Scottish & Southern Electricity Networks

TRANSMISSION

Dunoon to Loch Long 132 kV OHL Rebuild

Environmental Impact Assessment

Volume 4 | Technical Appendix

Appendix 13.1 - Framework Construction Traffic Management Plan (CTMP)

Scottish & Southern Electricity Networks

TRANSMISSION

OMEXOM MORGAN SINDALL INFRASTRUCTURE

LT193 DUNOON – WHISTLEFIELD REBUILD

CONSTRUCTION TRAFFIC MANAGEMENT PLAN (SECTION 37 ONLY)

CLIENT

Scottish & Southern Electricity Networks

Construction Traffic Management Plan

Project number:	**LT193**	**Business unit / region:**	**OMSI**
Project title:	**Dunoon – Whistlefield Rebuild**		
Customer:	**Scottish & Southern Electricity Networks**		
Location:	**Dunoon, Argyll & Bute**		

Preparation, approval, authorisation and distribution			
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Issued to:	**Position:**	**Company:**
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REVISION SCHEDULE

Revision	Issue date	Details of amendment	Approved for issue by
Rev 01	30/03/2022	Initial OMSI submission to SSEN	N/A
Rev 02	17/11/2022	Updated submission with new alignment - Section 37 ONLY	N/A

CONTENTS

1 INTRODUCTION

1.1 Background

Scottish & Southern Electricity Networks (SSEN) has applied for consent to construct a new 132kV double circuit overhead line (OHL) between the existing Dunoon substation and Tower GL1/2 15 West of Loch Long. In addition, replacement of conductor, earth wire, insulators and overhead line fittings are to be installed between Towers GL1/2 12 and 15 East of Loch Long but these works will be captured under another CTMP.

OMSI (a Joint Venture partnership between Omexom and Morgan Sindall Infrastructure) has been appointed by SSEN to undertake the Early Contractor Involvement (ECI) stage of these works.

1.2 Purpose

The purpose of this project specific Construction Traffic Management Plan (CTMP) is to provide details of the proposed traffic management of delivery vehicles and other traffic generated during the construction phase of the Section 37 works only. The tower crossing works and dismantling of the existing line will be covered under a separate CTMP.

This document proposes measures to demonstrate how OMSI plan to avoid and reduce the impact, wherever possible, between public and general construction site traffic. General site traffic, deliveries and collections where practicable will be planned and managed to minimise the impact of traffic on the surrounding local road network and to minimise the impact on the local community.

The CTMP is a live document that will be reviewed at regular intervals by the project team to reflect progress of the works and any changes in requirements. Any revisions to the document as a result of changes will be recorded and re-briefed as required.

2 CONSTRUCTION WORKS

2.1 Project Description

The proposed development will comprise approximately 17.8 km of 132kV double circuit OHL supported by new steel lattice towers of 'L7c' series tower design, from the proposed Terminal Tower number 77 at the existing Dunoon substation to proposed tower number 1, West of Loch long.
See Appendix 1, Figure 1 - Location of Works

To permit access to each of the steel lattice towers, a number of haul roads are required to be constructed as part of the works. The majority of haul roads will be temporary and shall either be removed upon completion of the development or reinstated back to form smaller tracks suitable for off road vehicles to allow for future maintenance of the transmission line.

The OHL development forms one part of a wider project which also includes the following works which will be carried out by others:

- Tree clearance works along the route of the new OHL
- Substation works at existing Dunoon substation

2.2 Construction Process

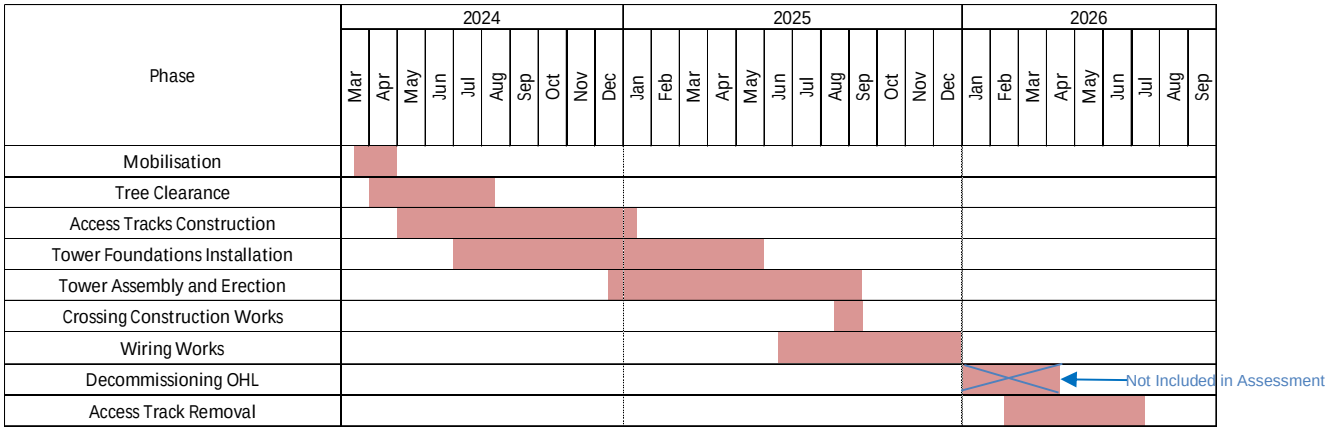
The construction process for the works will comprise the following key stages:

- Establishment of temporary construction compounds.
- Access track construction including bell mouths, passing places and other road improvements as agreed with Argyll & Bute Council (A&BC)
- Installation of tower foundations.
- Installation of temporary wood pole circuit diversions.
- Construction of towers.
- Conductor stringing including construction of any temporary scaffolding.
- OHL commissioning.
- Removal and reinstatement of temporary roads, tower location sites and decommissioning of bell mouths.

