

Appendix 3.4

Enabling Works Construction Method Statements

Green Highland Renewables Ltd



**Loch Etive Hydro Development
Environmental Impact Assessment Report
Appendix 3.4 – Enabling Works Draft CMS
May 2018**



Report Title: Loch Etive Hydro Enabling Works – Draft Construction Method Statement

Client: Green Highland Renewables Ltd

Report Reference: 10033_Enabling Works CMS_GHR_JD_20182105

Principle Author: Jayson Drummond

Reviewed By: Oliver Moffatt

Issue Date: 21/05/2018

| Version Number | Reason | Date |
|----------------|-------------------------------------|------------|
| 1 | Issue for QC | 25/01/2018 |
| 2 | Amendments following initial review | 21/05/2018 |



Contents

| | |
|---|-----------|
| 1. Introduction | 5 |
| 2. CONSTRUCTION PROCEDURES (ref SEPA WAT-SG-29)..... | 5 |
| MS01 – General procedures | 6 |
| MS02 – Surface water management..... | 8 |
| MS03 – Upgrading existing roads | 10 |
| MS04 – New access road construction | 11 |
| MS05 – Upgrading Glennoe Bridge | 12 |
| MS06 – Upgrading Existing Causeway..... | 13 |
| MS07 – Upgrading Inverliver Bridge | 14 |
| MS08 – New Bridge Construction | 15 |
| MS09 – Replacement Glenkinglass Bridges | 16 |
| MS10 – Marine Landing and Transition Area (Glenkinglass)..... | 17 |
| MS11 – Marine Landing (Barrs)..... | 18 |
| MS12 – Soil and Turf Handling and Management (General Practice) | 19 |
| MS13– Peat Handling and Management | 21 |
| MS14 – Emergency Arrangements..... | 23 |
| 3. Contact Details | 24 |
| 4. REFERENCES | 26 |

With regards to the additional information referenced in this document, please note the following:

- * - information that will be compiled prior to construction
- + - information that will be compiled towards the end of the construction phase



1. Introduction

This Construction Method Statement covers the works necessary to undertake the enabling works required to facilitate access to the Loch Etive hydro development.

The scope of work includes for the installation of the following;

- Upgrading of existing access roads
- Creation of new access roads (excluding those directly on the hydro sites)
- Upgrading or replacement of existing bridges/causeways
- New bridges
- Marine transition area on the south side
- Works to create the landing area for marine access

2. CONSTRUCTION PROCEDURES (ref SEPA WAT-SG-29)

The following method statements have been prepared by the Project Manager in advance of construction of the project. These will be issued to potential Civil Contractors at tender stage, and written into the contract documentation. All members of the construction team must familiarise themselves with the method sheets and the specific methods shown. All techniques have been agreed with the statutory consultees and landowner for the protection of the sensitive environment around Loch Etive and must be adhered to.



MS01 – General procedures

The works will be carried out within the following framework:

