Agenda Item	3.3
Report No	PLS/014/19

HIGHLAND COUNCIL

Committee: South Planning Applications Committee

Date: 20 February 2019

Report Title: 18/02742/FUL: Dickins Hydro Resources Ltd

Land 1000M SW Of Altachaorin, Glenetive (Allt Chaorainn)

Report By: Area Planning Manager – South

Purpose/Executive Summary

Description: Installation of (1,640kW) run-of-river hydropower system, including two intakes, buried pipeline, powerhouse building, outfall, and bridge (Allt Chaorainn)

Ward: 21 – Fort William and Ardnamurchan

Development category: Local

Reason referred to Committee: Number of objections

All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

Recommendation

Members are asked to agree the recommendation to **Grant** planning permission as set out in section 11 of the report.

1. PROPOSED DEVELOPMENT

1.1 It is proposed to construct a run of river hydro electric scheme with a generating capacity of up to 1,640kW on the Allt Chaorainn in Glen Etive. The scheme is one of seven schemes proposed within Glen Etive.

1.2 The scheme includes two intakes, a main and a secondary, with a buried penstock (enclosed pipe) extending to a powerhouse housing the turbine and an outfall back into the river beyond. The main intake is on the Allt Chaorainn and is a concrete structure 26m wide in total, with a 16m in river section. The main intake is located at 182m AOD. The secondary intake is on the Allt na Ghuibasan which flows into the Allt Chaorainn. This intake is 21m wide in total with an 11m in river section and is located at 188m AOD. Water from the secondary intake will be piped to the main intake and into an intake chamber proposed as part of the main intake. The penstock will then be piped across a bridge over the Allt Chaorain and will then be buried over the route from the bridge to the powerhouse. There is approximately 1450m overall of penstock, 1310m from the main intake to the powerhouse at either 1300mm diameter, or two 700mm pipes, and 140m penstock from the secondary intake to the main intake at 900mm diameter. The overall construction corridor is 20 metres.

1.3 Access to the site is to be taken from the existing access onto the public road with a replacement bridge over the River Etive proposed. The route will join with the existing access track, which currently serves and existing house and the fire damaged remains of another. A new track will spur off this track to serve the powerhouse and a new footpath will be formed to join with the existing river path. This new footpath section is not required for the development itself, but is to provide an improved public footpath to replace the substandard path from the River Etive bridge to the river.

1.4 A temporary construction track (3.4m) is to be formed from the proposed powerhouse to the intakes. Follows the line of the penstock. This is to be completely restored following completion.

1.5 The powerhouse is located on the northern side of the Allt Chaorainn approximately 114m from the Allt Chaorainn and 80m from the River Etive. The nearest habitable house is some 110 metres from the powerhouse. The powerhouse is positioned against the backdrop of rising ground and will be of a buried design, with the land graded and mounded on three sides. The powerhouse has a footprint of 24m x 17m.

1.6 Construction equipment and materials will be delivered to the existing jetty via a temporary floating pier and materials transported to the site via the existing private track from the jetty to the existing forestry track. This section is a Core Path but not a public road. Construction traffic travel along the forestry track and then join the public road at Invercharnan and use the public road network to the site.

1.7 The scheme will require connection to the National Grid to export electricity. The applicant has confirmed it is intended to use the existing overhead line which runs through the Glen to serve the development and has advised this would require to be upgraded to accommodate a new 3 wire grid connection. The upgrading of the

existing overhead line would be determined under Section 37 of the Electricity Act, not under the planning application. The Council would be a consultee on a Section 37 application, not the determining authority. A Section 37 application would be determined by Scottish Ministers. The Council has not yet been consulted on a Section 37 application.

1.8 Pre Application Consultation: None

1.9 Supporting Information: Environmental Impact Assessment Report (EIAR) and associated survey work, Supplement to EIAR, Construction Management Plan including works schedule, Access Management Plan, Traffic Management Plan.

1.10 Variations: Since the original submission of the application the powerhouse has been repositioned closer to the bank of the rising ground, proposals to upgrade the existing footpath as a construction route have been deleted, the penstock route and temporary construction track have been combined, the construction track is to be completely reinstated and a new section of walkers track has been included.

2. SITE DESCRIPTION

2.1 The proposed hydro scheme is located at the top end of Glen Etive, and is the closest of the schemes to Rannoch Moor and the A82. The Allt Chaorainn is a focussed glen with high hills on each side and behind. At the foot of the glen are two houses, one habitable and one badly fire damaged. They are accessed by an existing junction onto the public road and a bridge crossing of the River Etive and existing private track, which is also proposed to serve the proposed hydro scheme. To the east of the site is the popular 'Skyfall' view point on the public road. This section of the River Etive is very popular for canoeing/kayaking. There is an existing public right of way from the bridge to the river and the glen beyond. A previous re-route of the footpath away from the existing houses has left a poor route for walkers and kayakers accessing the river. The proposal includes the replacement of the bridge over the River Etive and a new section of public footpath to join with the river footpath. Going over the bridge, the route will follow the existing track to the houses. It will then spur off to the left before reaching the houses, where the powerhouse is to be situated. The new footpath will spur to the right after the powerhouse and the penstock and temporary construction track will cross the moorland to the left and run up the glen parallel to the river. The penstock gently climbs the glen at the base of the adjoining hill until it reaches a 'T' in the river, where the Allt Coire Ghiubhasan joins the Allt Chaorainn. This is where the intakes are proposed. Walkers routes continue on up these deeper glens.

3. PLANNING HISTORY

Application is one of seven proposed hydro schemes within Glen Etive

3.1	No decision	18/02738/FUL, Allt Charnan (up to 1,035kW)	Under consideration
3.2	No decision	18/02739/FUL, Allt Ceitlein (up to 810kW)	Under consideration

3.3	29 Nov 2018	18/02740/FUL, Allt Fhaolain (up to 586kW)	Withdrawn
3.4	30 Nov 2018	18/02741/FUL, Allt Mheuran (up to 1,540kW)	Withdrawn
3.5	No decision	18/02742/FUL, Allt Chaorainn (up to 1,640kW)	Under consideration
3.6	No decision	18/03024/FUL, Allt nan Gaoirean (up to 980kW)	Under consideration
3.7	No decision	18/03026/FUL, Allt Bhiorain (up to 715kW)	Under consideration
3.8	No decision	18/05439/FUL, Allt Fhaolain (up to 425kW)	Under consideration
3.9	No decision	18/05440/FUL, Allt Mheuran (up to 885kW)	Under Consideration

4. PUBLIC PARTICIPATION

4.1 Advertised: Oban Times and Edinburgh Gazette as EIA development

Date Advertised: 06 & 07 December 2018

Representation deadline: Overall 06 January 2019

Timeous representations: 293

Late representations: 70

4.2 Material considerations raised are summarised as follows:

1. Affect the character and ecosystem of the river and its flow
2. Impacts from construction traffic
3. Environmental damage from construction works
4. Detrimental impact on recreational users during construction and post construction
5. Dramatic and long term effect on character of the area
6. Cumulative impact – all seven application should be considered together
7. Impact on tourism
8. Impact on Wild Land
9. Impact on National Scenic Area
10. Impact on Nationally significant Glen
11. Disagreement with SNH's assessment/consultation response
12. Noise and disturbance will affect character of the Glen
13. Impact on amenity of visitors
14. Glen Etive road not suitable for construction traffic
15. Impact on ecology and protected species
16. Energy benefits do not outweigh the environmental impacts