2.3 Construction Phase Programme

The project construction phase is anticipated to last for 26 months and an indicative construction programme is given in Table 2.1 below.

Table 2.1: Outline Construction Programme



2.4 Working Hours

Construction working will be mainly during daytime only. The working hours during the construction phase within the site shall be during daylight hours generally as outlined in Table 2.2 below.

Table 2.2: Construction Working Hours

	March to September	October to February
Monday to Friday	07:00 to 19:00	07:30 to 17:30
Weekend (Sat / Sun)	07:00 to 18:00	08:00 to 16:00

Any other out of hours working would be agreed in advance with A&BC.

Weekend working shall be planned to minimise construction traffic and areas of work shall be restricted to those which have the least impact on the local community and general public.

2.5 Site Compound

There are 2 proposed locations for the main site construction compound. These are subject to acceptance from the landowners in these areas however the main compound is expected to be located along the A815 North of Dunoon, within the area highlight below:

See Appendix 1, Figure 2 – Example of Main Site Construction Compound Layout Detail

The main site compound will be used to provide office accommodation and welfare facilities for staff involved with the project. The compound area will provide a safe area for parking away from the public highways as well as temporary storage of materials, plant and equipment.

Other smaller temporary satellite construction compound locations will be used along the route utilising areas within the agreed limits of deviation (LOD) for the development. These areas will be used for temporary storage of materials, plant and equipment as well as temporary parking of vehicles.

3 CONSTRUCTION TRAFFIC

3.1 Transport Configurations

No oversized abnormal load vehicles with regards to length (over 18.3m) or width (over 2.9m), are anticipated to need access to the development site, with the largest vehicles anticipated to require access being road legal standard articulated lorries, including low loaders importing construction equipment (Note: Construction equipment such as excavators will be chosen to remain within the road legal width where possible)

Abnormal loads with regards to vehicle weight over 44 tonnes are required to access the development. These vehicles include low loaders when loaded with construction equipment and the mobile cranes required for the erection of the towers and installation of the conductors. The typical mobile cranes have a road legal weight of 60 tonnes and a maximum axle weight of 12 tonnes, which would make them abnormal loads, moveable under a special types general order. The loaded low loader will depend upon the load being carried.

Table 3.1 below outlines the HGV vehicle types anticipated to be operating on the public roads.

Table 3.1: Vehicle Types

Vehicle Type	Description	Activity
1	Tipper Lorries	Used on site for construction and removal of haul roads.
2	Hiab Wagon	Used for transferring materials from storage compounds to where they are required to be incorporated into the works.
3	Concrete Truck Mixer	Used to import concrete for the tower foundations, with high numbers accessing the site during some concrete pours.
4	Articulated Vehicles (normal)	Used to deliver materials to the construction compounds or direct to locations where materials are incorporated into the works.
5	Articulated Vehicles (low loader)	Used to deliver and collect site machinery such as excavators, telehandlers as necessary. Site machinery will move under its own power to suitable loading and offloading locations.
6	Mobile Crane	Used for erecting towers. This vehicle will move around the site using internal haul roads and travel between sites using the public road network. Cranes with a vehicle weight over 44 tonnes are classified as an abnormal load moveable under a special types general order. The special types general order will require 2 clear days' notice to the roads authority prior to movement on the public roads network.
7	Tractor and trailer	Used for transporting plant and materials around site and between access points.

3.2 Origins of Transport Movements

The origin of loads will depend upon the materials being imported. Materials such as steel tower sections, conductors, and other specialist equipment will be imported along the A815. Other materials will be delivered direct from manufacturers will approach the site from the North also, some of these materials may be imported through the port of Hunter's Quay and will approach the site from the South. These items will be imported using standard road legal articulated or rigid vehicles and will be imported to a site compound nearest to the location where they are to be used. These materials may be transferred between the compounds and the working area using Vehicle Type 2 (Hiab Wagon).

Stone for the construction of haul roads and crane pads, ready mixed concrete and tarmac will be locally sourced. The nearest quarries to the development are Bonnar Quarry and Cowal Quarry. Bonnar Quarry at Cairndow, near to the junction of the A83 and A815, is located approx. 25 miles North of the project. The Cowal Quarry is located to the South of the development near Toward, approximately 15 miles away. These materials will be imported and incorporated immediately into the works.

Potential stone sources for construction of haul roads and crane pads have been identified at 2no. locations within the development area. These areas are shown in Appendix 4.

General construction materials (such as timber for fencing), servicing of the contractors' facilities and construction equipment will be locally sourced and delivered to site using small vehicles. These vehicles will be encouraged to use the preferred routes, but this may not be possible at all times as the journeys may not commence at suitable locations.

