



Dickins  
Hydro  
Resources

## Mheuran Hydro 2

Supplement to the Environmental Impact Assessment  
Previously submitted for

### **Mheuran Hydro**

under ref 18/02741/FUL

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# 1 General issues or clarifications effecting Mheuran Hydro and some or all 7 schemes within the Glen Etive Hydro project

## 1.2 Traffic Management

Traffic Management – The most frequent number of vehicle movements to site will be for penstock and aggregate delivery. It has always been our intention to bring in the penstock and heavy machinery to the Glen via the Sea Road. We have recently been informed by Boyds of Fort William that a floating pier is currently available to us and that the relevant consent and licence will be applied for by our Agent in due course.

DHR Ltd requests that the carrying out of a Public C Road Survey be made a condition of planning. DHR Ltd will discuss this with the relevant Highways department to carry out The Public C Road Survey of the road and structures within Glen Etive that are made use of by the proposals.

A **Transport Planning Report'** document has been drawn up for the project. We have also produced a **Glen Etive Construction Program** to show how we plan tackle the project in order to minimise the cumulative impact of construction development within the glen by staggering construction. The program also forms basis of the construction program. In general, this means bringing in the equipment via the sea road then starting with the schemes Chaorainn, Fhaolain & Charnan and working our way back down the Glen then back out via the sea road. We have been informed by Boyd's of Fort William that a floating pier is currently available to us.

## 1.3 Grid Connection

The EIA documents for all schemes referred to in section 5.6.5 that the grid line running the length of the Glen will be a private line. This is now not the case as we had a revised offer from SSE after the EIA documents were produced, whereby the existing above ground cable would be upgraded to accommodate a new 3 wire grid connection. This offer was better for the project and the intention would have been to accept it once the planning response is known. However, we have been forced to make an early decision regarding this offer in order to firm the connection for the whole project. From here SSE will appoint a Project Manager who will co-ordinate the process and in terms of what is required and will produce a scoping document in due course.

## 1.4 Canoeing

**Solution:** We have been discussing the best way to facilitate flows for canoeing that will still permit use of the water for hydro-electric generation with the Scottish Canoe Association. The preferred method of operation for both parties appears to be the setting up an on demand system for when canoeists are there to canoe and allow us to produce electricity when they aren't canoeing. SCA are keen that there is a binding agreement in place. DHR Ltd has drafted a Legal Agreement to provide the security that SCA requires. We have produced Heads of Terms that have been sent to SCA and DHR Ltd is awaiting their response.

## 1.5 Landscape visual impact assessment - Scope and format of the LVIA

The information as presented in Chapter 5 in each of the EIA Reports represents a complete assessment of landscape and visual impact of the proposed developments. All information as set out in Chapter 5 has been informed by extensive field survey undertaken by two Chartered Members of the Landscape Institute (CMLI) - Douglas Harman and Mike Hyatt. The accompanying assessments have been drafted by Douglas Harman and reviewed by Mike Hyatt.

## 1.6 Reinstatement & Restoration

Reinstatement applies in some capacity to all schemes whether it means reinstating the temporary construction access tracks back to existing ATV tracks or the area around the intake or powerhouse. Restoration applies more to existing upland paths, in particular where some impact may have occurred, as could be the case with the Ceitlein Hydro development.

**Solution:** We have produced the “**DHR000-001 Glen Etive hydro schemes construction standards and guidance**” (**Construction Standards**) which provides the outline frame work for all reinstatement and restoration works. As well as other construction activities. Reinstatement will follow these guidelines. We have proposed a Landscape Clerk of Works for all areas within the WLS as well as a Arboriculturalist to ensure the protection of trees during construction works.

### 1.6.1 Management of stored peat

Management of stored peat being kept wet is now outlined in the **Construction Standards document**.

## 1.7 Access

**Issue:** Walkers access to the sites involved with construction development.

**Solution:** We have produced documents entitled ‘**Access Management Report**’ for each of the Hydro development sites which has been produced in consultation with the Access Officer Stewart Eastaugh. These plans state how we will provide continued access for hillwalkers during each development and where issues may arise and what solutions we have proposed. This includes but is not limited to: maintaining a permanent access to the Core Path LO09.11, escorted safe crossing of bridges during upgrade, appropriate warning signs re construction areas and vehicle access tracks / road are to have speed restrictions in and around the construction sites.