17. Limited employment benefits
18. Important Glen that should be left unspoiled for future generations
19. Support for development of hydro electric power
20. Contrary to national and local planning policy
21. Impact on landscape and heritage assets
22. Impact on peat and soils
23. Impact on public access and transport network
24. Impact on geodiversity
25. Impact on water environment
26. Impact on amenity
27. Impact on health and wellbeing as a result of impact on natural environment
28. Inappropriate design of powerhouses- not 'Scottish bothies' as referred to
29. Visual impact of tracks, intakes, powerhouses and deficient restoration - reference to other schemes in Highland and other parts of Scotland
30. Net contribution to carbon emissions not properly evaluated
31. Power generated is insignificant in UK context
32. Scottish Planning Policy and its administering inadequate for natural heritage
33. Industrialisation of important landscape
34. Deficiencies in the visual impact assessments
35. Lack of detail in the application
36. Scale of development is disproportionate to Glen Etive
37. Landscape impact of dried up rivers/loss of cascades
38. Impact on canoeing/kayaking from reduced river flow - estimated number of days the river would be available would fall from around 180 per year to 60 per year
39. Safety of kayakers using river when flow rates are changing more rapidly
40. No agreement has been reached with the Scottish Canoe Association re mitigation of the impact on canoeist or kayakers
41. Geomorphological impact of schemes – impact on ecology of River Etive
42. Environmental impact from in river works
43. No local community to benefit from the scheme
44. Impact from upgraded grid connection
45. No details of ongoing maintenance of tracks
46. Ecological Clerk of Works and Landscape Clerk of Works should be employed
47. Lack of detail on access tracks
48. Lack of detail on construction of intakes
49. Reinstatement if scheme no longer used
50. Concerns over the timing and purpose of the resubmission of two of the applications.
51. Contrary to SNH Guidance on Constructed Tracks in the Scottish Uplands guidance

4.3 All letters of representation are available for inspection via the Council's eplanning portal which can be accessed through the internet www.wam.highland.gov.uk/wam.

5. CONSULTATIONS

5.1 **Community Council** (6.12.18) – Glencoe and Glenetive Community Council advised they have discussed these applications and support the applicants.

5.2 **THC Forestry Officer** (1.10.18 and 11.12.18) – no objection subject to conditions

5.3 **THC Transport Planning Team** (2.8.18 and 5.2.19) – no objection subject to conditions

5.4 **THC Historic Environment Team** (previous response 3.10.18) – no objection

5.5 **THC Flood Risk Management Team** (8.1.19) – no objection subject to conditions

5.6 **THC Access Officer** (5.7.18 and 8.1.19) – no objection subject to minor update to the Access Management Plan.

5.7 **Scottish Natural Heritage** (17.7.18 and 9.1.19) – no objection subject to conditions

5.8 **Scottish Environment Protection Agency** (17.7.18 and 20.12.18) – no objection subject to conditions

5.9 **Historic Environment Scotland** (23.7.18 and 20.12.18) – no comments

5.10 **Scottish Water** (11.12.18) – no objection

5.11 **Transport Scotland** – (4.7.18) – no comments

5.12 **Argyll and Bute Council** – no response

5.13 **Argyll District Salmon Fisheries Board** – no response

6. DEVELOPMENT PLAN POLICY

The following policies are relevant to the assessment of the application

6.1 **Highland Wide Local Development Plan 2012**

28 - Sustainable Design
29 - Design Quality & Place-making
30 - Physical Constraints
51 - Trees and Development
52 – Principle of Development in Woodland
55 - Peat and Soils
56 - Travel
57 - Natural, Built & Cultural Heritage
58 - Protected Species
59 - Other important Species
60 - Other Importance Habitats
61 - Landscape
62 - Geodiversity
63 - Water Environment

64 - Flood Risk
66 - Surface Water Drainage
67 - Renewable Energy Developments
69 - Electricity Transmission Infrastructure
72 - Pollution
77 - Public Access
78 - Long Distance Routes

6.2 **West Highland and Islands Local Plan 2010 (as continued in force 2012)**

No specific policies – refer to Highland wide policies

6.3 **West Highland and Islands Local Development Plan – Proposed Plan (WestPlan)**

No specific policies – refer to Highland wide policies

6.4 **Highland Council Supplementary Planning Policy Guidance**

Construction Environmental Management Process for Large Scale Projects (August 2010)
Flood Risk & Drainage Impact Assessment (Jan 2013)
Highland Historic Environment Strategy (Jan 2013)
Highland's Statutorily Protected Species (March 2013)
Highland Renewable Energy Strategy & Planning Guidelines (May 2006)
Physical Constraints (March 2013)
Standards for Archaeological Work (March 2012)
Sustainable Design Guide (Jan 2013)
Trees, Woodlands and Development (Jan 2013)

7. OTHER MATERIAL POLICY CONSIDERATIONS

7.1 **National Planning Framework 3 (NPF 3)**

Support for renewable energy developments towards a ‘low carbon place’

Seek to respect, enhance and make responsible use of our natural and cultural assets towards a ‘natural, resilient place’.

7.2 **Scottish Planning Policy (SPP)**

SPP sets out a presumption in favour of development that contributes to sustainable development and aims to direct the right development to the right place. Key subject policies with respect to this development are Delivering Heat and Electricity and Valuing the Natural Environment

The planning system should:

- support the development of a diverse range of electricity generation from renewable energy technologies - including the expansion of renewable energy generation capacity - and the development of heat networks;

- guide development to appropriate locations and advise on the issues that

will be taken into account when specific proposals are being assessed;

- facilitate positive change while maintaining and enhancing distinctive landscape character;

- conserve and enhance protected sites and species, taking account of the need to maintain healthy ecosystems and work with the natural processes which provide important services to communities;

- promote protection and improvement of the water environment, including rivers, lochs, estuaries, wetlands, coastal waters and groundwater, in a sustainable and co-ordinated way;

- seek to protect soils from damage such as erosion or compaction;

- protect and enhance ancient semi-natural woodland as an important and irreplaceable resource, together with other native or long-established woods, hedgerows and individual trees with high nature conservation or landscape value;

- seek benefits for biodiversity from new development where possible, including the restoration of degraded habitats and the avoidance of further fragmentation or isolation of habitats; and

- support opportunities for enjoying and learning about the natural environment.

Renewable electricity generating technologies - Considerations will vary relative to the scale of the proposal and area characteristics but are likely to include:

- net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities;
- the scale of contribution to renewable energy generation targets;
- effect on greenhouse gas emissions;
- cumulative impacts - planning authorities should be clear about likely cumulative impacts arising from all of the considerations below, recognising that in some areas the cumulative impact of existing and consented energy development may limit the capacity for further development;
- impacts on communities and individual dwellings, including visual impact, residential amenity, noise and shadow flicker;
- landscape and visual impacts, including effects on wild land;
- effects on the natural heritage, including birds;
- impacts on carbon rich soils, using the carbon calculator;
- public access, including impact on long distance walking and cycling routes and scenic routes identified in the NPF;
- impacts on the historic environment, including scheduled monuments, listed buildings and their settings;
- impacts on tourism and recreation;
- impacts on aviation and defence interests and seismological recording;
- impacts on telecommunications and broadcasting installations, particularly

ensuring that transmission links are not compromised;
- impacts on road traffic;
- impacts on adjacent trunk roads;
- effects on hydrology, the water environment and flood risk;
- the need for conditions relating to the decommissioning of developments, including ancillary infrastructure, and site restoration;
- opportunities for energy storage; and
- the need for a robust planning obligation to ensure that operators achieve site restoration.

7.3 Scottish Energy Strategy

The Scottish Energy Strategy, published in 2017, sets out the Scottish Government's vision on how Scotland's future energy production and use will help achieve the transition to a low carbon economy by 2050.

The Strategy recognises that the target for meeting 100% of our energy demand from renewables by 2020 is well on the way to being achieved. However, it advocates a refocus of thinking towards a whole system approach; not just considering electricity but looking at heat and transport also.