The workforce will be encouraged to share journeys to reduce the number of vehicles passing through towns and villages at the start and end of each day. This will be achieved by not allowing private vehicles onto site except at the main construction compound. It is anticipated that a large number of the workforce will be based in Dunoon, as such arrangements will be made for shared journeys to commence in Dunoon and use the preferred routes for construction traffic. It is accepted that not everyone will be able to share their journey as the exact location of individuals is not known, and Dunoon may not be convenient for all.

3.3 Transport Routes and Site Access Points

Council and Trunk roads that will be directly affected by the development are as outlined in Table 3.2 below.

Table 3.2: Traffic Routes

Road Name	Description
A815	Glen Kinglass – Dunoon - Toward
A885	Sandbank - Dunoon
A880	Ardbeg – Blairmore
B836	Dalinlongart - Auchenbreck
Unclassified	South of Invereck Countryside Holiday Park – Glen Massan
Shore Rd	Blairmore - Ardentinny
Unclassified	Ardentinny – Whistlefield Hotel turn off A815

Transport routes and site access points are shown in Appendix 2.

The proposed construction site access routes to the development will be via existing, new and temporary tracks from existing Council and Trunk roads. At 3no. of locations new bell mouths will be installed where site access tracks adjoin the public roads. Existing bell mouth openings from the public highway will be improved to A&BC requirements including widening and work carried out to improve sightlines. Images of all access Points can be found in Appendix 3

The proposed access points from existing Council and Trunk roads for the construction of the new OHL are outlined in Table 3.3 below.

Table 3.3: Site Access Points

Access Point	Road Name	Proposed Improvement Works	Proposed End Use
15	A885	Existing bell mouth, Minimal improvements required	n/a
14	B836	Existing bell mouth, Minimal improvements required	n/a
13	B836	Existing bell mouth, Minimal improvements required	n/a
12	B836	Existing bell mouth, Minimal improvements required	n/a
11	Unclassified	New temporary bell mouth to be installed	Reduce to field entrance
10	Unclassified	New temporary bell mouth to be installed	Reduce to field entrance
9	A815	Existing bell mouth, Minimal improvements required	n/a
8	A815	Existing bell mouth, Minimal improvements required	n/a
7	Shore Rd	Existing bell mouth, Minimal improvements required	n/a
6	Unclassified	Existing bell mouth, Minimal improvements required	n/a
5	Unclassified	Existing bell mouth, Minimal improvements required	n/a
4	Unclassified	Existing bell mouth, Minimal improvements required	n/a
3	Unclassified	Existing bell mouth, Minimal improvements required	n/a
2	Unclassified	New permanent bell mouth to be installed	Remains as permanent bell mouth
1*	Unclassified	Existing bell mouth, Minimal improvements required	n/a

**Access Point 1 not considered in this assessment as works not under Section 37 planning*

Not all site access tracks which are constructed will be capable of taking a crane and other heavy plant, including concrete deliveries and other construction materials delivered on articulated lorries. The construction of the tracks

that will be able to shall be constructed to good practice working methods with water crossings designed and constructed to comply with legislation. The majority of these site access roads will be temporary and shall be removed upon completion of the development with sites being reinstated. Where construction of tracks is not possible due to constraints such as steep terrain, materials and operatives will be transferred via helicopter or All-Terrain Vehicles.

Table 3.4 below outlines the location of the access points to the key road links that will be used by construction traffic.

Table 3.4: Key Road Links

Link No.	Vehicle Routing	Relevant Access Points
1	A885 (High Road)	15
2	B836	12, 13 & 14
3	Unclassified – Turn off A815 at Invereck Countryside Holiday Park	10 & 11
4	A815	8 & 9
5	A880 / Shore Road	7
6	Unclassified – Turn off A815 at Whistlefield Hotel	2, 3, 4, 5 & 6
7	Unclassified – Turn off A814 at Whistlefield	1

**Link 7 not considered in this assessment as works not under Section 37 planning*

The extent of the key road links are shown on in Appendix 2 – Key Road Links.

3.4 Estimated HGV Trips on Vehicle Routes

An assessment of the total vehicle trips associated with the works has been derived from first principles, based on the key road links. The details of these are shown in Table 3.4.

Table 3.4: Trip Generation by Road Link

Total Trip Generation on Road Link

Link No	Road Name	Total Vehicles		
		HGV	LGV	Total
1	A885 (High Road)	383	594	977
2	B836	1862	2688	4550
3	Unclassified – Turn off A815 at Invereck Countryside Holiday Park	785	1098	1883
4	A815	12751	13812	26563
5	A880 / Shore Road	3374	2766	6140
6	Unclassified – Turn off A815 at Whistlefield Hotel	8301	7686	15987
Totals		27456	28644	56100

The maximum levels of traffic will be encountered on Link 4 as the majority of all other link roads feed off the main A815 route.

Table 3.5 below, provides a further breakdown of the assessment showing projected total number of trips relevant to each tower location and the different work types relating to the outline programme as indicated in Table 2.1.