- The Principal Contractor will inspect all working areas each working day to ensure that work is being carried out to plan, and that risks to the environment and health and safety of the workforce, the public and any other who may be affected are minimised,
- The Principal Contractor and the GHR Project Manager will communicate at least weekly either on site or via telephone to review all active and planned working procedures and a record maintained of such conversations.
- Clear warning signs and secure protection will be rigorously applied, this including areas which may be accessed by members of the general public, e.g. by walkers. Signage and welfare equipment is to comply with CDM 2015 regulations, and with the commitments made during the planning process.
- All construction plant and equipment is to be regularly inspected and maintained to statutory and manufacturers' specifications. Any plant and machinery that will be operated within 10m of a watercourse should be double bunded or be situated inside an effective drip-tray and will be checked for fuel and lubricant leaks prior to operating each day, and regularly throughout a working day. Any leaks shall be immediately contained and fixed, with the previous working locations inspected for potential pollution. Only competent and trained persons should operate plant.
- The on-site storage of materials and equipment is to be kept to a reasonable minimum. All hazardous materials must be identified and evaluated by means of a COSHH assessment prior to being permitted on site. Risk assessments will be carried out for all high-risk activities and for dealing with materials covered by COSHH regulations.
- The main fuel storage location will be at the FCS Inverawe Quarry on the south and the Bonawe Quarry on the north, and vehicles will carry with them a double bunded, non-pressurised tank of approximately 1000l – 1500l and a suction pump to allow flexible refuelling across the site.
- Mobile refuelling will be carried out at least 10m from any watercourse. Pumps, tanks and machinery will be checked for leaks before refuelling takes place. Fuel bowsers and refuelling points must not be situated within 10m of a watercourse and must be double bunded. All fuel storage facilities should be locked when not in use.
- All machines will carry oil-spill control kits and records maintained of their use and replacement.
- Concrete mixers will be washed out if necessary in bunded skips at least 10m from any watercourse. The waste water will be treated to reduce its alkalinity to pH7 before release back to the natural environment. The solids and contaminants are retained in the skip and treated as waste (i.e. the responsibility of the PC – see below).
- All waste generated during site operations will be removed to an agreed temporary location and stored securely in appropriate containers. Treatment of this waste is the responsibility of the Principal Contractor.
- The Principal Contractor must maintain a weather diary. In the event of, for example, periods of heavy and/or sustained rainfall, the Principal Contractor must contact the ECoW to discuss whether any particular activities should be suspended. In the event of disagreement the ECoW's decision is final.
- No river-related construction activities at the intake will be attempted if high flows are present or imminent unless adequate protection measures have previously been installed and approved by the GHR PM, and prior approval has been sought from SEPA if necessary.



- All materials used for access track upgrades are not to chemically alter the sensitive adjacent habitats.



MS02 – Surface water management

Surface Water Management on every site must be of the highest priority. To manage the surface water flow and prevent inundation of the watercourse by pollutants, including natural silt, the contractor must employ the following general methods:

- The existing drainage pattern across the site should be retained and enhanced where necessary. Don't try to divert larger burns.
- Site runoff (i.e. dirty water) must not be allowed to flow directly into natural watercourses, no matter how small. Site run-off should always be diverted to silt traps.
- Ensure that existing patterns of surface water runoff and natural and man-made drainage are reinstated as soon as practicable.
- Silt pits, traps, and filters will be installed at appropriate locations along the length of access tracks and around the permanent infrastructure until the ground stabilises. They will be numbered and regularly monitored, maintained and emptied and records maintained of these activities in the site diary.
- All soils stockpiles should be located on the upslope side of the working width where possible. Regardless, the stockpiles must:
 - Be upslope of the schemes surface water management provisions
 - Have as a minimum a silt fence along the toe of the slope with a ditch on the upslope side to prevent additional water accessing the stockpile.
- Enhance the existing top-side ditch to capture the clean water before it enters the exposed working area, then culvert it across the work corridor before it is discharged on the downhill side of the working area. Larger surface water run-offs may need to be temporarily culverted to cope with the water volume.
- It is important that the culverts transferring the clean water are:
 - Reactive to ground conditions – use culverts to maintain existing lines of drainage. It is far better to transport the water across where it wants to go rather than attempt to divert it.
 - Appropriately sized – most should be a minimum of 300mm internal diameter to cope with run-off during periods of heavy rainfall.
 - Stable at the headwalls and exits – without this the track and ground around the entrance and exit will scour and contaminate the clean water. It will also result in additional ongoing work to fix. It is much more effective to ensure they are constructed properly in the first instance.
- When pumping water directly onto vegetation (when de-watering an excavation or an isolated working area) ensure that the outlet pipe is regularly moved to prevent saturating or scouring the ground. Regularly check nearby watercourses downstream of pumping operation for signs of mobilised sediment which may be resulting from that activity. All pumped silt water shall be pumped to a preferably flat area that shall be at least 10m away from the nearest watercourse.
- Any concerns expressed by visiting representatives of the statutory bodies will be reported by the principal contractor in writing to the Project Manager and Green Highland Renewables Ltd (the Client) as soon as practicable.
- A site diary must be maintained showing:
 - Labelling of the surface water management system to allow identification.
 - Action lists, including completion dates.
 - Evidence of the ECoW reports being incorporated into the actions list.
 - Weather forecasts.