Consideration is given to the need to reduce energy demand, through for example adoption of energy efficiency measures, but also to the increasing upward trend in electricity consumption that seems likely to continue particularly when looking to decarbonise transport, through replacement of fossil fuel engines with electric charging/battery storage.

The Strategy sets two new targets for the Scottish energy system by 2030:

- The equivalent of 50% of the energy for Scotland's heat, transport and electricity consumption to be supplied from renewable sources.
- An increase by 30% in the productivity of energy use across the Scottish economy.

The Strategy does not set out specific goals or targets for renewable electricity production deriving from hydro but it does state that a *diverse, well-balanced energy supply portfolio or 'energy mix' will remain essential as we continue to decarbonise our heat, transport and electricity systems – providing the basis for secure and affordable heat, mobility and power in future decades*.

7.4 Scottish Government Advice

Planning Advice Note 51 – Planning, Environmental Protection and Regulation

Planning Advice Note 60 – Natural Heritage

Planning Advice Note 69 – Flood Risk (+update June 2015)

Planning Advice Note 79 – Water and Drainage

Planning Advice Note 1/2011 – Planning and Noise

Planning Advice Note 2/2011 – Planning and Archaeology

Planning Advice Note 1/2013 – Environmental Impact assessment

Scottish Government Policy on Control of Woodland Removal

8. PLANNING APPRAISAL

8.1 Section 25 of the Town and Country Planning (Scotland) Act 1997 requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise.

Determining Issues

8.2 This means that the application requires to be assessed against all policies of the Development Plan relevant to the application, all national and local policy guidance and all other material considerations relevant to the application.

Planning Considerations

8.3 The key considerations in this case are:

a) compliance with the development plan and other planning policy
b) contribution towards meeting renewable energy generation targets
c) socio-economic impacts
d) landscape and visual impact
e) archaeology
f) woodland
g) species and habitats
h) amenity of neighbouring occupied buildings
i) ground water, surface water, aquatic ecosystems and fisheries
j) the amenity (and safety) of users of any public access
k) tourism and recreation interests
l) land and water based traffic and transport interests
m) any other material considerations

Development plan/other planning policy

8.4 In line with Scottish Planning Policy, Policy 67 of the Highland-wide Local Development Plan sets out that renewable energy proposals should be well related to the source of the primary renewable resources that are need for their operation and that the Council will consider:

- the contribution of the proposed development towards meeting renewable energy generation targets; and
- any positive or negative effects it is likely to have on the local and national economy.

8.5 Together with Policy 67, the proposal will be assessed against other policies of the development plan and Planning Guidelines and regard will be had to other material considerations, including proposals being able to demonstrate significant benefits

including making effective use of existing and proposed infrastructure or facilities. Subject to balancing these considerations and taking into account any mitigation measures to be included, the Council will support proposals where it is satisfied that they are located, sited and designed such that they will not be significantly detrimental overall, either individually or cumulatively with other developments having regard in particular to any significant effects on the following:

- natural, built and cultural heritage features;
- species and habitats;
- visual impact and impact on the landscape character of the surrounding area (the design and location of the proposal should reflect the scale and character of the landscape and seek to minimise landscape and visual impact, subject to other considerations);
- amenity at sensitive locations, including residential properties, work places and recognised visitor sites;
- the safety and amenity of any regularly occupied buildings and the grounds that they occupy – having regard to visual intrusion or the likely effects of noise generation;
- ground water, surface water (including water supply), aquatic ecosystems and fisheries;
- safe use of airport, defence or emergency service operations;
- other communications installations or quality of radio or TV reception;
- the amenity of users of any Core Path or other established public access for walking, cycling or horse riding;
- tourism and recreation interests;
- land and water based traffic and transport interests.

8.6 This application is one of seven application submitted for individual hydro scheme within Glen Etive. Due to their relationship the proposals are being considered both individually and cumulatively. All seven applications are EIA development and Environmental Impact Assessment Reports (EIARs) accompany each application.

8.7 Subject to the proposal having no overall significant detrimental impacts on the following matters, the proposal would comply with the development plan.

Contribution towards meeting renewable energy generation targets

8.8 Scottish Government policy recognises the valuable contribution that hydropower generation makes to Scotland's renewable targets and advises that the planning system should support the development of a diverse range of electricity generation from renewable energy technologies, including the expansion of renewable energy generation capacity. Larger schemes with a generation capacity of 100kW or more (such as the current scheme) are considered to make an important contribution to renewables targets and Ministers accept that in supporting such schemes some deterioration of the water environment may be necessary. This however must be justifiable in terms of costs and benefits.

Socio-economic impact

8.9 The submitted EIAR recognises the importance of tourism to the local and national economy, however there is no direct assessment of the predicted impact of the

development on tourism. There are a high number of visitors (tourists and recreational users) to Glen Etive for varied reasons – walking, sightseeing, canoeing, photography etc – and it is very difficult to predict how many of these visitors would stop coming to the Glen as a result of the construction works, and what the loss would be to the local economy as a result. Given the temporary nature of the disturbance (over a two year period), the mitigation measures proposed and as visitors are generally in the Glen for a purpose (for example climbing a particular Munro, canoeing a particular route or driving down the Glen as part of a wider visit to the area), it is considered that the impact on the economy will not be significant in the local or national context. The EIAR highlights there will be direct and indirect short term positive effect on the economy during the construction phase from the use of local services and suppliers. Not referred to are the benefits to the Estate owners of income from the hydro schemes which will help to sustain local employment in the Glen.

Landscape and Visual Impact

National Scenic Area

8.10 The site lies within the Ben Nevis and Glen Coe National Scenic Area (NSA). The designation notes "Glen Etive is not of the same awe-inspiring grandeur *(as Glen Coe)*, but nevertheless is a deep cleft through towering peaks, notably the portal peaks of the Buachailles and the great slabs of Ben Starav. The River Etive with its numerous waterfalls is an important feature of the glen".

8.11 There are a range of special qualities within the Ben Nevis and Glen Coe NSA. Within Glen Etive these are as follows:

8.12 **A land of mountain grandeur** – this is described as a landscape of massive proportions, breathtaking grandeur and great variety. It offers the highest altitude and greatest vertical relief in Britain.

8.13 **A land of classic highland vistas** – With each crossing of a glen or watershed, the scenery dramatically changes, from open moor to mountain pass, from smooth hillside to towering crags, from enclosed glen to long sea loch. The journey by road northwards across the open Moor of Rannoch Moor, past the sentinel of Buachaille Etive, and down through spectacular Glen Coe to the sea at Loch Leven, is a journey of great contrasts – one of the classic Highland journeys. The mountains, moors and glens are visited by many of those in search of the outstanding scenic experience, or outdoor exhilaration and challenge. It is not remote by distance or time from major settlement, particularly Fort William, and a sense of true remoteness must be searched for, with human contact in the upper glens and moors to be expected.

8.14 **Long and green Glen Etive** - Glen Etive, a long and dramatic glen with a fast-flowing rocky river, is generally green and grassy, affording tranquillity and peacefulness. Surrounded by high mountains, its narrow, sinuous single track road extends to the shores of Loch Etive, where it abruptly ends at the disused pier. From here the narrow, elegant Loch Etive stretches seawards, free of obvious human infrastructure, settlement or intrusion. The upper reaches of the River Etive offer interesting and sharply contrasting detail to the overall simplicity of the

landscape. Its shallow, gorged profile within the sweeping, smooth grassland draws attention, emphasised by the crystal pools and waterfalls over a complex geological bedrock. Settlement in this glen is limited to the occasional cottage and a single hunting lodge, but it is influential with the policies of the lodge dominating the lower reaches.

