



Eastern Inner Dock Quay, Port of Nigg

Framework Construction Traffic Management Plan

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Comments

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1. Introduction

- 1.1. ECS Transport Planning has been commissioned by EnviroCentre Ltd on behalf of Global Energy Nigg Ltd (GEN) to prepare a Framework Construction Traffic Management Plan (CTMP) in support of a planning application to upgrade the eastern side of the Inner Dock by providing a new berthing quay within the Port of Nigg.
- 1.2. It is expected that a condition would be attached to any planning permission detailing that no development shall commence until the CTMP has been updated following the appointment of a contractor and submitted and approved in writing by the Planning Authority in consultation with the Roads Authority.
- 1.3. The findings of this study are based on a site visit by design team members and review of existing infrastructure. Consideration has also been given to the requirements of local and national government transport planning guidance and policies.
- 1.4. This CTMP has been created to manage all types of Heavy Goods Vehicles (HGV) to and from the site during construction, to improve the safety and reliability of deliveries to site, reduce congestion / delay and minimise the environmental impact. In addition, measures are proposed to ensure that parking by contractors is controlled to limit the potential impact on the public highway in the wider area.
- 1.5. This CTMP sets out the strategy and measures to be adopted within the project in respect to construction traffic in order to:
 - Facilitate site access points and routes for the delivery of construction materials and equipment;
 - Provide temporary access routes within site working areas where necessary;
 - Carry out construction activities;
 - Manage the impacts arising from temporary closure of roads and public rights of way if required at times during the Project, including the provision of alternative diversion routes where possible; and
 - Maintain communication with roads authorities and residents throughout construction activities and monitor the conditions of the road surfaces.
- 1.6. It is intended that the CTMP is a live document that will be updated and modified as agreed with the relevant authorities (The Highland Council's Roads Department) as the Project progresses and as details are clarified prior to the start of works on site. The CTMP may also need modification to reflect other developments in the area whose details are uncertain but subject to their programmes and progress, may have a cumulative effect on the public highway network at the time of construction of the Project.
- 1.7. The CTMP and the control measures therein are included within all contractor enquiries to ensure early understanding and acceptance/compliance with the rules that will be enforced on this project.

Project Details

- 1.8. The site is part of the wider Nigg Energy Park which is positioned approximately 10km south of the A9 and some 500m north of Nigg Ferry Terminal, and comprises laydown and storage areas, fabrication and assembly shops, staff offices and a deep-water quay. Access to the Park can be gained via the B9715 on the eastern boundary.
- 1.9. The location of the site is indicated as a star within *Figure 1* overleaf.

Figure 1: Site Location



- 1.10. The site comprises the eastern side of the Inner Dock at the Port of Nigg Energy Park. It is an existing dry dock with a sloped revetment covered with rock armour. Currently the Inner Dry Dock is flooded with the dock gate moored offshore at the adjacent Oil Terminal jetty. This situation is envisaged to remain for the foreseeable future and the proposed construction works would take place within a flooded Dry Dock.
- 1.11. GEN propose to modify the existing rock revetment forming the east side of the Inner Dock to form 290m of heavy-duty quayside 36m wide, faced with a vertical retaining wall to primarily facilitate the export of HV cable manufactured at the adjacent proposed factory directly onto cable installation vessels. The area of the works is 1.86 Hectares or thereby.
- 1.12. Planning permission has recently been granted (Planning Reference 23/04662/FUL) for the construction and operation of a High Voltage (HV) cable manufacturing factory and ancillary facilities. The site of the factory is to the east of the B9175 opposite Nigg Energy Park. It is intended the upgraded east side of the Inner Dock at Nigg Energy Park will be used to receive the HV cables from the factory, directly onto installation vessels, predominantly to service the off-shore wind market.

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

- Construction Traffic Routing;
- Site Layout;
- Mitigation Measures; and
- Summary