## 1.8 Program of Development - Accumulative impact

**Solution:** We have produced a ‘**Construction Schedule**’ document and accompanying **Glen Etive Construction Program** aimed at minimising construction impact within Glen Etive and to keep any disruption to a minimum for those that live in the Glen or visiting it, by adopting a two-phased approach.

The intention is to start with the schemes furthest from the jetty ie. Chaorainn, Fhaolain and Charnan. Access to these sites from the jetty will initially be along the forestry road to Inbhircharnan. The plan then would be to work back down the Glen towards the jetty. In

year 1 this would mean developing 3 out of 7 with facilitating works for bridges etc on the others. In year 2 there would be 4 schemes to build, reducing during the year. As each is finished the equipment will leave via the sea road. This would mean that the lower Glen is relatively clear of construction in the first year and the mid to upper Glen completely clear in the second year. This has been outlined in the “**Construction Schedule**” a copy of which will be submitted.

## 2 Mheuran Hydro 2

### 2.1 Highland Council Points & DHR Responses

#### 2.1.1 Visual Impact and restoration issues

**Issue:** A major concern for The Highland Council regarding the layout of the initial Mheuran Hydro scheme planning application was the visual impact of the construction corridor up to the proposed intakes and their concerns over the length of time and possibility that full restoration of the working corridor could leave a lasting impact over the upper part of the scheme, where the temporary access and penstock route go over the hill shoulder and on across to the top up intake above the “Robbers waterfall”. Concerns about this were also raised by the Public.

**Solution:** Having carefully considered these issues and listened to the concerns we have significantly redesigned this scheme whereby a single intake is now located c.550m downstream from the previous main intake and there will be no top up intake above the “Robbers waterfall” or elsewhere for this scheme. This new intake location is at the base of the shoulder and the combined penstock and access corridor will be completely restored leaving access to the intake on foot for maintenance inspection or by quad bike should tools and material be required for repairs. Full restoration of the temporary access track and penstock route as well as the crossing point and surrounding area of the walkers access path will take place as outlined in the Construction Standards document.

The revised intake location for **Mheuran Hydro 2** is at **NGR NN 1400 4551**

This can be seen in the new location plan **C083 8 102 AM Location 2500 1of2 Rev05** and **C083 8 103 AM Location 2500 1of2 Rev06**

#### 2.1.2 Access track to intakes

**Issue:** Misunderstanding brought about by a typing mistake in the original EIA document that wasn't picked up. Stated that there would be “a permanent access track to the intakes”.

**Solution:** This is contrary to the CMS documentation and constraints plans where they state that the “temporary access track which will be 3.4m wide will be reinstated to ATV tracks 1.5m wide” post construction. This applies to all temporary access tracks created to facilitate construction access to the intakes.

**Issue:** public concerns permanent access tracks at Mheuran Hydro in regard to the initial planning application.

**Solution:** We have considered the objections posted regarding access tracks to the intakes. As previously mentioned in the constrains plans and CMS which indicated that these tracks would be reinstated to ATV access tracks post construction . With the exception of Mheuran Hydro where the access track to the intake will be fully restored to the previous landform. The temporary access track will cross the existing footpath so restoration of the footpath in this surrounding area will take place. A specification (Red) Survey will be carried out on the affected areas of the footpath prior to construction in order to ascertain the work that needs to be done post construction. This means that once fully reinstated it will leave the access similar in appearance to what is there at present, once regeneration has taken place. The appointed LCoW will lead a specialist qualified reinstatement team ensuring that reinstatement is carried up to the highest standards.

The lower penstock route will also now accommodate the temporary access track of 3.4m wide. This section to the powerhouse will be fully restored to the original landform.

As a consequence to these changes, regular maintenance inspections of the intake will be done on foot with cleaning equipment kept on site, to minimise long term impact. On occasion should materials and equipment be required on site, these could be ferried there by quadbike, thus minimising the impact.