8.15 The submission includes a Landscape and Visual Impact Assessment (LVIA) which has considered the effects of the proposal, both individually and cumulatively on the special qualities of the NSA. Due to the theoretical visibility of the development being almost entirely restricted to within Glen Etive, this has focussed on the "Long and green Glen Etive" quality.

8.16 The LVIA identifies that the development would only affect a small part of the dramatic glen and the qualities of the fast flowing River Etive would be largely unaffected. In close proximity to the site the development would impact on tranquillity through visibility of manmade infrastructure. Construction activities, mainly from the powerhouse and the lower part of the penstock, will be very visible from a short section of the public road, particularly around the bridge over the Etive at the entrance to the site. The whole scheme will also be visible from the nearby hilltops. In this area, where landscape sensitivities are high, short term construction activities will have the greatest effect. Various changes have been made to the original scheme to address concerns over the landscape impact of the proposals. The powerhouse has been relocated by approximately 50 metres to bring the structure closer to the rising ground to allow the buried design of the structure to be better integrated into the landform. This position also reads visually with the nearby buildings. The river side section of the existing path is visually interesting, using the existing rock formations in places, and relates very well to the river itself. Rather than upgrade this to an access track suitable for construction vehicles, it was considered more appropriate to combine the construction track and the penstock route, away from the river and focus the disturbed ground in one route. This entire length of the penstock and construction access will be restored and the original path left alone, with the exception for the formation of a new section of walkers' path to improve the public access route. The lower section will still be visible within the 'long and dramatic glen', although only for a reasonably short section. It is considered that the revisions to the scheme, together with quick and sensitive reinstatement of the penstock and construction access track, will reduce these effects in the medium to longer term.

8.17 The LVIA has considered the cumulative effects on the special qualities of the NSA as a result of all seven schemes proposed. The LVIA concludes that the combined construction activity of the seven developments would be limited to a very small part of the NSA in the context of the entire 1000km^2 and any effects would be localised. Within the localised context of Glen Etive, cumulative landscape effects from construction works would be experienced across a large part of the Glen, and will be significant in places, particularly from the works associated with the Allt Chaorainn, Allt Mheuran and Allt Ceitein schemes which are on the more open glen sides and incorporate construction works along the side of the river Etive. However, as these effects are over a small part of the overall designation, and will be temporary, the overall cumulative impact on the special qualities of the NSA are not considered to be significant.

8.18 Since the LVIA was undertaken, the applicant has agreed to a number of changes across all seven schemes which will further reduce the landscape impacts. Key changes include a significant reduction in the Allt Mheuran scheme, removal of an intake on the Allt Ceitlein scheme, reduction of tracks and reducing, relocating and part burying powerhouses.

8.19 Scottish Natural Heritage has advised that it agrees with the conclusions of the LVIAs that the effects on the special qualities of the Ben Nevis and Glen Coe NSA will not be significant.

Wild Land Area

8.20 Three of the proposed hydro schemes (Allt Chaorainn, Allt Ceitlein and Allt Mheuran lie within the Loch Etive Mountains Wild Land Area. The other four schemes (Allt Fhaolain, Allt Charnan, Allt Gaoirean and Allt Bhiorain) lie adjacent to, but beyond the Wild Land Area. Wild land is recognised as a nationally important asset.

8.21 Scottish Planning Policy states that wild land character is displayed in some of Scotland's remoter upland, mountain and coastal areas, which are very sensitive to any form of intrusive human activity and have little or no capacity to accept new development. Scottish Planning Policy further advises that in areas of wild land development may be appropriate in some circumstances. Further consideration will be required to demonstrate that any significant effects on the qualities of these areas can be substantially overcome by siting, design and other mitigation.

8.22 The Loch Etive Mountains Wild Land Area (WLA) is a large area, spanning 507km2 and is a renowned and highly visited mountain landscape. The area contains a range of high and rugged mountains, divided by steep glens, with distinctive rock features. The WLA is largely uninhabited although there are a few isolated estate buildings within some of the glens. The land is mainly used for deer stalking, fishing, woodland, recreation and nature conservation. Many people view the WLA from outside its edges, including the road through Glen Etive. Although views to the interior of the WLA are limited due to the screening effect of the adjacent slope, it is nonetheless possible to experience some of the wild land qualities of the area, including a perception of naturalness and ruggedness. Within the WLA there are 22 Munros and 8 Corbetts which attract hillwalkers and climbers. The key attributes and qualities of the wild land area are described as:

- Quality 1: Arresting, steep, high mountains with precipitous tops and ridges that offer panoramic views of elevated tops continuing far into the distance.
- Quality 2: A series of deep glens carved through the mountains, with arresting side slopes and spectacular geological features that contribute to a strong sense of naturalness.
- Quality 3: A high number of visitors that seek different wild land qualities and are able to experience a wide range of remoteness, risk and physical challenge.

8.23 The Allt Chaorainn lies on the eastern side of Glen Etive and is within the Wild Land Area. The LVIA considers the impact of the development on the key

attributes and qualities of the wild land area, both individually and cumulatively.

8.24 The development is located along the lower reaches of the Allt Chaorainn and would be experienced within the context of the glen floor and lower mountain slopes away from the first of the key attributes of the WLA. However there are several prominent nearby mountain summits where views of the development would be experienced. Given the lower elevation of the proposed hydro scheme, the panoramic views of elevated tops continuing far into the distance (Quality 1) would tend to be largely unaffected.

8.25 In relation to Quality 2 (deep glens) there would be a localised impact within the lower part of the Allt Chaorainn glen, particularly during the construction phase, however this is more related to the glen floor and on the periphery of the wild land area, where there is less of a sense of wildness. At the 'T' in the river where the Allt Chaorainn meets the Allt Coire Ghuibhasan, and the intakes are proposed, there is a distinct change in the character of the area, where the hills rise dramatically and the glens deepen into the distance. The sense of wildness increases in this upper part of the glen.

8.26 With respect to Quality 3 (visitor experience) some localised significant effects on recreational users are predicted, particularly for those walkers and climbers using the footpath along the riverside and to the hills and mountains beyond. A permanent change will be the introduction of the two intakes within this transitional part of the WLA. Given the topography of the land close to the rivers, the intakes themselves will be screened from distance views on the approach, and impacts will predominantly only be felt when adjacent to the intakes. Their location within the river and the surrounding tree cover also help to contain the impact of these manmade structures. The LVIA has noted that in the context of undertaking an entire ascent and descent most of the site would not be visible from nearby routes, and that recreational enjoyment from the large majority of hill slopes and summits across the Wild Land Area would be unaffected.

8.27 Users of the Glen experience the character of wild land when travelling through parts of the glen along the public road. Leaving the A82 there is feeling of remoteness in the top section of the Glen, before the road starts the descent into the lower part of the glen. The Allt Chaorainn scheme is located where the road starts to drop down and views of the lower part of the glen start to open up. This is close to a viewpoint made popular by the film Skyfall. Views of the scheme itself from here will be limited, but it is anticipated that during the construction period construction vehicles on the penstock route will be visible. Likewise there will be signs of construction activity around the new bridge at the site entrance. Although this will affect a users enjoyment of the landscape in this area for the temporary construction period, it is considered this is more of an impact on visual amenity rather than affecting the qualities of the WLA. This impact can however be reduced with careful setting out of the penstock route on the south western side of the knoll where the penstock route climbs behind the powerhouse.

8.28 Given the temporary nature of the main impact, the restoration proposals and the focus of development towards the glen floor at the edge of the wild land area, the development is not considered to significantly affect the wider Wild Land Area.

