capacity of 12 m^3 which will result in approximately 394 vehicle loads or 788 two-way HGV movements for this element of works.

Component Delivery

3.22. The site will require delivery of 24 battery packs which require 1 HGV delivery per 6 packs resulting in 4 deliveries and 8 movements.

3.23. A further 15 HGV deliveries will be required for the sub-station components, water tanks etc resulting in 30 movements.

3.24. Therefore, the total number of HGV deliveries required for this element of works is 19, resulting in 38 movements.

Frames and Inverters and Storage Containers

3.25. The solar arrays will be ground mounted, and each string of panels will be supported on a frame. Electrical inverters/transformers and other electrical equipment will be imported and installed with the panels. Three inverters, 100 loads of frames and 3 storage containers will be required, and these will be transported to Site via standard HGV resulting in 106 deliveries or 212 two-way vehicle movements.

Battery Packs, Control Building, STS and DNO Building (Substation)

3.26. Construction of the substation and battery storage area will commence once the access tracks are largely complete. A hardstanding area of roughly 5,000m^2 will be constructed. Allowing for a depth of 0.40 m, this will require approximately 2,000m^3 of aggregate, resulting in 167 HGV deliveries or 333 vehicle movements with an assumed volumetric capacity of 12 m^3.

3.27. A further 30 HGV deliveries has been assumed for materials, namely concrete, to be imported to form the foundations of the structure and internal electrical cabling, resulting in an additional 30 vehicle movements.

3.28. Therefore, the total number of HGV deliveries required for this element of works is 197, resulting in 394 movements.

Panels

3.29. Solar panels will be imported to the Site by HGV, and this is assumed to be the maximum size 16.5 m length HGV. Panels will be delivered and stockpiled on-site prior to installation. It has been assumed that 94,128 individual panels are required and that 600 panels can be delivered per HGV load. Therefore, 157 deliveries will be required for panels resulting in 314 HGV movements.

Miscellaneous Deliveries

3.30. Several miscellaneous HGV deliveries have been allowed for throughout the construction phase, this has been estimated at 5 per month resulting in 10 HGV movements per month or 120 movements over the 12 month duration of construction.

Staff

3.31. Staff levels are likely to vary through construction depending on the operations being undertaken. It is anticipated that during the peak period of construction, 40 staff will be required onsite per day, during the other phases of work this is anticipated to be an average of 20 staff. For the purposes of this assessment, the most recent available National Travel Survey private vehicle occupancy rate of 1.5 people per vehicle was used, equating to 27 vehicles during the peak period and 13 vehicles during the non-peak period. This equates to 54 movements per day during the peak period and 26 movements per day during the non-peak period.

3.32. Assuming 26 workdays per month, this will result in 1,404 movements per month during the peak period and 624 movements per month during the non-peak. Staff will be encouraged to car share, so it is anticipated that the figure for car or van movements is likely to be considerably lower than the above estimates in practice.

Fuel

3.33. Fuel for plant will be required on the Site regularly through construction - this is estimated to result in one HGV fuel tanker delivery every two weeks (2 per month) or four vehicle movements per month.

3.34. All subcontractors will stipulate to the site manager their vehicle size, times for deliveries, access route and site access arrangement prior to delivery.

3.35. The project is likely to take between 12 months to complete with weekday operating hours of 08:00 - 19:00 Monday – Friday and 08:00 – 13:00pm on Saturdays. The reduced construction period concentrates vehicles movements over a shorter build period thereby increasing vehicle movements per day. *Table 1* indicates the total number of two-way trips over the twelve month construction period, categorised by purpose of trip.

Table 1: Estimated Vehicle Movements During Construction Period

Activity	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Site Mobilisation / Demobilisation	40											40
Access Track and TCC		197	197	197	197							
Solar Frames / Inverters				70	70	70						
Substation				66	66	66	66	66	66			
Component Delivery							10	10	10	10		
Panels						52	52	52	52	52	52	
Miscellaneous Delivery	10	10	10	10	10	10	10	10	10	10	10	10
Staff	624	624	624	624	1,404	1,404	1,404	1,404	1,404	1,404	624	624
Fuel	4	4	4	4	4	4	4	4	4	4	4	4
Total (All Vehicles)	678	835	835	971	1751	1606	1546	1546	1546	1480	690	678
Average Total Traffic per Day)	26	32	32	37	67	62	59	59	59	57	27	26
Total (HGV only	54	211	211	347	347	202	142	142	142	76	66	54
Average HGV Traffic per Day	2	8	8	13	13	8	5	5	5	3	3	2

3.36. As indicated in *Table 1*, the peak months for construction is expected to occur in Month 5. During this period there are 1,751 two-way vehicle movements per month, made up of 1,404 car movements and 347 HGV movements. Assuming a 26-day working month, this would equate to a maximum of 67 two-way vehicle movements per day which would consist of 54 car movements and 13 HGV movements on average. In other months, the daily average HGV movements are between 2 and 13.