Table 3.5: Trip Generation by Tower Location and Work Type

Total Trip Generation by Tower Location and Work Type

Tower Number	Link	Total Movements HGV (2-way)							
		Bellmouths, Access Tracks & Compounds	Tower Platforms & Foundations	Towers & Stringing	Dismantling & Reinstatement	Light Vehicles	HGV	LGV	Totals
1 to 20 (inc. Ex. 14 & 15)	4 & 6	2387	408	32	672	3306	3499	3306	11634
21 to 23	4 & 6	116	45	64	106	426	331	426	1831
24	4 & 6	76	45	40	85	372	246	372	1497
25	4 & 6	28	26	4	30	204	88	204	826
26 to 27	4 & 6	641	51	6	65	612	763	612	2209
28 to 44	4, 5 & 6	2000	316	53	1005	2766	3374	2766	14394
45 to 51	4	729	168	35	374	1530	1306	1530	6240
52	4	37	32	3	42	216	114	216	924
53	4 & 3	143	26	41	92	324	302	324	1955
54 to 55	4 & 3	65	51	7	63	360	186	360	1350
56 to 57	4 & 3	132	51	1	113	414	297	414	2060
58 to 62	4 & 2	252	115	11	83	912	461	912	1952
63 to 74	4 & 2	580	242	51	528	1776	1401	1776	7706
75 to 77	4 & 1	164	73	30	116	594	383	594	2206
Totals		7350	1649	378	3374	13812	12751	13812	51478

The largest volume of HGV traffic is generated by access works due to the large volumes of stone required to construct the tracks. Current numbers are based on commercial supply for the full project. There is the potential to source stone locally within the development area. It is anticipated that if the two identified locations were used then the HGV volumes for Access Tracks & Compounds could reduce by around 30%.

4 EXISTING ROAD PROFILE

4.1 General

The 15 proposed access locations and public roads used to access the development have been categorised into three main areas throughout the development area with a short profile given below:

- Southern Development Area
- Central Development Area
- Northern Development Area

4.2 Southern Development Area

4.2.1 A885 (High Road)

For construction traffic approximately 600m of the A885 will be utilised, Link 1, it continues from the A815 at Sandbank up to Access Point 15 (AP 15). This will be used for access to the existing Dunoon substation and to Towers 77 to 75.

The A885 comprises of single-carriage way roads and is suitable for construction traffic. Access Point 15 leading off the A885 is situated just to the North of Sandbank Primary School, no construction traffic is required to bypass the school.

This stretch of road passes through a built-up area with a combination of commercial and residential home access on both sides.

4.2.2 B836

Approximately 1.8 km of the A836 will be utilised for construction traffic, Link 2, between the turn from the A815 at Dalinlongart and Access Point 12. This road will be used for access to AP 12, 13 and 14.
Towers 63-74 will be accessed from AP 13 & 14. Towers 58 – 62 from AP 12

The A836 comprises of single-carriage way roads and is suitable for construction traffic. Approximately 150m West of AP 13, the road narrows to single lane traffic over a bridge spanning the Little Eachaig River.

From Dalinlongart heading West is part of National Cycle Network Route 75.

4.2.3 Unclassified – Turn off A815 South of Invereck Countryside Holiday Park

Access Points 10 & 11 are situated along this unclassified road, Link 3. From the A815 to AP 11 construction traffic will be required to utilise approximately 1.3 km of this road.

The road is a single-track road with very limited provision for construction vehicle passing places. At its junction with the A815 it is signed with a 7.5T weight limit at 2.4 km (1.5 miles) and that it lead to a dead-end, neither of which will affect construction traffic for this project. Signage also indicates the road is unsuitable for touring coaches.

4.3 Central Development Area

4.3.1 A815

The A815 is the main route for the project and the surrounding areas. With the exception of AP 1 to the East of Loch Long all other link roads and access points will originate from this road. The road, at approximately 40 miles in length, leaving the A83 at Glen Kinglass and travelling South towards Dunoon. The traffic volumes aren't as large as would be expected due to the majority of traffic travelling to Scotland's Central Belt region opting to cross from Dunoon by ferry.

The road comprises of single-carriage way roads and no issues are foreseen with using it to bring in heavy plant and materials for the construction of the new overhead line. More lightweight items would likely benefit from the reduction of travel time by utilising the ferry network at Dunoon. From Hunter's Quay to the T-junction with the A885 at Holy Loch Marina the 3.2 km section of this road passes by many residential properties on its Western side. The road is flanked to the East by Holy Loch. No heavy loads are expected to be brought to the project along this routing.

From the A885 at Sandbank to Dalinlongart, turn off for the A836, along the A815 the volume of properties to the Western side of the road begins to decrease. North of this area they are few and far between.

Access Points 8 and 9 lead off the A815. AP 8 leads to a single Tower, number 52. This will be accessed through the Chainsaw yard. Access Point 9 is at the Southern end of Loch Ech, opposite Strathech Holiday Park, and this leads to Towers 50 - 43 via the track to the reservoir located in Puck's Glen.

The A815 between Hunter's Quay and Dalinlongart is part of National Cycle Network Route 75.

4.4 Northern Development Area

4.4.1 Shore Road / A880

The A880 begins at a T-junction with the A815 to the North of Cot House Services and heads South East to Strone before turning North towards Ardentinny. The A880 officially stops at Blairmore Farm from where it is assigned the name Shore Road. Up to this point the road is single-carriage way lanes with speed limits between 30 and 40mph. After Blairmore, Shore Road turns to a single-track and the maximum speed is increased to the national speed limit.