8.29 The LVIA has considered the cumulative effects on the key attributes and qualities of the WLA as a result of all seven schemes proposed. When considering the WLA as a whole, only a fairly small proportion of the identified area will be affected by the seven developments. Although localised, during the construction phase of the developments these impacts could be significant. Cumulatively, Quality 3 is likely to be most affected, particularly for walkers and climbers seeking to experience a wide range of remoteness.

8.30 The LVIA has considered the inter-visibility of all seven schemes within the Glen, and the cumulative effect this would have not only on the WLA, but the landscape character and the visual impact. A Cumulative Zone of Theoretical Visibility (ZTV) has been submitted, together with assessment of 20 viewpoints within the area– listed below (together with a description of changes made to scheme since viewpoint information submitted)

VP No.	Name	Description of changes
1a	Gualachulain facing south west	Public road shown is no longer used for as transport route
1b	Gualachulain facing north east	Superseded – powerhouse is no longer in the location shown
2	Starav Path	Allt Mheuran main intake no longer in the location shown (not visible). Allt Bhiorainn powerhouse now adjacent to existing track and penstock reduced (most of bottom leg of blue line removed). Allt nan Gaoirean powerhouse repositioned – right hand side of blue line shortened
3a	Kinlochetive facing west	Allt Bhiorain powerhouse moved, now part visible approx. to right of tree in foreground. Left hand side of blue line reduced.
3b	Kinlochetive facing north east	As shown
4	Glen Etive Road east of Druimachoish	Superseded – penstock repositioned, permanent access track deleted, intake moved lower down. Revised photo submitted “Mheuran Hydro Penstock and Walkers Track View”
5	Starav ascent	Allt Mheuran top up intake removed and permanent access track to right of bridge removed. Allt nan Gaoirean powerhouse repositioned – right hand side of blue line shortened
6	Footpath west of Allt Mheuran	Superseded – scheme no longer covers this area
7	Glen Etive Road north of Allt nan Gaoirean	Superseded – powerhouse now behind knoll to far right of photograph

8	Glen Etive Road north of Invercharnan	Location of Allt Charnan powerhouse remains as shown. Upper section of Allt Mheuran scheme deleted from proposals.
9a	Bridge south of Glenceitlein facing north	Powerhouse repositioned to right hand side of photo (off picture), penstock shortened and outfall repositioned to east (right) of bridge.
9b	Bridge south of Glenceitlein	Generally as shown, however top up intake removed from scheme. Powerhouse and outfall now in this location.
10	Allt Ceitlein facing west	Allt Ceitlein scheme as shown. Allt Nan Gaoirean powerhouse repositioned to the right and penstock slightly shortened
11	Glen Etive Road west of Inbhir-fhaolain	Superseded – Allt Fhaolain powerhouse repositioned to left hand side of the road (near to knoll in centre of the photograph). Penstock shortened, outfall on LHS of public road and no new access required.
12	Allt Ceitlein top up intake	Superseded – top up intake no longer part of the proposals
13	Allt Ceitlein main intake	As shown
14	Stob Dubh	Allt Fhaolain powerhouse repositioned to upper side of the public road to upper right of position shown. Penstock shortened, new access deleted.
15	Stob na Broige	Allt Charnan as shown. Allt Fhaolain powerhouse repositioned to lower left and penstock shortened. Allt Chaorainn access track to follow penstock route – no longer separate upgrade of existing footpath to track. Construction access to be reinstated.
16	Slopes south of An Grianan	Allt Chaorainn access track to follow penstock route – no longer separate upgrade of existing footpath to track. Construction access to be reinstated.
17	An Grianan	Powerhouse slightly repositioned.
18	Glen Etive opposite Alltchaorainn	Allt Chaorainn access track to follow penstock route – no longer separate upgrade of existing footpath to track. Construction access to be reinstated. Powerhouse slightly repositioned to left of photo pulled into the higher ground and part buried.
19	Stob na Doire	Allt Chaorainn access track to follow penstock route – no longer separate upgrade of existing footpath to track. Construction access to be reinstated. Powerhouse slightly repositioned to left of position shown

20	Stob Dearg	Allt Chaorainn generally as shown - access track to follow penstock route – no longer separate upgrade of existing footpath to track. Construction access to be reinstated.

8.31 The viewpoint assessment shows that areas where more than one or two powerhouses and/or intakes will be viewed together are limited, indicating that the cumulative impacts of the developments are limited. It is important to note that the ZTV is a bare ground study; i.e. it does not take into account and screening provided by trees, vegetation or buildings, and does not take account of the scheme changes made since original submission (significant reduction to the Mheuran scheme and deletion of top up intake from the Ceitlein scheme). The ZTV however is limited to an assessment of above ground structure (intakes and powerhouses). This is supplemented by the specific viewpoint study. The areas where the cumulative impact of the developments is greatest in terms of inter-visibility are the hill/tops around the Allt Mheuran and Allt Ceitlein schemes. These are a mix of well visited Munros and Corbetts within the Wild Land Area. Although the Allt A Chaoarainn is also within the Wild Land Area, the distance, landscape type and topography mean it contributes less to the cumulative impact.

8.32 The original ZTVs were based on a 5km zone which is fairly standard for hydro developments. However in order to test the cumulative impact in particular, the ZTVs were extended to 10km (and the intake heights increased to 2m). It is accepted that it will be difficult to pick out individual elements of a scheme at this increased distance, however it was considered important to understand the potential visibility at this longer distance given the nature and importance of the wider area.

8.33 For walkers and climbers within the WLA on ascent and descent of the surrounding hills, views of the hydro schemes on the north western side of the Glen (outwith the WLA) will be reasonably limited and these schemes would be read in the context of the existing forestry and associated haul roads.

8.34 For the three schemes within the WLA, taking into account their location near the edge of the Wild Land Area, the significant reduction in the Allt Mheuran scheme since original submission, the reduction of tracks, removal of intakes, and relocation/redesign of powerhouses across the schemes, the construction activity will be visually read more in relation to the settled floor of the glen, rather than the upper levels of the WLA which exhibit much more wilderness character.

8.35 Scottish Natural Heritage has advised it considers that the proposals will have a localised effect on the sense of wildness but will not affect the experience or result in significant effects on the wider appreciation of the WLA or qualities of the area. It recommends mitigation measures to further reduce the impacts. Most of these have since been incorporated into the applicants revised Construction Management Statement (CMS), however a condition is proposed to secure an updated CMS to cover addition elements, including specifying the role of the Ecological Clerk of Works and the Landscape Clerk of Works.

Landscape Character

8.36 All seven proposals lie within the Mountain Massif Landscape Character Type (LCT). Scottish Natural Heritage has advised that although there is some limited predicted visibility into the adjacent High Tops to the west, this is not considered to result in a significant effect. The effects (individually and cumulatively) on landscape character will therefore be limited to the Mountain Massif LCT. They agree that the sensitivity of this LCT would be high to these proposals. They also agree that although the effects on this LCT will be significant (as illustrated at VPs 2 and 5) these effects will be localised due to the nature of the change proposed.

Visual Impact

8.37 The preceding sections consider the effects of the development on the physical landscape which may give rise to the changes in its character and how this is experienced. This includes consideration of the effects on landscape designations.

8.38 This section on visual impact considers potential changes to available views in the landscape as a result of the development and the resultant effects on visual amenity and people's responses to the changes. In a planning context amenity is a positive element(s) that contribute to the overall character or enjoyment of an area.