- All significant pollution events must be immediately reported to SEPA and GHR. Minor events that have been remedied quickly must be recorded in the site diary and referred to the ECoW. There should be no doubt as to what constitutes a pollution event. This will be addressed during formal and ad-hoc TBT's delivered by GHR and the ECoW.



MS03 – Upgrading existing roads

All turf, soil, and peat excavation/handling/storage is to follow the methods described in MS12 and MS13..

The following methods will be employed when constructing the laydown/storage areas:

- No turf stripping will be carried out in wet conditions (i.e. following periods of heavy and/or sustained rainfall or during snowmelt/frost thaw where the ground is waterlogged), and the area for stripping will not be tracked over prior to removal.
- The ECoW is to mark out sensitive habitats for avoidance and inform the contractor of their presence and location.
- The contractor will then:
 - Remove the turfs from the verges of the road, all the time staying within the extent of the existing disturbed corridor.
 - Where the bends need to be straightened, do so on the uphill side by:
 - Laying a pipe in and along the line of the top-side ditch to maintain top-side ditch connectivity
 - Laying crushed aggregate on top of the pipe to the existing road level
 - Where larger vegetation exists, use a verge flail mower to allow removal. Note that no vegetation outside of the existing road line is to be removed.
 - Store removed turfs on the uphill side of the roads where space permits. Do not move excavated materials far from their point of excavation
 - The verge should be level with the road surface.
 - Where necessary:
 - A 50mm layer of crushed aggregate should be lain to provide a reasonable running surface
 - Where the substructure of the road is insufficient, lay 100mm to 200mm of crushed aggregate (includes the running surface)
 - The top-side ditch should be cleaned to re-establish the original capacity. Similarly, existing culverts and cross drains should be cleaned. Where necessary undertake improvements to comply with best practice.
 - Where surface water is obviously gathering on the existing road, install sufficient cross drainage to convey it to the downhill side
 - Install surface water management particularly to prevent movement of contaminated water.

On the south side some additional widening of the running width is required where rock encroaches on the uphill side. This rock should be removed by:

- First remove any turf/vegetation from the rock face. Store on the uphill side of the track as close to the excavation as possible
- Using a toothed bucket, scrape as much of the rock away as possible
- Where required use a pecker to excavate the rock face back to allow the required running width.
- The removed rock is to be processed using an excavator-mounted crusher and used to provide the running surface at the point of excavation
- Surface water management provisions should be installed to protect against pollution.



MS04 – New access road construction

All turf, soil, and peat excavation/handling/storage is to follow the methods described in MS12 and MS13. All access tracks should be regularly maintained to prevent the build-up of mud and the formation of ruts. Maintenance during construction will be at the direction of the site manager following daily inspection.

Traditional Track Sections

- Habitats will be classified by the ECoW prior to stripping vegetation and soil/peat, and care should be taken to keep stripped material from different habitat types separate.
- There must be no trafficking over the ground prior to stripping.
- Keep the line of the new road tucked in to the toe of the slope to avoid the wet ground. Avoid creating excess batters on the uphill and downhill sides
- Remove and store turfs and soils according to MS12
- Avoid work the soil in wet or frosty conditions when the structure can be damaged. Strip and store in one operation.
- Lay sub-layer of crushed stone to provide road structure, between 100mm and 200mm deep
- As the workfront progresses, install suitable surface water management provisions
- Form running surface, ensuring a free-draining and appropriately cambered finish.
- Dress the uphill and downhill batters with subsoils, then topsoils, then turfs

Floated Sections (if necessary)

- A layer of geo-textile is to be rolled out on top of the vegetative layer, which will remain intact throughout the construction phase.
- Low grade aggregate is to be spread on top of geo-textile.
- Ensure surface water management provisions are included in the construction of the track.