The road is narrow but with ample passing places. It is expected that all heavy construction vehicles would take the alternative route from the A815 at the Whistlefield Hotel. The reasons for this are, the narrow nature of the lanes, the high volume of residential properties along its North / Western side and the number of vehicles that are parked on the road in areas such as Kilmun and Strone.

The A880 would be suitable for light good vehicles such as welfare vans and 4x4s. If all vehicles related to the works are to be routed via the road from the Whistlefield Inn turn off at the A815, this road offers the shortest distance back to Dunoon from 6no. Access Points in the area, so it would be utilised in an emergency situation.

No Access Points are situated along this A880.

For Access Point 7, construction traffic would be required to used approximately 4.2 km of Shore Road from AP 6. The road is narrow and would require the addition of passing places for construction vehicles. The road passed through the small village of Ardentinny. AP 7 serves as access to Towers 42 – 27.

4.4.2 Unclassified – Turn off A815 at Whistlefield Hotel

This road leads off the A815 at the side of Loch Eck. Initially it is 2- way traffic but within the first 20m it turns into single track. The road is narrow but would be suitable for construction vehicles. There are a number of passing places along its length but these would need to be widened to accommodate larger construction vehicles.

From the Whistlefield Inn the gradient of the road begins to increase reaching a maximum of 20%. A number of forestry accesses lead off the road and there are sign posts warning of cyclists and horse riders in places.
The road levels out for a time, closer to the Access Points it begins to decrease in altitude with more signs indicating 20% gradients. An area around this point bends sharply, it is not expected to be an issue but swept path analysis would be beneficial to confirm.

Signage at the Sligrachan terminus / bus turning area indicates the road is subject severe weather and that during such times the A880 should be used as an alternative.

During visits to this area to complete site walkovers in the months of December to March, this road was observed to have very little traffic on it, however this is likely to increase during the summer months.

This road serves as access to AP2 to 7. Access Point 2 would be used for Towers 21- 23 and potentially a compound within the field East Glen Finart Burn. This compound would be used to assemble tower steelwork before it is flown to positions Northeast and Southwest. A compound within this area would need to avoid the Dun Daraich iron age fort remains. Access Point 3 would lead to 1 Towers, number 24. Tower 25 would utilise AP 4. From AP 5 Tower 1-20 will be accessed utilising a combination of existing forestry and new tracks. AP 6 would be the access for Towers 26 & 27.

4.4.3 ~~Unclassified – Turn off A814 at Whistlefield~~

~~Link road 7 would be utilised for access to the anchor and crossing towers on the East of Loch Long via Access Point 1. Leading off the A814 at Whistlefield, North of Garelochhead towards Royal Naval Armaments Depot Coulport, this road is wide comprising of single carriageway roads. No issues are foreseen using this stretch of road for all construction vehicles.~~

~~Deliveries of plant and materials would use the A82, A817 and A814 as the fastest route to this point for vehicles approaching from the Central Belt.~~

4.5 Suitability For Construction Traffic / Public Roads Improvement Works

The A815 is considered suitable for all construction traffic without improvement and will be used as the main route to connect all the areas of work and construction compounds West of Loch Long. Construction traffic will be routed to each Access Point along authorised routes from the A815. These routes where required will be improved prior to work commencing.

The A815 will require advance warning signs, as considered necessary, to warn other drivers of possible slow moving and turning traffic as well as traffic / speed management for AP 8 given its location.

The A885 requires no improvements and is suitable for all construction traffic. Signage to warn of slow moving and turning vehicles will be required.

The B836 also requires no improvement works but will require signage and is suitable for all traffic.

The A880 is expected to only be used for light goods vehicles with no improvements intended.

Heavy construction vehicles travelling along the unclassified road from the A815 South of Invereck Countryside Holiday Park will require additional passing places up to AP 8.

From the Whistlefield Hotel junction to AP 7 heavy construction vehicles will require passing places to be widened and additional places installed. Swept path analysis for tight sections of this road would be beneficial to ensure suitability.

Any improvement works to the public roads will be undertaken in agreed phases between SSEN and A&BC. These works will be subject to detailed design under a licence from A&BC which will be applied for in due course. There may be measures taken to protect utility services sited along the routes. Any works which require the modification of utility services will be specified at the detailed design stage and in full consultation with the relevant service providers and A&BC

5 MITIGATION MEASURES

5.1 Driver Communication

All vehicles directly owned by the client or main contractor will have a communications system installed that will be legal to use while the vehicle is in motion. The communications system will be used to advise drivers of any issues on the road network or on site, allowing them to re-route as necessary, adjust driving speed or adjust destination. The communications system will also be used by drivers to report issues, and to call for immediate assistance if required.

5.2 Passing Places

Passing places will be constructed along the local roads in advance of the works commencing. The location and size of each passing places will be determined and agreed with the council for each route. During the works the access routes will be monitored for damage caused by indiscriminate passing of vehicles. Where considered necessary additional passing places will be provided in these locations.