2. Construction Traffic Routing

Haulage Route

- 2.1. Construction materials will arrive by both sea and road. Construction materials arriving by sea will primarily be tubular steel piles. The materials will be offloaded at one of the existing quays at Nigg. Once offloaded, the material will be transported to the designated work area without the need to access the public road.
- 2.2. For deliveries by road, two access points are anticipated. Access point 1 will be via the main gate of Nigg Energy Park which will be used for general deliveries. Access point 2 is located further east and is normally locked. However, to minimise impact on the B9175, the Contractor will be given restricted access for the sole purpose of importing material from Castlecraig Quarry.
- 2.3. As noted above, it is estimated that around 129,692m³ of infill material is required will be brought to site from Castlecraig Quarry. This equates to a maximum number of daily movements of 250 per day based on 8 m³ tipper lorries being used to transport the material from the quarry to the construction site.
- 2.4. In relation to concrete, this will also be transported to site via road with a total of 680 m³ being required for the coping beam formation and a further 2,900 m³ to form the final concrete slab. It is estimated that this will equate to approximately 20 ready mix concrete wagons accessing the construction site per day during the relevant concreting phases of the development.
- 2.5. The site is located to the west of the Port of Nigg, at the southern end of the B9175. The B9175 is a single carriageway road subject to a 60mph (national speed limit), with the exception of a short section through Arabella, which has a limit of 40mph. Operating in a north – south direction, the B9175 links the A9(T) in the north with Nigg Ferry Terminal in the south. The route is circa 10km in length.
- 2.6. In the vicinity of the site the B9175 is a 7.5m wide single carriageway road which has the ability to accommodate circa 13,000 vehicles per day. At present, the B9175 accommodates circa 2,500 two-way daily movements at its busiest location to the north of Arabella. As such, the carriageway is currently operating at 20% or less of its actual capacity.
- 2.7. At the southern end of the site, the B9175 links to a private road via a priority junction linking to Castlecraig Quarry circa 1.5km east of the development site.
- 2.8. The B9175 connects to the A9(T) via a four arm roundabout known locally as the Nigg Roundabout junction approximately 10km north of the site. The A9 is a major trunk road operating from Thurso on Scotland's north coast to Bridge of Allan in Stirlingshire, connecting several towns and cities including Inverness and Perth.
- 2.9. The haulage route is generally the shortest available to the strategic road network and, once on the strategic road network, the haulage route is focused on distributor / trunk standard roads which are suitable to accommodate construction traffic vehicles.
- 2.10. Given the rural location and distance to the trunk road network, interaction with sensitive receptors will be limited. Furthermore, the B9175 currently supports larger vehicle access to Castlecraig Quarry and the Port of Nigg Energy Park.
- 2.11. The anticipated haulage routes are identified within *Figure 2* overleaf.

Figure 2: Haulage Routes



Construction Vehicle Management

- 2.12. Immediately upon commencement of construction, all deliveries, operatives and visitors to the construction site will report to the site office. This will be communicated to all works contractors at their pre-start meeting. They will be informed by site staff of emergency procedures, assembly points, first aid, site rules, etc.
- 2.13. Staff and visitor parking will be clearly signposted and located opposite to the site office. Signage will be erected at the entrance of the site to clearly direct construction traffic and visitors to ensure there is no potential for confusion.
- 2.14. Delivery vehicles will progress to the material laydown area where the vehicle will be unloaded, and the goods immediately moved within the wider construction site to ensure the delivery area is clear at all times. Once the vehicle is ready to exit it will manoeuvre to exit.
- 2.15. An indicative laydown area has been identified by the contractor within the Port of Nigg, less than 200m from the main works access. This area of the site currently accommodates larger vehicle access and turning for exit in a forward gear. Delivery / construction vehicles will be accommodated within the site

during all phases with no requirement for reversing manoeuvres on to the external road network. Vehicle swept paths will be provided once the internal arrangements for construction have been finalised.