MS05 – Upgrading Glennoe Bridge

All turf, soil, and peat excavation/handling/storage is to follow the methods described in MS12 and MS13. No works are to be undertaken in the water environment, however works will only be undertaken during periods of low flows unless agreed in writing with the ECoW beforehand.

The bridge over the River Noe will be permanently upgraded to allow larger vehicles to pass by undertaking the following:

- The running surface on the approach on both side will be expanded within the extent of the existing disturbed corridor by removing the vegetation and subsoil, which will be stored adjacent to the working area.
- Remove the fence on both sides of the bridge
- Set back from the edge of the river, on both sides lay manhole rings directly onto the bedrock and dowel in. The top of these rings should be level with the existing running surface
- Fill manhole rings with concrete
- Lay pre-stressed concrete sections to form the new running surface
- Erect wooden fencing on the upstream and downstream side
- Use soils and vegetation removed for construction to landscape around the bridge



MS06 – Upgrading Existing Causeway

All turf, soil, and peat excavation/handling/storage is to follow the methods described in MS12 and MS13. All works are to be carried out in periods of low flows unless agreed in writing with the ECoW beforehand.

Construction will take place from within a dry environment, which would be secured using either a full width cofferdam and bypass pipes or a “half and half” approach.

The construction process will be:

- Isolate the dry working area using either a full or half width cofferdam following the details below:
 - Full width:
 - Lay bypass pipes to permit river flow to pass
 - Form upstream cofferdam to divert all river flow through the bypass channel.
 - Install downstream cofferdam upstream of where the bypass pipes re-join the watercourse.
 - Ensure the bypass channel is working effectively prior to beginning intake construction works.
 - Half width:
 - Form cofferdam, starting at the riverbank, and continue to the mid-point of the river.
 - On the downstream side of the causeway, continue the cofferdam until downstream of the working area
 - Reverse when constructing the second half
- Pump all isolated water to nearby vegetation at least 10m from the nearest watercourse. If in continued use, periodically move the pipe exit to prevent inundation of the vegetation.
- Excavate foundation of rock armour structure, laying blinding concrete as specified.
- Place locally sourced, clean rock on the blinding concrete and secure in place with additional concrete
- Ensure a channel is retained from each culvert to permit the safe downstream passage of fish
- Reinstate working area and allow flows to pass naturally through structure



MS07 – Upgrading Inverliver Bridge

TBC



MS08 – New Bridge Construction

TBC



MS09 – Replacement Glenkinglass Bridges

TBC



MS10 – Marine Landing and Transition Area (Glenkinglass)

All turf, soil, and peat excavation/handling/storage is to follow the methods described in MS12 and MS13.

Transition Area

- Habitats will be classified by the ECoW prior to stripping vegetation and soil/peat, and care should be taken to keep stripped material from different habitat types separate.
- There must be no trafficking over the ground prior to stripping.
- Remove top layer of turf, aiming for 1m x 1m x 0.3m deep and place to one side
- Remove top soil and subsoils/peat, and store separately in areas marked by the ECoW. This should be on bracken dominated areas
- The LCoW will advise on placement and location of the stockpiles to minimise the visibility of the transition area during the construction phase
- Using a toothed bucket, scrape away as much of the bedrock as possible. Where necessary use a pecker to remove rock sufficient to create the transition area.
- Process the excavated rock and use for surfacing the transition area
- Ensure sufficient surface water management is included in the construction of the area on all sides. A topside ditch should be excavated on the uphill side to keep clean water off the area, and all site run-off diverted through silt traps before being released into the natural environment. Given the proximity of Loch Etive, it is important that pumps are kept on site at all times in the event of an emergency