Passing places will not be used by drivers of construction vehicles as a place to wait or as a place to park. Local residents will be able to report any instances of inappropriate driving or use of passing places to the project community liaison officer.

5.3 Accesses Improvements

Existing and new accesses will be improved to double gate access bell mouth layouts. Where required visibility will be improved or provided at the access points, appropriate for the nature and speed of the road. Visibility will be measured from a point 2.4m or 4.5m back from the carriageway edge as agreed by A&BC. All public road improvement works will be approved by A&BC and individual traffic management plans agreed before works commence.

5.4 Wheel Washing

In order to reduce mud and debris being deposited onto the road network, wheel washing facilities will be provided at all accesses where vehicles can exit onto the public road. The minimum provision will be a brush and a water supply. Where considered necessary the public road, adjacent to the site access points shall be kept clean by utilising a mechanical road sweeper. Local residents will be able to report any instances of mud being carried onto the public highway to the project community liaison officer.

5.5 Speed Limit

A maximum 15 mph speed limit will be imposed for all construction traffic on private roads and tracks, which would be reinforced through temporary construction traffic speed limit signs. Along public roads national speed limits or signed speed limits (whichever is lower) will apply. Local residents will be able to report any instances of speeding on the public highways to the project community liaison officer.

5.6 Signage

Temporary construction site signage will be erected on the local road network in the vicinity of each of the proposed construction accesses, and at other locations as considered necessary, to warn people of construction activities and associated construction vehicles. The purpose of such signage is to provide driver information and to maintain road safety along the construction vehicle route. The exact nature and location of the signage would be agreed with Transport Scotland and A&BC prior to construction activity on site. Figure 1 illustrates examples of the type of signage which will be utilised.

Figure 1 - Typical Advance Warning Signage

5.7 Public Information / Community Liaison

Information on the project will be distributed using a variety of methods including the project website, local newsletters, public notices and public meetings by the project community liaison officer.

A construction liaison committee comprising of the project community liaison officer will meet periodically to provide updates on the construction programme, vehicle movements and public road improvements. Representatives from SSEN and OMSI will attend. Contact details for key project staff will be provided to the community in order for any complaints or information requests to be actioned.

5.8 Protecting Pedestrians and Vulnerable Road Users

Public access safety advice signage will be installed at all access points from the public road network. All excavations shall be surrounded by barriers. All construction works will be undertaken with strict adherence to the current Construction Design and Management regulations.

5.9 Public Rights of Way

Core paths and other recreational routes are designed to cater for non-motorised travel and general public access. The alignment of the proposed OHL and associated access tracks does cross core paths. An Outdoor Access Plan should be produced to demonstrate how public access will be maintained and managed during construction.

5.10 Road Condition Surveys

The roads being used by the construction traffic are both major roads and minor rural roads that carry heavy vehicles associated with forestry operations. Intensifying the use minor road roads by heavy construction vehicles may lead to some deterioration of the road pavement, which cannot be determined in advance. The developer will therefore undertake a road condition survey in conjunction with the roads authority prior to commencing works on site; this survey will identify any visually apparent defects with the road pavement and will be used as a baseline for any future surveys.

During the construction of the transmission line weekly inspections will be undertaken of roads used during the previous week and repairs to the road pavement will be undertaken when damage is identified and agreed to be as a result of the construction works. Upon completion of the works in any area, a final road condition survey will be undertaken in conjunction with the roads authority. Defects will be recorded for comparison with the initial survey. Where deterioration of the road pavement can be agreed as a result of the construction works, the developer will arrange for a repair to be undertaken.

6 SUMMARY

Construction of the 132kV overhead transmission line will occur over a 26 month construction programme and will require access to numerous access points through the adjacent road network.

Suitable construction routes have been derived through consideration of the available road network, taking account of road width and condition. Swept path analysis is required to demonstrate that some construction routes proposed are suitable for gaining of access required based on vehicle type and size.

Cranes have been identified as the only vehicles requiring access to the site which are to be considered as abnormal loads. Crane movements are not extensive and will be taken to the site areas through suitable construction routes.

Construction traffic will be routed to avoid using inappropriate lanes or from passing through major residential areas.