3.37. Staff will be encouraged to car share, so it is anticipated that the figure for car or van movements is likely to be considerably reduced. Furthermore, it should be noted that deliveries associated with HGV movements will be distributed throughout the working day.

3.38. The worst-case HGV impact would result in an average of less than 2 HGV's per hour which the standard of the adjacent road network is more than capable of accommodating.

3.39. Traffic generated during the operation of the scheme will be very low and associated with the management staff, circa one trip per week.

3.40. Due to the very low number of vehicle movements being made to and from the site during its operational period, the development will not impact on the local road network during the operational phase.

3.41. At the end of the operational lifetime of the scheme, it will be decommissioned, and the site reinstated. This would involve similar access requirements as the construction phase. It is unlikely that any access tracks would be removed; consequently, the number of HGV movements would be reduced compared with the construction phase. The construction phase is therefore the worst case scenario when considering the potential impact of development trips on the network.

4. Impact Assessment

4.1. In accordance with the Institute of Environmental Management Assessment (IEMA) 'Guidelines for the Environmental Assessment of Road Traffic and Movement' 2023, a full impact assessment should be undertaken:

- On highway links where traffic flows are predicted to increase by more than 30% (or where the number of heavy goods vehicles is predicted to increase by more than 30%); and
- Where traffic flows are predicted to increase by 10% or more in any other specifically sensitive areas.

4.2. The A90(T) to the east of the site has Annual Average Daily Traffic (AADT) flow of 22,149 adjacent to the Glamis Junction as provided by Transport Scotland counter information.

4.3. The generation would not breach the requirement for a full assessment based on general traffic flow, as follows:

- All Vehicles - 67 / 22,149 = 0.3% impact

4.4. In overall terms, the Proposed Development is not considered large enough to trigger a detailed assessment given that the maximum number of deliveries and staff movements per day is minimal. However, consideration has been given to the likely traffic impacts.

Development Traffic Flows

4.5. For the purpose of this assessment, a 12 month construction period has been assumed. Any extension or delay in the programme will have a reduced impact on the surrounding road network.

4.6. At the peak of construction, two-way vehicle generation is not expected to exceed 67 two-way movements per day with approximately 13 of these trips undertaken by HGV.

4.7. Based on the capacity of the local roads the predicted volume of construction associated with the Proposed Development is unlikely to cause any operational impacts.

4.8. A general overview of the IEMA assessment assuming no mitigation is in place has also been undertaken and is illustrated in *Table 2* overleaf.

Table 2: Review of Development Impact

Receptor	Potential Effect	Magnitude	Comment
Existing Road Users	Severance	Low	No issue – Low volumes of traffic.
	Driver Delay	Low	No issue – Traffic generation will be managed outwith peak periods.
	Pedestrian Delay	Low	No issue – Low volumes of traffic and low volumes of pedestrians. Construction will be managed outwith school periods.
	Pedestrian Amenity	Low	Impact will be low and outwith peak periods.
	Accidents and Safety	Low	Potential increase in interaction will be low.
	Dust and Debris	Low	Management and facilities will be in place to control impact on the local road network.
Ecology		Low	Visibility splays to be cleared of vegetation and tree canopies maintained will present a minimal and temporary impact. The new planting will be positioned outwith the visibility splay.

5. Construction / Decommissioning Traffic Management Plan

5.1. A framework Construction Traffic Management Plan (CTMP) has been prepared in support of the application to ensure road safety for all road users during the construction period and to provide mitigation for the effects described in *Table 2*. The CTMP will be finalised in consultation with the police, roads authorities and agreed before deliveries commence to the site, once a contractor has been appointed. A suitably worded pre-commencement planning condition requiring a CTMP would be appropriate.

5.2. A package of mitigation measures has been proposed to reduce the safety risks and minimise any effects on local residents and the local highway network as a result of construction traffic activities and are as follows.

Approved Route

5.3. An off-site signing strategy from the A90(T) Glamis Junction to the site will be provided to guide construction and staff traffic to the development site via the approved route and to alert other road users of construction traffic.