Landing Area

- Remove the loose rock from the rock ramp (the landing area)
- Isolate the working area by creating a cofferdam at the toe of the existing rock slope. This is to catch any material before it enters Loch Etive
- Where necessary, using a pecker level off the exposed rock shelf but retain the existing angle
- Fill the gaps in the bedrock with concrete to provide a smooth running surface
- Install surface water management provisions on the uphill side of the rock ramp



MS11 – Marine Landing (Barrs)

To facilitate the marine access, which is to be shared by GHR and FCS for material/plant delivery and extraction, and timber extraction respectively, a new landing pad, and access to it, will be created on the Rubha Barr beach using the following methods:

- Create a running surface that extends above the water mark from the MHWS to the MLWS. This will be around 2m from the existing bed at its deepest.
- Working from the beach outwards, lay large diameter clean boulders along the line of the access track. This will create the stable, strong structure of the track.
- Using clean smaller diameter crushed rock, lay the running surface ensuring it remains above the MHWS mark
- Lay large diameter boulders along the edge of the track from the bed to the running surface. This will provide protection from wave/wind erosion during the associated works.
- Working from the new access track, form cofferdam using one tonne bags filled with cleaned gravels to create an area isolated from the water environment.
- Overpump any isolated water away from the working area
- During the next phase it is imperative that pumps are kept to hand to address any seepage into the working area
- Form landing pad area by excavating down below the natural bed of Loch Etive
- Lay blinding concrete
- Mass pour concrete to provide the landing point to the required gradient, ensuring the northern end of the concrete is at the same elevation as the access track.
- Install anchors to ensure landing craft can tie off safely.



MS12 – Soil and Turf Handling and Management (General Practice)

Soil handling and management should be carried out following best practice including:

- BS8601:2013 – Specification for subsoil
- Good Practice Guide for Handling Soils (MAFF 2000);
- BS 3882: 2015 Specification for topsoil

Soils and Turfs shall not be handled:

- during or shortly after heavy/sustained rain or snow;
- in a waterlogged condition;
- when there are pools of water on the ground surface;
- when the ground is frozen or covered in snow;

In order to ensure the turfs and habitats have the best possible chance of effective reinstatement, the following methods must be used:

- Strip vegetation into the largest and thickest turfs possible. Aim for 1m x1m x at least 0.30m thick.
- Store turfs vegetation side up, root side down.
- Avoid storing turfs on high points where they are more exposed to drying in the wind. All excavated turfs are to be monitored whilst in storage. If they appear to be drying out then they must be watered.
- Store turfs no deeper than 1.5m high. All turfs should be stored on the downhill side of the working width and away from the exit of any culverts/silt traps.
- As excavation commences, surface vegetation, topsoils and subsoils from the principal habitat types shall be stored locally in clearly defined and separate soil stockpiles for later re-use.
- Soils shall be excavated to avoid cross contamination between distinct horizons and shall be stored in separate stockpiles. Stockpiles should be located on the uphill side where possible, but **always** upslope of surface water management provisions.
- The maximum permissible height for topsoil stockpiles shall be 2m with natural stable slopes. Sub-soil stockpiles shall be no greater than 5m high. If required, stockpiles shall be formed avoiding excess consolidation during placing. Mechanical handling of soils is to be kept to a minimum.
- Stockpiled soils should not be stored within 10m of any watercourse,
- Vegetation which grows on stockpiles must be periodically cut, to prevent it becoming established. Herbicides must not be used.
- Stockpiles shall not be located where they will create adverse landscape and visual effects; however, stockpiles may be used as screens to reduce views of construction activities, under the guidance of the LCoW or ECoW.
- All stockpiles must have surface water management measures installed particularly on the downhill side to prevent movement in surface water flows. As a minimum this should be silt fencing at the toe of the slope, ideally a top-side ditch as well.
- All soils should be stored away from access routes or where it may be over-tracked by vehicles.
- The restoration of soils should be done so to reflect how they were excavated (i.e. subsoils first, then topsoil, then turfs). Subsoils should never be left as the finished surface.



- Areas which have been stripped of vegetation should have the vegetation cover restored as soon as possible once works have been completed, vegetation side facing up.