The amended location plan **C083 8 102 AM Location 2500 1of2 Rev05**

#### 2.1.3 Restoration of upland path

**Issue:** The previous planning application for this site required significant upland path restoration.

**Solution:** The revised current application less so. However, the temporary access track does cross the existing footpath so we will undertake a Specification (Red) Survey prior to construction for the surrounding area.

#### 2.1.4 Canoeing

The revised intake location is upstream of the designated canoe input location NGR NN 13965 45641 so will not provide a barrier to descent. We continue to discuss an on demand compensation flow for canoeists.

Canoeing Heads of Terms document for agreement sent to SCA – DHR Ltd is awaiting their response.

## 2.2 SEPA Objections, Guidance & DHR responses

### 2.2.1 Watercourse Crossings

**Issue:** Objection to the use of permanent fords and confirmation of old bridge removal, requested in the previous planning application has been addressed in the revised new application.

**Solution:** – The ford shown across the Etive is for single crossing access only in order to get necessary machinery to the opposite bank in order to facilitate the upgrading/new bridges over the Mheuran and Etive. Thereafter the bridges will provide the access across the Etive and Mheuran for the machinery.

#### 2.2.2 Borrow Pits

See **Borrow Pit Document** highlighting usage, size and drainage layout. Includes photos of borrow pits. Also the renamed habitat survey map and documents; **Mheuran Access track NVC survey Map**

#### 2.2.3 Access track layout

**Solution:** DHR acknowledges that there should be a 10m buffer from access track to the River Etive and the same along the Allt Mheuran. The access track along-side the River Etive is an existing old track that will be upgraded. Where the existing track is closer to the Etive than 10m then the access track will be upgraded away from the water course. The originally proposed access track up to the main intake was proposed to follow the existing stalkers path. However, because of the close proximity of the path to Allt Mheuran DHR Ltd has decided to overlay the lower temporary access track on top of the penstock route, thus keeping well from the watercourse and leaving the existing footpath open for hillwalkers to access.

This is shown on the new location plan **C083 8 102 AM Location 2500 1of2 Rev05**

#### 2.2.4 New access around Coileitir

A new permanent access track to the Mheuran powerhouse, around the south side of Coileitir, is proposed. SEPA request a habitat survey for the new access track, however DHR Ltd submitted this report and habitat map with the original planning application.

This document has been renamed to avoid confusion – see **Mheuran Access track NVC survey Map** and similar associated documents.

#### 2.2.5 Bunds and 1 in 200 year flow sizing for bridges and culverts

The **CMS document** makes no mention of the use of bunds, however the original **EIA document** in the previous application erroneously alluded to this possibility. For the avoidance of doubt the **Construction Standards** document confirms that bunds can't be used as flood defences and that bridges and bottomless culverts will be sized for a 1 in 200 year flood risk.

### 2.3 SNH Objections

**Issue:** Footprint of access track and penstock route – SNH claimed, in the previous application, that they will be disproportionate to the size of the proposal and that there is potential for long term adverse impacts.

- Concern that CMS has limited information regarding reinstatement.
- Storage of turves and revegetation of exposed stone

SNH provided guidance on how to minimise adverse impacts by:-

- appointing a Landscape Clerk of Works (LCoW).
- the separation of soils and turves to improve the rate of reinstatement.
- reinstating temporary access tracks to ATV tracks.

- incorporating footpath construction techniques for drainage solutions.
- suitable integration of new or replaced culverts with the surrounding landform – ensuring no obvious visible ends.
- Removing of railings for construction purposes which might appear incongruous.

**Solution:**

We have removed any divergence of access track and penstock on the Mheuran Hydro 2 project.

The concern raised about limited reinstatement in the CMS has been fully addressed in the **Construction Standards document** regarding both track and upland path restoration. This also deals with the handling of soils and turves during penstock installation and the footpath construction techniques.

The CMS document now lists a **Landscape Clerk of Works** for this project and scope of works has been amended to include the removal of railings erected for construction purposes.