8.39 Glen Etive is a very scenic and popular glen attracting visitors to the Glen with a variety of interests. Described as the original 'road to nowhere", visitors travel the 12 miles of public road to just experience the qualities of the glen. The Glen is not highly populated, but does support local families and jobs. The top end of the Glen continues a similar landscape to Rannoch Moor, before entering the lower part of the Glen towards the head of Loch Etive. The Glen is busy with climbers and walkers attracted to the variety of Munros and Corbetts accessed from the Glen. The River Etive and some of its tributaries are popular for canoeing and fishing. The Glen is also popular for photography, mountain biking, stalking and camping and has been used as a film location including for Skyfall and Braveheart. Although of high landscape value with striking vistas and viewpoints, the Glen is not pristine in terms of visual quality. There are significant areas of commercial forestry and associated forestry roads, within the lower part of the glen, predominantly, but not exclusively on the north western side of the public road through the glen.

8.40 Due to the scenic qualities of the area and the number of visitors using the Glen, the visual amenity in the area is high and recreational users, road users and residents are predicted to have a high sensitivity to change.

8.41 In terms of the visual impact from this individual site, public road users will have open views of the route of the penstock/construction track and powerhouse from around the existing access and bridge to the site, south west to the bend in the public road near where the Allt Chaorainn joins the Etive. The intakes will not be openly visible. There may also views of construction activities on the approach to the site – see section 8.27 above.

8.42 As discussed above recreational users will experience some localised significant effects, predominantly during the construction and early restoration phases. In particular this will affect those walkers and climbers using the riverside path and the

route to the hills beyond and those ascending and descending the surrounding summits and ridge.

8.43 Users of the Core Path along the section from the jetty to the car park, and those using the path from the car park to the head of Loch Etive will experience some visual disturbance from construction traffic however this will be reasonably short lived and set on the landward side of the road, off set from the main views of the loch at this point.

8.44 Concerns have been raised by objectors over the loss of cascades and drying up of the rivers as a result of the proposed hydro schemes. There will be a loss of flow as a result of the individual hydro schemes, however protections are put in place by SEPA through the CAR Licence to ensure low flows in the rivers are retained and to regulate the amount of water that can be extracted from the rivers. The rivers will not 'dry up' as a result of the proposed hydro schemes. In terms of visual amenity, the change in flow rates will reduce the amount of time full cascades are experienced by viewers, however the restrictions on water abstraction put in place by the CAR licence will allow these features to remain, just less frequently. In principle, for these type of run of river schemes, the low flows will continue largely as normal, and the high flows will be affected, although not significantly, and not when in spate conditions. It is the periods of medium flow that will experience the most change as a result of the abstraction, changing them from medium to low flow rates. At all times water will continue to flow through the rivers, unless they would not be flowing in normal conditions such as in a period of very dry weather. For the four schemes which are important for kayaking/canoeing, this visual change will be further mitigated by days/times where the hydro scheme is not operating to allow natural flows for recreational users.

8.45 For the same reasons set out in the wild land assessment above, given the temporary nature of the main impact and the focus of development towards the glen floor it is considered that the proposal in the medium to long term will not have a significant impact on visual amenity. Quick and sensitive full reinstatement of the penstock and construction track will reduce the visual effects.

8.46 As discussed in the cumulative landscape impact assessment above, there are few locations that more than one or two schemes are viewed together. Similar to the landscape assessment, the cumulative visual impact of the development will be from distanced views from the ascent/descent of nearby hills by recreational users. The construction phase will undoubtedly have a visual impact, however the primary impacts will be temporary and mitigation is proposed to manage these impacts.

8.47 In terms of cumulative visual impact, in addition to the inter-visibility of schemes, the sequential effect of various schemes could also have a cumulative visual impact. This could affect all users of the Glen Road. This is essentially the effect on visual amenity of viewing construction works in isolation, but repeated along the Glen road. Although this impact would be fairly short lived - limited to the overall construction period of approximate two years, it could be a significant impact for the varied users of the Glen. As such, the construction programme has been revised to split the works into two phases, to reduce the spread of disturbance from construction activities and reduce the sequential impact of construction activity when travelling though the Glen (phase 1 focusing work on the upper Glen

schemes and once complete, moving to phase 2, the scheme in the lower end of the Glen.

8.48 In summary, the main individual and cumulative impacts of these developments relate to the construction phase. While the construction phase is for a fairly short period, if the construction is not carried out in accordance with the principles, practices and mitigation set out in the EIAR and Construction Management Statements then the impacts could be greater than assessed and the restoration less effective. The developer/contractor must adhere to these principles, practices and commitments to ensure the highest quality of outcome on the ground. Conditions will require the appointment of an Ecological Clerk of Works (ECoW) and a Landscape Clerk of Works (LCoW) for the duration of the construction and restoration, and part of their role will be report direct to the Planning Authority to aid the independent monitoring of work on the site. In addition, the Planning Authority will commit specific resources to the monitoring of these developments, and SNH has confirmed that it is happy to be involved in site visits during construction to discuss and advise on any issues emerging (relating to the three schemes within the Wild Land Area).

Archaeology

8.49 All of the sites have been subject to an archaeological walkover survey by Scotia Archaeology and their survey report has been submitted in support of the application.

8.50 With respect to this application (Allt Chaorainn) the survey work did not identify any sites of significance within the survey area which would be affected by the development.

Woodland

8.51 In accordance with national and local planning policy in relation to woodland removal, where the woodland is to be removed as part of a scheme such as this, woodland loss requires to be minimised and compensatory planting is required. The Forestry Officer has advised that the Native Woodland Survey of Scotland notes there is established regeneration of wet woodland on the south side of the two intakes and that it is likely that some of these trees would be lost due to construction works in this area. There are very few other trees likely to be impacted by the construction of the penstock, access tracks or the powerhouse. The overall loss of trees could be minimised by careful siting of the proposed scheme and could be mitigated by compensatory tree planting, particularly around the powerhouse. The Forestry Officer has no objection to the proposal subject to a condition requiring a tree planting plan and maintenance programme. There is a group of native trees close to where the footpath and penstock diverge (near the powerhouse) which can to be avoided by the construction activities.

Species and habitats

8.52 The proposed site lies within the Glen Etive and Glen Fyne Special Protection Area which is classified for golden eagle. The EIAR discussed the potential ornithological impacts and is accompanied by a Breeding Bird Survey Report and a separate

assessment on the impact on golden eagle. The site is predominantly open moorland of ornithological value, and which is within golden eagle territory. For the reasons set out in the Appropriate Assessment (Appendix 2 of this report) it is considered that the proposal will not have an adverse effect on the integrity of the Glen Etive and Glen Fyne SPA, individually or cumulatively. Mitigation has been recommended in the form of pre-construction surveys for breeding birds (by appointed Ecological Clerk of Works) if habitat clearance is within the bird breeding season, limited working times, and toolbox talks. A specific mitigation plan has been provided to protect the golden eagle interests.

8.53 The EIAR discusses the potential impacts on ecology and is accompanied by various survey reports, including Bryophyte Report, Phase 1 Habitat and National Vegetation Classification Report, Fresh Water Pearl Mussel Report, Fish and Aquatic Report, and Protected Mammals Report. The impacts on species and habitats within the water environment have been assessed by SEPA under the CAR licence application.

8.54 A number of trees within the vicinity of the lower intake and the powerhouse have the potential for bat roost. Evidence of otter spraint along the Allt Chaorainn was recorded on the survey and one potential resting site. A single scat typical of pine marten was recorded on the west bank of the Allt Chaorainn within the mixed woodland. No evidence of other protected species has been identified by the survey work. Mitigation, including pre-commencement surveys for otter and pine marten, embedded into the Construction Management Plan.

Amenity of neighbouring occupied buildings

8.55 The main potential impact on regularly occupied buildings is from the construction phase. There are responsibilities on contractors for managing health and safety on construction sites. Noise from construction activities is controlled under Environmental Health Legislation and an informative will be attached on any decision notice to remind the applicant of their responsibilities. When operational, the main noise source from a hydro scheme is the equipment within and adjacent to the powerhouse. In the case of the Allt Chaorainn scheme, the powerhouse is located approximately 110 metres from the nearest habitable building. Taking into account the design of the building, this is considered to be a sufficient distance to prevent disturbance from the operation of the powerhouse.