MS13– Peat Handling and Management

Site stripping

- Avoid trafficking over the heath prior to stripping.
- Habitats should be classified by the ECoW prior to stripping vegetation and soil/peat, and care should be taken to keep stripped material from different habitat types separate
- Strip the top layer of peat and turf (ideally 1m x 1m x 0.3m) by digger bucket and place it on the downhill side of the working width. Subsequent excavation of deeper (black) peat must be kept separate from glacial till and rock.
- Do not work the soil in wet or frosty conditions when the structure of the top peat can be damaged. Strip and store in one operation.

Temporary Storage

The following measures will be adopted during the temporary storage of peat:

- Peat must be separated from any other stored material such as rock and mineral soils. Peat turfs must be stored separately from the darker, catotelmic peat. Turfs must be stored with the vegetation facing up, roots facing down.
- Form temporary bund using the turfed peat and store darker catotelmic peat within the bund to prevent slippage and preserve moisture.
- Excavated peat should ideally be stored and reinstated in the same area that it is excavated to avoid transportation and minimise handling.
- Minimise temporary storage times. Avoid storing on high points to avoid drying out. If peat is exposed for a significant amount of time monitor for signs of drying out. Avoid storing on high points to avoid drying out.
- Peat storage must not be undertaken over wetland (GWDTE) and protected habitats, near to ecological sensitivities, within 10m of watercourses, over deep peat (>2m), in areas at risk of peat instability, and over steep gradients (>6°). ECoW and SNH guidance is to be followed at all times.
- Stockpiles and peat turves, and especially catotelmic peat, will be sprayed during dry periods to prevent drying out.
- Temporary peat stockpiles and peat turves will be visually inspected weekly and records maintained.
- Seek and follow ECoW advice on water management in and around the peat storage areas.

Reinstatement

Measures to reinstate and stabilise peat will include:

- Use appropriate low ground pressure plant.
- Excavations will be reinstated with the locally dug material, returned to the trench in the correct order, subsoil at the bottom, topsoil and turf above. Avoid compaction during restoration.
- Ensure turfed layer is returned with the roots facing down and vegetation facing up
- If insufficient turfs are present to provide 100% coverage, lay in a chequerboard fashion
- Avoid tracking over reinstated ground
- Avoid double handling and compaction of excavated peat
- Ensure surface water management is maintained, identify and report any signs of erosion on the reinstated peat



- If necessary use erosion control matting to stabilise any bare peat.



MS14 – Emergency Arrangements

This CMS provides guidance to the Principal Contractor on how the project should be carried out to protect environmental interests. It will be the responsibility of the Principal Contractor to devise a Pollution Incident Response Plan (PIRP), detailing:

- Site Details.
- Contacts (including statutory bodies and specialist clean up contractors).
- Site chemical inventory (including petrol, diesel, oil etc.).
- Pollution prevention equipment inventory (spill kits, booms etc.).
- Drainage plan (to be used for silt mitigation purposes as well).
- Emergency response plan.
- Actions to be taken should the following occur:
 - Fuel spillage
 - Cement spillage
 - Silt in any watercourse
 - Inundation of the dry working areas at the intakes and outfall
 - Landslip and peat slide.

All site staff shall be briefed on the PIRP upon first arrival on site and shall be required to attend 'refresher' courses at not more than monthly intervals thereafter. Induction and further instruction shall cover the use of all emergency-related equipment, including recovery from incidents. Recovery involves dealing with the residue of 'spillage', whether this is of chemicals including fuels or of sediments.

The Principal Contractor's Site Manager shall have overall responsibility for ensuring that all emergency procedures as displayed in the PIRP are understood by all site staff and sub-contractors and carried through as specified, and that all preparations for and reports of any incidents are fully documented and reported to the Project Manager. The Principal Contractor's Site Manager shall ensure that the planning authority and statutory consultees are satisfied regarding the arrangements which have been made, including making available current inventories of all safety-related equipment held on site and its whereabouts at any time.