5.4. All contractors and suppliers to the site will be advised of the approved route in advance.

Restricted Delivery Hours

5.5. Deliveries will be restricted to site working hours as set out above or otherwise agreed with ACRD to reduce disruption to local and strategic road network.

Booked Delivery Times

5.6. Construction deliveries will be planned with booking slots and will not be allowed on site outside of these time slots.

5.7. Drivers of inbound delivery vehicles will be required to stop and contact the Site Manager by mobile telephone to advise of their approach. If there is a conflict on the site with another delivery they may be required to layover for a period to allow an outbound vehicle to clear. This will ensure minimal delays to other road traffic.

Speed Limit

5.8. The developer will ensure that all deliveries abide by local speed limits and a site speed limit will be established and enforced at 5mph, with signage indicating such and all persons made aware of this requirement at the site induction. This speed limit will also extend from the site to the public road to ensure the safety of those using the core path network.

Banksman

5.9. Banksman will be provided for all HGV movements into and out of the site to minimise the potential impact on the public highway.

Road Cleansing

5.10. The developer will ensure that the roads and footways surrounding the site are swept on a daily basis. This process is to ensure that any debris or dirt from the construction vehicles avoids getting transferred around the road network.

Dust and Noise Suppression

5.11. The Site Manager will take reasonable steps to minimise noise and supress dust, dirt and debris generated by the scheme, working to the relevant British Standards and best working practices.

5.12. 'Silenced' plant and equipment will be used on-site wherever possible.

Considerate Contractors Scheme

5.13. The main contractor and sub-contractors will subscribe to the "Considerate Contractors Scheme" and adhere to the guidelines set out by the scheme.

Mobile Phones

5.14. No plant or delivery drivers will be permitted to use mobile phones or similar whilst driving vehicles or plant.

Project / Site Manager's Checklist

5.15. Both the Project Manager and Site Manager will utilise the checklists contained within *Appendix C* to ensure the safest methods are applied throughout the construction phase.

6. Residual Impacts

6.1. There would be a temporary adverse impact on the local road network resulting from the construction traffic. However, the mitigation measures outlined within the Construction Traffic Management Plan will offset and minimise any potential negligible impact.

6.2. Due to the increased HGV movements, it is possible construction could deteriorate the carriageway surface at the junction with the U364. It is expected that wear and tear would be managed through a Road Condition Survey prior to the beginning and at the end of works. This could form a formal planning condition.

6.3. In general, the impacts are minor and therefore not significant and will be confined to the construction period only.

7. Summary & Conclusions

Summary

7.1. ECS Transport Planning Ltd (ECS) has been commissioned by Trio Power Limited to prepare a Transport & Access Statement in support of a Section 36 application for the construction and operation of solar farm and battery energy storage system land to the west of Nether Drumgley, west of Forfar, Angus.

7.2. This study has been undertaken to provide details of the proposed traffic management measures that are to be implemented during the construction, operation and decommissioning phases of the development. These measures seek to mitigate any impacts related to construction traffic.

7.3. The findings of this study are based on a site visit, existing highway infrastructure observations and discussions with Angus Council Roads Department. Consideration has also been given to the requirements of local and national government transport planning guidance and policies.

7.4. This study includes a construction management strategy to enable and manage all types of Heavy Goods Vehicles (HGV) to and from the site during construction; this is to improve the safety and reliability of deliveries to site, reducing congestion and minimising the environmental impact. The routing and volume of traffic has been assessed at each stage together with the access requirements and potential impacts on key receptors.

7.5. The Proposed Development will comprise a ground-mounted solar photovoltaic array and associated infrastructure with an installed capacity of 49.9 MW. The array will comprise PV modules arranged in rows with a maximum height of 2.87m above ground level.

7.6. The Proposed Development also includes a Battery Energy Storage System with a capacity of 35 MW. The BESS will store excess energy generated by the solar PV array and release it during periods of high demand or low generation.

7.7. The infrastructure associated with the Proposed Development will include:

- PV module mounting frames;
- battery units housed in containers;
- inverters;
- transformers;
- high voltage (HV) switchgear and control equipment;
- cabling and interconnectors;
- on-site substation and control building;
- customer station compound;
- spares container;
- site access and tracks;
- security fencing and CCTV; and
- temporary construction compound.

7.8. Once operational, the development will be monitored remotely and will only require infrequent maintenance visits which are unlikely to be any more common than once a week.

7.9. Access for the proposed solar and BESS development has been investigated and it has been established that there is a feasible access route. The traffic flows on roads local to the site will be subject to minor increases during the construction period, but this will be a temporary effect, distributed over some 12 months. Traffic generated during normal operation of the scheme will be minor and would not result in any material effect.