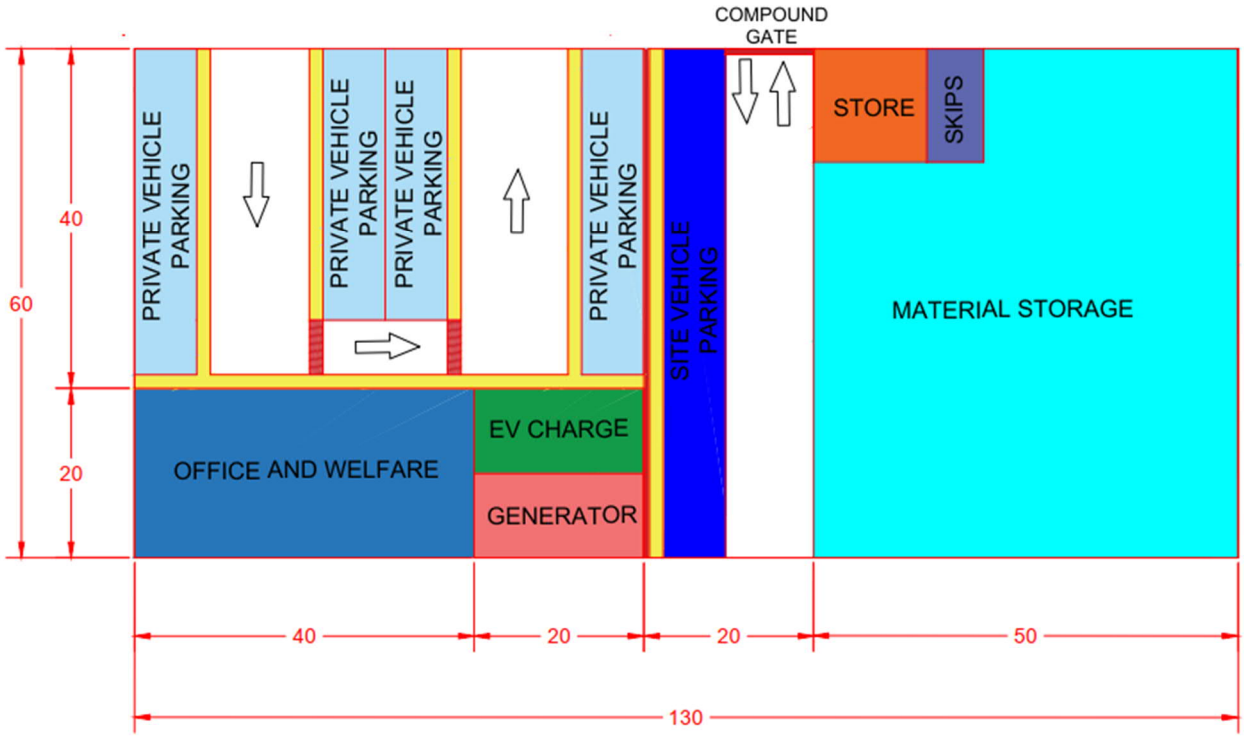
An estimate of trip generation by vehicle type has been undertaken and assigned to the road network based on access points and routing along suitable roads.