- 2.16. Deliveries will only be permitted between 8am - 7pm Monday – Friday and 8am – 1pm Saturday and must be pre-arranged giving 24 hours' notice to the Site Manager. On arrival at site drivers must report to the Site Manager wearing appropriate PPE.
- 2.17. A booking system will be adopted to minimise multiple vehicular arrival at the same time, so as to minimise the impact on the local surrounding area and ensure no conflicts with the level crossing to the north of Arabella.
- 2.18. Prior to arriving, suppliers or drivers will notify the site manager to indicate their anticipated time of arrival. If in the rare event a problem with access to the site is identified whilst the delivery is in transit, the supplier or driver will be advised to wait until such time as access becomes available. An area will be made available to delivery vehicles off the public road network.
- 2.19. Based on discussions with contractors, it is considered that the site could generate a maximum of 250 two-way HGV movements per day on the southern delivery route (via Castleraig Quarry) and 10 two-way HGV movements on the northern delivery route (via Pat Munro Caplich Quarry Alness).
- 2.20. Transportation of the crushed rock from Castleraig Quarry is expected to extend circa 21 weeks, with transportation of the ready-mix concrete (via Pat Munro Caplich Quarry Alness) lasting 25 weeks. Delivery of the crushed rock will be complete before the ready mix concrete process begins.
- 2.21. In addition, the construction works would be temporary, therefore, effects associated with HGV traffic on the local road network would only occur over the duration of operations. It is estimated that construction will be complete within 18 months.
- 2.22. In terms of staff, it is anticipated that there could be 20 – 30 employees on site at any time. Staff would travel to the site in groups of 2 in vans. As such, Light Goods Vehicle generate could be in the region of 15 arrivals in the AM and 15 departures in the PM.
- 2.23. Following commissioning of a contractor, the vehicle volumes and types detailed above will be confirmed and finalised together with a construction programme. Nevertheless, daily generation will be negligible and easily accommodated on the network.
- 2.24. At this stage, abnormal load or oversized vehicles access to the site is not considered necessary. If circumstances change, access to the site by these types of vehicles would be agreed with THC separately and would be subject to escort.
- 2.25. The delivery of crushed rock will be the most intensive operation throughout the construction period. As is common place with construction in rural areas, the delivery of these materials will be programmed over a longer period to ensure that the impact is managed and disruption is limited on any specific day. This will assist with limiting the deterioration of the road surface as a result of larger vehicle activity.
- 2.26. All subcontractors will stipulate to the site manager their vehicle size, times for deliveries, access route and site access arrangement prior to delivery.
- 2.27. Any deliveries to be made out with working day will be reviewed on a case by case basis taking into account a number of factors including, time and impact on local community, noise and traffic disruption. Contractors will be required to give details of proposed timings of material deliveries to the site. At this stage they will

be given a specific area for delivery with key maps and access routes including direction of travel, turning points and any site specific hazards.

- 2.28. Construction vehicles will be managed by the Project Manager overseeing direction of the project and by the Site Supervisor responsible for on-site activities. Contact details for both the Project Manager and Site Supervisor will be provided to the council on appointment. In the meantime, Global Energy Nigg Ltd will assume Project Manager status for the scheme and will be the primary point of contact for THC Roads Department:-

Stuart Innes
Project Manager
Global Energy Nigg Ltd
Nigg Energy Park
Nigg
Ross-shire
IV19 1QU
Scotland
stuart.innes@gegroun.com

- 2.29. Security hoarding around access points will be periodically inspected for damage by the site manager and remedial maintenance will be carried out if necessary.

3. Site Layout

Site Setup

- 3.1. As per the current arrangement, the site will be enclosed by boundary fencing which secures the site and prevents unauthorised access onto the construction area.
- 3.2. The site set up will be of sufficient size to cater for the anticipated construction staff as well as construction vehicle holding and turning areas. Such facilities will be in accordance with the requirements of the relevant CDM regulations and will be subject to regular maintenance and cleaning.
- 3.3. Site cabins will be located within the storage area ensuring they are easily accessible from the road network.
- 3.4. The area will have the ability to accommodate all parking requirements to ensure that no parking is undertaken outwith the site area or on the public road. The main car park could also be utilised, if necessary.
- 3.5. As detailed previously, site contact details will be presented to ensure that neighbours can contact the Site Manager should an issue with parking or any other matter remain unaddressed.

Site Vehicular Access

- 3.6. The site access / egress will be secured through hoarded gates. During working hours, the gates will remain under control of an appointed person – who will physically control entry through the gate at all times. The scheme shall include a monitoring regime to repair or replace any damaged or lost fencing or signs as necessary. Furthermore, a layby / setdown area will be made available for any vehicles outwith their designated time slot.
- 3.7. Traffic accessing and egressing the site will give way to all road traffic although this will be minimal given the site is located in a rural location. Vehicles will enter and exit the site in forward gear (which if required will be managed by onsite traffic marshals). There will be adequate areas for vehicle manoeuvring within the site, storage of materials and loading / unloading.
- 3.8. Warning and locating signs will be established and maintained (Caution; Construction Traffic or similar) at key locations along the B9175 and on approach to the entrance at the earliest opportunity.

Pedestrian and Cycle Access

- 3.9. Due to the rural location of the site, pedestrian and cycle activity on nearby roads is limited. The construction traffic will impact on a limited number of crossing points in the vicinity of the site ensuring that there will be little disruption to pedestrian routes. Whilst the percentage of HGV movements would increase on the proposed haulage route it is not considered to be a significant increase. Construction traffic will be limited to 40mph on the B9175. Given there is no footway on the western side of the B9175, there will be no pedestrian activity over the proposed construction access.
- 3.10. National Cycle Route 1 operates on the B9175 for a short section of the construction route on the eastern boundary of the site.
- 3.11. No element of the development area will be open to the public, as such, there will be no interaction between pedestrian / cyclists visitors and construction vehicles.