Conclusions

7.10. In conclusion, the report demonstrates that the Proposed Development can be supported on the existing road network with minor impact to the network. Construction traffic will be limited and temporary, with general maintenance during its operational stage, infrequent. The impact on the road network will, therefore, be negligible.

APPENDICES

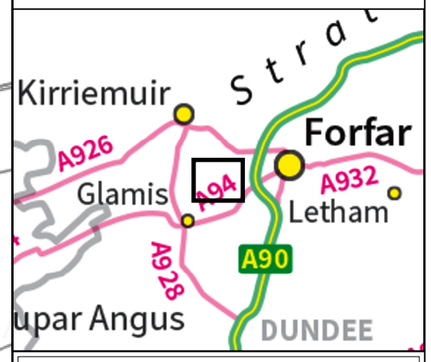
A. Scheme Plans

340000
341000
342000
751000
750000
3000

N

LEGEND

- Site Boundary
- Solar PV Module
- Battery Energy Storage System (BESS)
- Substation
- Sustainable Drainage System (SuDS)
- Temporary Construction Compound
- Security Fence
- Access Track
- Existing Track



trio

SLR

COSSANS SOLAR & BESS

EIA REPORT

PROPOSED SITE LAYOUT 3

FIGURE 2.3

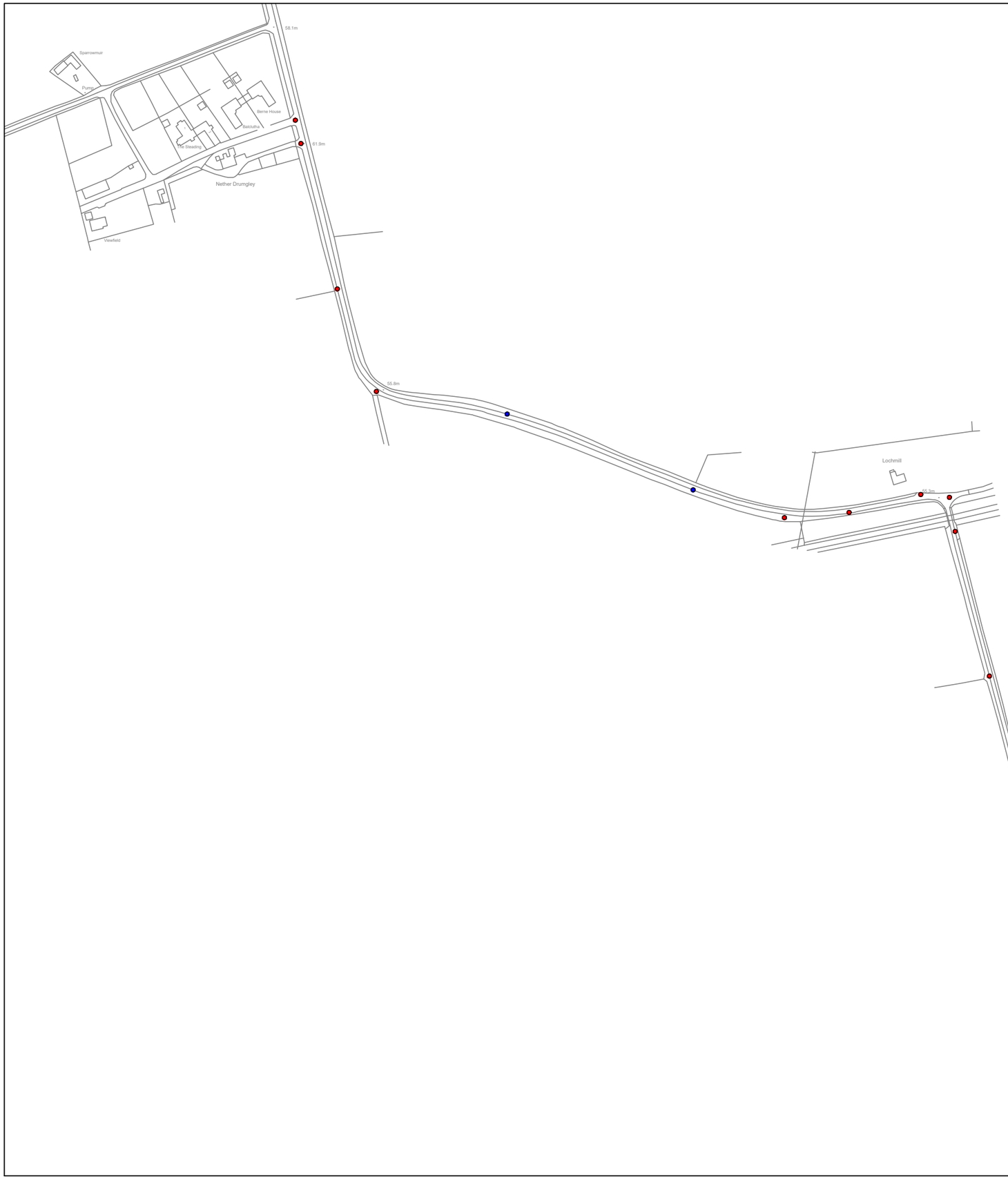
Scale 1:10,000 @ A3

Date MAY 2025

0 0.5 1
Kilometres

425.VT3194.00001.0007.0 Proposed Site Layout

B. Existing and Proposed Passing Places



Notes:-

Two No. Passing Places to be introduced within the existing verge between Drumgley in the north and Dean Water in the south.

Construction to consist of the following:-

40mm / 14mm CG Surface Course
80m DBM Combined Binder Course & Roadbase
300mm Well Compaed GSB Type 1 Laid to Falls

Geotextile Separation Layer Subsoil

Laid to Falls to ensure all surface water sheds to back of Passing Place.

Specification to be Agreed in Writing with Local Authority.

Proposed Passing Place Location -

Existing Informal Passing Place Location -

REV	DATE	AMENDMENTS	DRAWN	CHK	APP

ECS Transport Planning Ltd
Centrum Offices
38 Queen Street
Glasgow
G1 3DX

TRANSPORT PLANNING LIMITED

Telephone: 0844 443 0934
Email: info@ecstransport.co.uk

Client

TRIO POWER LIMITED

Project

LAND WEST OF NETHER DRUMGLEY, FORFAR

Title

PASSING PLACE REVIEW

Team	Drawn	Checked	Approved
-	SS	MS	MS

Scale @ A3	Date
N.T.S	28.03.25

Project No.	Drawing No.	Rev
24072	24072_001	-

Purpose of Issue

☐ Preliminary ☐ For Tender ☐ For Construction
☐ _____ ☑ For Information ☐ For Approval ☐ As Built

C. Project / Site Manager Checklist

Project/Site Managers Checklist