APPENDIX 1 – FIGURES

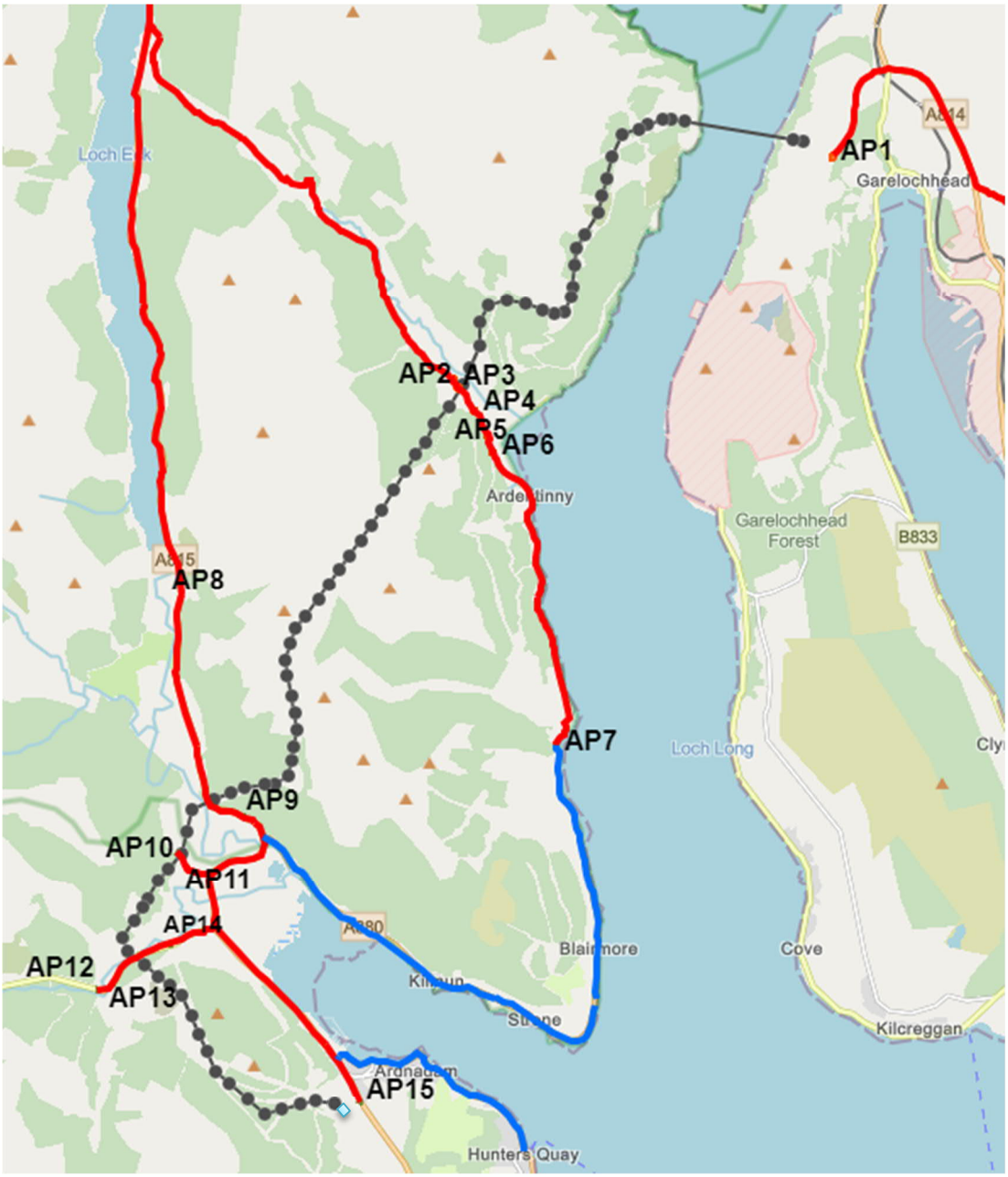
Figure 1 – Location of Works

New Overhead Line Route

Figure 2 – Example: Main Site Construction Compound Layout Detail



APPENDIX 2 – KEY LINK ROUTES



AP	Access Points
	Main Construction Traffic Route
	Secondary Traffic Route
	Dunoon Substation

APPENDIX 3 – ACCESS POINTS

AP1

AP2

AP3

AP4

AP5

AP6

AP7

AP8

AP9

AP10

AP11

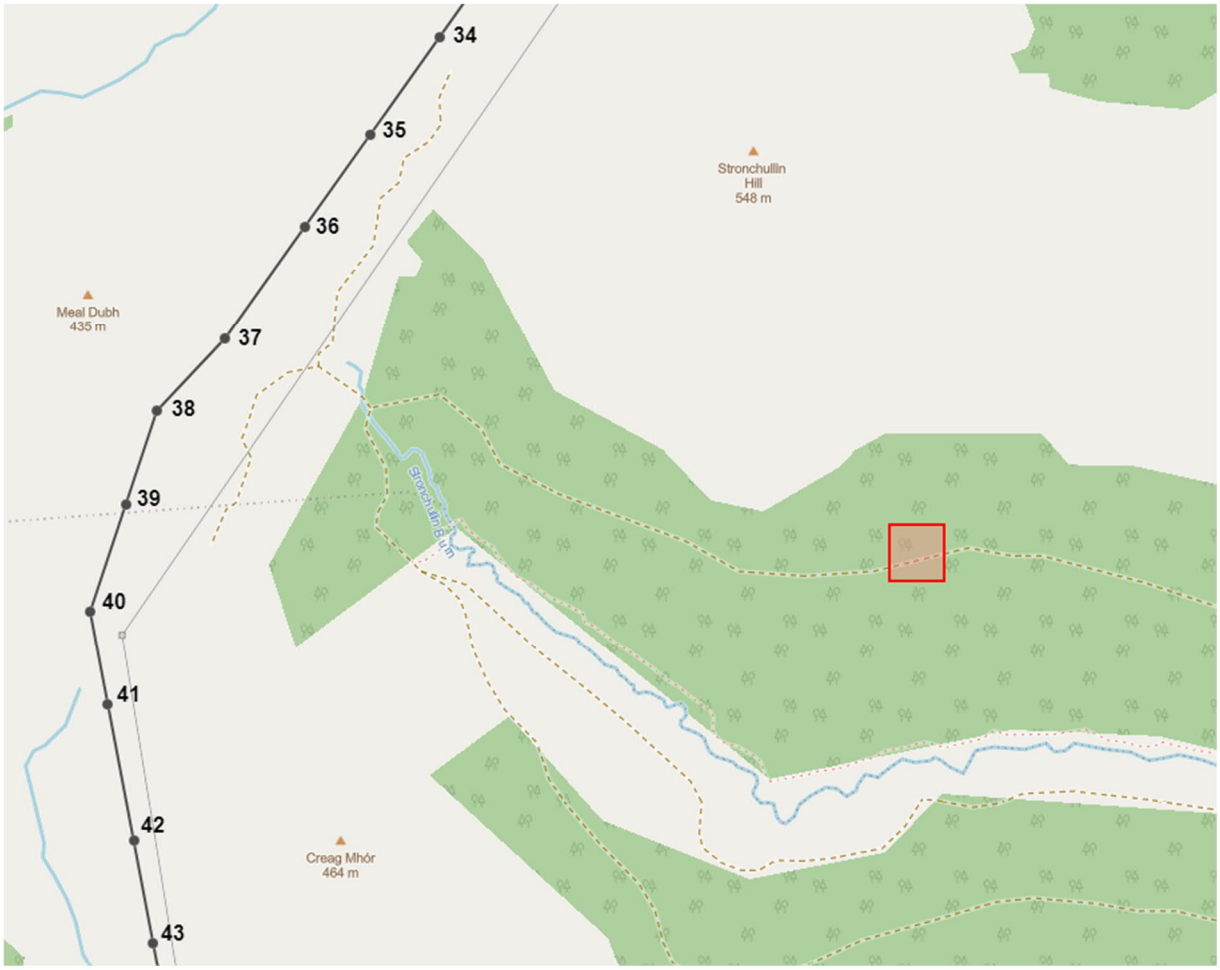
AP12

AP13

AP14

AP15

APPENDIX 4 – POTENTIAL STONE SOURCE LOCATIONS



Potential Stone Source Locations