Hours of Work

- 3.12. Working hours would be agreed with THC, but are expected to be:
- 08:00 to 19:00 hours Monday to Friday;
 - Saturday working will be at the discretion of the site management team but will be limited to 08:00 to 13:00 hours; and
 - No working on Sundays or Bank Holidays.
- 3.13. All work which is intended to take place outside of these hours, excluding emergencies, would be subject to prior agreement, and / or reasonable notice to THC.

Enforcement

- 3.14. All contractors associated with these works will be required to abide by the CTMP as a condition of contract. The PM will monitor the compliance of contractors and the PM's details will be made available to THC.
- 3.15. Daily compliance will be monitored by the Project Manager to ensure that vehicles follow the measures set out in the CTMP.

4. Mitigation Measures

- 4.1. A package of mitigation measures has been proposed to reduce the safety risks and minimise any effects on local residents and the local road network as a result of construction traffic activities including:

Restricted Delivery Hours

- 4.2. Deliveries will be restricted to site working hours as set out above or otherwise agreed with THC to reduce disruption to local residents and businesses.

Booked Delivery Times

- 4.3. Construction deliveries will be planned with half hour booking slots and will not be allowed on site outside of these time slots.
- 4.4. If a vehicle arrives outside its booking time the driver will be advised to wait within a dedicated area outwith the public road until a slot is available on site. Remedial action will be taken to prevent this being repeated and they will be spoken to by the site management team and given a series of warnings.
- 4.5. It is understood that vehicles will not be permitted to wait on the public road.

Key Events

- 4.6. Key events on the area during the duration of the project will be considered to ensure that the impact on the local roads is minimised.

Convoys

- 4.7. Convoy of construction vehicles is to be avoided wherever possible to minimise the impact to other road users. Drivers should allow road users to overtake at regular intervals where safe to do so to reduce traffic congestion.

Speed Limit

- 4.8. The developer will ensure that all deliveries abide by local speed limits and a site speed limit will be established and enforced at 15 mph, with signage indicating such and all persons made aware of this requirement at the site induction. Larger vehicles will be advised to travel at 40mph on the B9175 at all times.

Traffic Management

- 4.9. A large volume of material will be sourced locally. Vehicle sharing will be encouraged (within company polices) for staff living locally.

Wear and Tear

- 4.10. The applicant will commit to a "Wear and Tear" agreement with Highland Council as the Local Roads Authority in accordance with Section 96 of the Roads (Scotland) Act 1984. This would cover the B9175 being used for construction access purposes and include a pre-commencement condition survey.

- 4.11. The only exceptional traffic arising from the quay construction contract is the HGV's associated with delivering crushed rock from Castlecraig Quarry to the site via the southern access gate, which will be opened only for this purpose.
- 4.12. This short section of road should be jointly inspected before and after that operation which will take place at the start of the construction and last for circa 3 months. The delivery of the other materials, and the ready-mix concrete in particular, should not be regarded as exceptional, as such, inspection of the entire length of the B9175 is not considered necessary.
- 4.13. Any exceptional or abnormal loads would be the subject of a separate consent application to which the relevant roads authority could attach conditions.

Project / Site Managers Checklist

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

Banksman

- 4.15. Banksman will be provided for all larger vehicle movements into and out of the site to minimise the potential impact on the public highway.

Road Cleansing

- 4.16. The developer will ensure that the roads surrounding the site are swept as regularly as required. 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

- 4.17. The Site Manager will take reasonable steps to minimise noise and suppress dust, dirt and debris generated by the scheme, working to the relevant British Standards and best working practices.
- 4.18. 'Silenced' plant and equipment will be used on-site wherever possible.

Considerate Contractors Scheme

- 4.19. 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

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

Project / Site Managers Checklist

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

5. Summary

- 5.1. This Framework Construction Traffic Management Plan (CTMP) considers the traffic impacts that could arise during construction of the proposed development and outlines the principles to manage site operations with the view to minimising any transport and traffic-related issues during the construction period.
- 5.2. Consideration of the construction related traffic likely to be generated by the proposed development and the route available to/from site has been undertaken in detail. The proposed route is detailed within this CTMP (*Figure 2*).
- 5.3. This CTMP sets out a variety of mitigation measures during construction which may be implemented to minimise the impact of the construction traffic on the environment and local communities, including best practice techniques.
- 5.4. In order for the CMTP to be most effective, it is proposed that it is promoted to all employees and subcontractors coordinated by the Project Manager / Site Manager.

APPENDICES

A. 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.