Ground water, surface water, aquatic ecosystems and fisheries

8.56 The Controlled Activities Regulations (CAR) provides the main regulatory controls for protecting the water environment from harm. CAR has specific controls for activities affecting rivers, lochs, groundwater, wetlands, estuaries and coastal waters, including discharging, abstraction, impoundment, engineering activities in or near watercourses and groundwater recharge. The Scottish Environment Protection Agency (SEPA) is responsible for implementing these Regulations. The Planning Authority and SEPA have different powers and functions which can on occasion overlap, however the planning system should not be used to secure objectives that are more properly achieved under other legislation. Therefore, some issues raised by this proposal will be determined under CAR, not under the planning application. When providing comments on planning applications that it will

also regulate, SEPA is required to assess the land use aspects of the planning application to clarify whether, on the information available at the time, the proposed development is potentially capable of being consented under the licensing regime.

8.57 In its response, SEPA has welcomed the amendments made to the layout of the scheme and has advised CAR application has been submitted. SEPA is of the view that the revised proposals are capable of being authorised. Under CAR SEPA has considered all impacts on the water environment, including impacts on river morphology, flow rates, species and habitats, fisheries interests and other water users.

8.58 There are land based elements of the development which would impact on the water environment which are not controlled under CAR. SEPA has considered these elements and provided advice and recommended conditions.

Borrow pits

8.59 There is one borrow pit proposed to serve this scheme (borrow pit 3). This is located adjacent to the existing access track after the Etive bridge. SEPA has confirmed the information provided suggests the borrow pits will not have an unacceptable impact on peat, GWDTE and watercourses. A condition is proposed to secure working and restoration proposals.

Penstock and access track layout

8.60 Concerns were originally raised by SEPA regarding the deviation between penstock and access track as it is important to minimise areas of ground disturbed during construction. The proposal has been amended to combine the construction access track and the penstock route and to leave the existing riverside path as existing.

8.61 In its original response on the previous application SEPA highlighted the importance of maximising the space between construction works and waterbodies wherever possible. SEPA required further information to demonstrate the existing tracks would be widened away from the watercourse and for there to be a 10m buffer from the watercourse. The CMS has been updated to confirm the tracks will be widened away from the watercourse and SEPA has requested a condition to cover this aspect. The revised site plan also shows the required 10m buffer from the watercourse.

8.62 In response to SEPA concerns over proposed fords in the river, the revised information has clarified that the fords will be used for single crossings in order to get equipment over to the other bank of the river. SEPA advise it is content with this subject to a condition to ensure that fords can only be used for the single crossing of each vehicle.

Peat disturbance

8.63 The EIAR contains an assessment of the impact on soils and geology, including a peat survey. The proposal largely avoids area of deep peat and the revised proposal further reduces the impact on peat.

Flood risk

8.64 Parts of the application site lie within the medium likelihood flood extent of the SEPA Flood Maps and may therefore be at medium to high risk of fluvial flooding. Given the nature of the development, a hydro scheme can be acceptable as an exception to the risk framework outline in Scottish Planning Policy. Issues have been raised by SEPA in relation to loss of flood plan storage and land-raising, however these can be controlled by conditions.

8.65 SEPA has also requested conditions in relation the proposed replacement of the bridge. These are to cover the bridge structure being designed to convey the 1 in 200 year flow with constriction of flow or increasing flood risk elsewhere and for the abutments to be set back minimising impact on the watercourse. A condition is also sought requiring the removal of the old structures once the new structures are complete to minimise the risk of blockage in the channel.

8.66 The Council's Flood Risk Management Team has also recommended conditions in relation to flood risk protection. The Flood Risk Reviews submitted in support of the applications conclude that the powerhouses may be at medium to high risk of flooding and recommends a more detailed Flood Risk Assessment be carried out to inform the siting of the powerhouses and any mitigation measures required. The Flood Team agree with this conclusion and suggest a condition to secure the detailed Flood Risk Assessment. It also recommends a condition requiring any new tracks/crossings are designed to convey the 1 in 200 year plus climate change return period flow with appropriate allowance for freeboard; together with a condition requiring final design details of the surface water drainage.

Construction method statement

8.67 Following the submission of a revised Construction Method Statement and Supplementary Document SEPA is content that the revised information addresses the issues previously highlighted. A condition is recommended requiring the development to comply with these documents.

Groundwater Dependent Terrestrial Ecosystems

8.68 The EIAR has assessed the impact on GWDTE identified in the Phase 1 Habitat and National Vegetation Classification (NVC) survey accompanying the EIA. SEPA originally requested further information in relation to GWDTE. This has now been provided. SEPA has advised that if standard mitigation measures are put in place to maintain local hydrology the revised layout will have a reduced and acceptable impact on GWDTE.

<u>The amenity (and safety) of users of any public access</u>

8.69 Access Management Plans have been submitted for each application. As highlighted in the Traffic Management Plan, the proposals involve bringing materials in by sea, unloading via a floating pier attached to the existing pier. The track from the pier to the existing forestry haul road (just before it reaches the Glen Etive public road) is the route for deliveries. This section of track is a Core Path. There is also wide public use of the network of forestry roads, footpaths and

informal routes throughout the Glen. The Access Management Plans have been developed to ensure continued public access during construction works, while being mindful of the safety of users. The Council's Access Officer is content with the land based elements of the Access Management Plan, subject to a minor amendment to the text in the case of the Allt Chaorainn scheme. Specific concerns were raised over the restrictions on public access from closures due to the bridge replacement. The applicant has advised that the existing bridge over the Etive will remain in place (and open) while the new bridge is constructed, with the exception of a period of up to 10 days while the new decking is laid. This temporary closure will be communicated to walkers through the local newspaper, direct communication to the mountaineering organisations and on site signage. The proposal also includes a new section of footpath to link from the existing track up to the existing riverside path which provides hill access for walkers. At present first section of the route is in poor condition and very wet. This proposal will enhance the initial part of the route and will become the new preferred walkers route with appropriate access rights, and will be signposted as such.

8.70 In terms of general amenity of users of the public access routes, there will be an impact on the amenity of users from construction activities, however this will largely be a temporary disruption. Following restoration, it is not considered that the above ground structures remaining will unacceptably affect the amenity of users of the public access routes.

Tourism and recreation interests

8.71 The primary impacts of this development, and the six other associated developments, on tourism relate to the visual impacts of the development, during and post construction. This is discussed in the landscape and visual impact section above.

8.72 There are wide recreational interests in Glen Etive including walking, climbing, canoeing, fishing, cycling, camping, stalking and photography. The visual impact of the developments on recreational users is considered above. Construction has been phased to try to minimise disturbance. Access Management Plans have been produced for each scheme to provide for continued public access throughout the construction process. Post construction there will be no impact on public access, and there will be some benefits from upgraded and retained paths.

8.73 Four of the rivers proposed for hydro scheme are included in the 3rd Edition of the Scottish Canoe Association's Scottish White Water publication; Allt a Chaorainn – route 168; Allt Ceitlein – route 169; Allt Fhaolain – route 170; and Allt Mheuran – route 171. This particular application has raised significant objection from the paddlesports community as the Allt Chaorainn is considered to be a nationally important and unique river in terms of its kayaking/white water interests.

8.74 The impact on recreational users as a result of changes to a waterbody (e.g. flows or morphology) are assessed by SEPA under the CAR licence. The applicant has advised they 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 (SCA). The preferred method of operation for both parties appears to be the setting up of an on demand system for when canoeists are there

to canoe and allow the company to produce electricity when they are not canoeing. The Heads of Terms for a Legal Agreement to provide the security that the SCA requires has been drafted and sent to the SCA.