All significant pollution events must be immediately reported to SEPA and GHR. Minor events that have been remedied quickly must be recorded in the site diary and referred to the ECoW. There should be no doubt as to what constitutes a pollution event. This will be addressed during formal and ad-hoc TBT's delivered by GHR and the ECoW.

If necessary GHR will work with a clean-up specialist to remove the pollutants which will then be transported off site by the specialist and disposed of according to the relevant legislation.

Should there be an incident (killed or injured) involving either protected mammals or protected bird species, the following actions must be taken:

- All works in the vicinity of the incident must be immediately stopped.
- The impacted receptor must be left in situ where possible.
- The ECoW must be called immediately who must then attend the site.
- GHR must be notified, then SNH notified of the incident, providing details on the receptor and the incident.
- Once the ECoW is on site they will take charge of the incident, liaising with SNH, GHR and RSPB to ensure the correct actions are taken.
- Works will commence in the vicinity of the incident at the discretion of the ECoW.



3. Contact Details

Table 2 – Development contact details

| Role | Responsibilities | Contact Details |
|---------------------------------|---|---------------------------------|
| Project Manager | Ensuring the construction phase proceeds as agreed with the planning authorities and all conditions are met | Rob Smith |
| | | Tel: 01738 493110 |
| | | Mobile: 07581 799715 |
| GHR Supervisor | Provides on-site supervision and back-up to the PM | TBC |
| | | Tel: TBC |
| | | Mobile: TBC |
| GHR Project Developer | Provides on-site supervision and back-up to the PM | Jayson Drummond |
| | | Tel: 01738 493110 |
| | | Mobile: 07818 568304 |
| Design and Structural Engineers | Providing the client with the detailed design drawings and inspecting the construction work | Gordon Davie – Allen Gordon LLP |
| | | Tel: 01738 639881 |
| | | Mobile: N/A |
| Principal Contractor | All civil works on site | TBC |
| | | Tel: TBC |
| | | Mobile: TBC |
| ECoW | Ensuring the mitigation measures proposed, and the environmental conditions attached to the planning permission are adhered to. | Dr Phil Ratcliffe |
| | | Tel: N/A |
| | | Mobile: 07710 612708 |



Table 2 – Development contact details

| Role | Responsibilities | Contact Details |
|---------------------------|---|--------------------------------------|
| LCoW | Providing advice and guidance on all landscape and visual matters, and ensuring the scheme is built according to the agreed design. | Oliver Moffatt, Eden Environment Ltd |
| | | Tel: 07500 013766 |
| | | |
| Scottish Natural Heritage | Protection of Scotland's Natural Heritage | Claire Masson |
| | | Tel: 0300 244 9360 |
| | | Mobile: N/A |
| Planning Officer | Compliance with the Planning Consent. | Arlene Knox |
| | | Tel: 01546 604847 |
| | | Mobile: N/A |
| SEPA | Compliance with the CAR licence and CAR Regulations | TBC |
| | | Tel: TBC |
| | | Mobile: N/A |
| SEPA – Emergency Number | To be contacted either during a pollution event or when out of regular office hours. | Tel: 0800 807060 |



4. REFERENCES

- E Murnane, A Heap and A Swain 2006. Control of water pollution from linear construction projects, CIRIA, C648
- Forestry Civil Engineering, Scottish Natural Heritage 2010. Floating Roads on Peat
- Scottish Natural heritage 2015. Constructed Tracks in the Scottish Uplands
- Scottish Government et al 2012. Hydropower Construction Guide Good Practice
- SEPA, 2012– Planning advice on Windfarm developments. Land use planning system
- SEPA Good Practice Guides:
 - River Crossings
 - Intakes and Outfalls
 - Construction Methods
 - Sediment Management
- Pollution Prevention Guidelines:
 - 1 – General guide to the prevention of pollution
 - 5 – Works and maintenance in or near water
 - 21 – Pollution incident response planning
 - 22 – Incident response – dealing with spills