Both the Project Manager and Site Manager will utilise the following checklists to ensure the safest method:

Checklist 1 - Site/Project Managers – Vehicle Routes Checklist

		YES	No	N/A
Q1	**Are vehicle routes clearly separated from pedestrian routes? If 'No' see Action 1**			
Q2	**Do routes allow easy access to delivery areas? If 'No' see Action 2**			
Q3	**Are routes kept free of obstructions? If 'No' see Action 3**			
Q4	**Are routes clearly & suitably signed? If 'No' see Action 4**			
Q5	**Do routes reduce need to reverse? If 'No' see Action 5**			
Q6	**Will parking areas be required? If 'Yes' see Action 6**			

Vehicle Routes – Actions to be Taken

		Action
1	**Ensure routes are clearly designated and pedestrians protected**	**Routes clearly signed and segregated**
2	**Plan routes to allow safe access/egress**	**Assessed**
3	**Keep access routes clear**	**Check daily**
4	**Ensure sufficient signage is maintained**	**Check daily**
5	**Plan deliveries to reduce need for vehicles to reverse**	**Check during ordering process**

Checklist 2 - Site/Project Managers – Vehicle Movements Checklist

		YES	No	N/A
Q1	**Are highway routes planned to reduce need for excessive vehicle movement? If 'No' see Action 1**			
Q2	**Are vehicles fitted with audible reversing aid? If 'No' see Action 2**			
Q3	**May some vehicles reverse without audible aid? If 'Yes' see Action 3**			
Q4	**Can pedestrians have a clear view of traffic movements at crossings and at main access? If 'No' see Action 4**			
Q5	**Will vehicles run the risk of depositing mud on the highway? If 'Yes' see Action 5**			
Q6	**Will vehicles require sheeting? If 'Yes' see Action 6**			

Vehicle Movements – Actions to be Taken

		Action
1	Ensure highway routing is suitable	Review daily
2	Request aids are fitted	Where available
3	Vehicles without aids must be banked when reversing	Appoint banksman
4	Ensure drivers are aware of pedestrians and give way – pedestrian signing where necessary	Contractor briefing of staff
5	Provide on-site wheel wash facilities	Contractor to arrange
6	Ensure provision of sheeting gantry if required	Vehicles to be sheeted.