8.75 The CAR licence applications for these four schemes are being determined by SEPA which advises that conditions have been included in the draft licences to cover this issue. The conditions require the prior approval of a plan detailing the start up, shut down and operational procedures for the turbines. SEPA advise it is envisaged that the plan will include the procedures agreed with the SCA for the 'on demand' system of access. If the on-demand system cannot be agreed then the plan will have to include periods of shutdown to allow canoe access. No abstraction will be permitted until the plan has been signed off by SEPA.

Land and water based traffic and transport interests

8.76 Since the original submission of the application, further information has been submitted relating to the traffic management proposals relating to the overall developments to respond to an initial objection from the Council's Transport Planning Team seeking further details. Importantly, this has confirmed that all materials and plant will be delivered via the sea loch to the existing jetty beyond the end of the public road, and that this will be transported over the forestry road, avoiding use of the bottom section of the public road. The information also proposed phasing the development into two phases; the three top schemes first, and the four bottom schemes second, focusing most of the increased traffic movements on one section of the public road at a time. It is estimated that there will be on average 200 tractor/trailer journeys for each scheme to transport plant and materials and between 120-160 staff trips for each scheme.

8.77 The Council's Transport Planning Team has advised that the proposed hydro power schemes are accessed via the C1094 which is a single track road with passing places subject to a vehicle length restriction (30 feet/9.1 metres.) It summarised issues resulting from the impact of tourist traffic. The issues are:

- Extensive verge overrun leading to road edge deterioration
- Damage to formal and informal passing places
- Informal car parking causing obstructions and damage to road edges
- Litter from tourists and wild campers

8.78 It further advises that the C1094 is a fragile road not designed to cope with the existing level of traffic and that the road has suffered significant deterioration due to the increased volume of traffic. The bridges and culverts along the C1094 are also under stress. A provisional assessment of the existing structures has recommended that an 18 tonne weight limit is applied to prevent any further structural decline and the Council Structures Team has recommended that further assessments are required.

8.79 The Transport Planning Team has reviewed the vehicle generation information supplied by the applicant in the Transport Planning Report (23/11/18) which provides a breakdown of the vehicle trips for each hydro scheme. It welcomes the applicant's proposal to use the existing forestry track which will serve the following

three hydro schemes: Bhiorain, Gaoirean and Charnan. However for all of the other schemes, construction traffic must use parts of the C1094.

In its view the impact of the construction vehicles on the C1094 will be more acute than predicted by the applicant for the following reasons:

- It is unlikely that concrete can be delivered via the sea loch as it is likely to have begun curing by the time it arrives
- No vehicles trips for restoration are included
- It is proposed to use 8 wheeled wagons which have a permitted maximum gross weight of 30 tonnes

8.80 The Transport Planning Team has advised it has no objection to the applications subject to a number of roads related Conditions being applied to any consent the Council may give. These Conditions are essential to protect the structural integrity of the road and structures for all road users. The recommendations regarding Conditions are as follows:

8.81 **Site Access:** All new accesses from the C1094 must be designed as an SDB2 service bay to provide additional passing places and for future maintenance staff to access sites without impeding traffic flows. The service bays must be designed as per the Council guidance 'Access to Single Houses and Small Housing Developments' the design of which must be approved by the Council and implemented prior to any works commencing on site.

8.82 **Weight Limit:** To ensure the structural integrity of the existing road structures from damage by heavy goods vehicles and to ensure the safety of all road users they require a Condition limiting the weight of construction vehicles using the C1094 to a maximum gross weight of 18 tonnes.

8.83 **Improved Passing Places:** A scheme to improve and/or provide new passing places is to be submitted to and approved by the Council and implemented prior to any works commencing on site. The extent of the improvements will be agreed with the Council and the developer during a pre-commencement walkover of the C1094. This is required to ensure that the presence of construction traffic does not impede the free flow of traffic on the C1094.

8.84 **Construction Traffic Restriction:** It is recommended that a restriction on the use of the C1094 by construction traffic is imposed from the end of the public road at the car park to the access to the bridge over the River Etive at Coileitir – an approximate distance of 3km. This is required to protect the most vulnerable section of the public road.

8.85 These requirements are incorporated into the proposed conditions.

<u>Other material considerations</u>

8.86 There are no other material considerations.

Non-material considerations

8.87 The following issues raised by third parties are not considered to be material to the assessment of this application.

1. Proposals driven by financial gain
2. Lack of developer consultation with recreational users
3. Impact on area that could gain National Park status in the future
4. Shame there is no Management Strategy for the National Scenic Area
5. No measures in place to prevent ATVs using land beyond the ATV tracks

Matters to be secured by Section 75 Agreement

8.88 None

9. CONCLUSION

9.1 The assessment of this application and the other six associated applications for hydro schemes within the Glen is a careful balance between National and local support for renewable energy and protection of important environmental resources. The greatest impacts from the development, both individually and cumulatively, will be from the construction phases. The schemes have been amended to take account of issues raised, appropriate mitigation has been proposed and conditions recommend to secure the best management of the construction process and provide for successful restoration of the disturbed ground.

9.2 The application can be supported in the context of the Council's Development Plan and in particular Policy 67 Renewable Energy. All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and on balance is acceptable in terms of all other applicable material considerations.

10. IMPLICATIONS

10.1 Resource: Not applicable

10.2 Legal: Not applicable

10.3 Community (Equality, Poverty and Rural): Not applicable

10.4 Climate Change/Carbon Clever: Not applicable

10.5 Risk: Not applicable

10.6 Gaelic: Not applicable

11. RECOMMENDATION

Action required before decision issued N

Notification to Scottish Ministers N

Conclusion of Section 75 Obligation N

Revocation of previous permission N

Subject to the above, it is recommended that planning permission be **Granted,** subject to the following:

Conditions and Reasons

1. No development shall commence on site until a pre-commencement meeting is held on site between the Developer, the Contractor, the Ecological Clerk of Works, the Landscape Clerk of Works, Scottish Natural Heritage and the Scottish Environment Protection Agency where appropriate. In advance of the meeting the developer's representatives shall provide an updated programme of works and ensure the route of the construction corridor has been clearly marked out on site and the necessary pre-commencement surveys have been carried out. The development shall not commence until written agreement has been received from the Planning Authority that the construction corridor route and marking is acceptable and the necessary surveys undertaken and any additional mitigation captured within the Construction Management Plan required under Condition 3.

   Reason: To ensure the development is implemented in accordance with the provisions of the application, environmental statement and associated documents.

2. The development shall be undertaken in accordance with the Application and Environmental Impact Assessment Report, except insofar as amended by the terms of this permission or as otherwise approved in writing by the Planning Authority in consultation with other relevant authorities. The development shall be undertaken in accordance with the phasing plan for the other associated hydro scheme proposals in Glen Etive.

   This development shall be undertaken in its entirety, in one continuous phase, with no partial implementation. Construction activities shall be completed within a one year period from the commencement of the development unless otherwise approved in writing by the Planning Authority. All reinstatement works shall be undertaken within three months of completion of all construction work and in accordance with the approved Construction Management Plan and associated Construction Method Statement.

   Reason: To ensure the development is implemented in accordance with the provisions of the application, environmental statement and associated documents and that it is constructed in one continuous phase and within an acceptable timescale.

3. No development shall commence on site until an updated Construction Management Plan and Construction Method Statement has been submitted to, and approved in writing by, the Planning Authority. The updated documents shall include the following:

a) An updated Schedule of Mitigation (SM) drawing together all approved mitigation in support of the application and other mitigation (including that required by agencies and relevant planning conditions attached to this permission);

b) Details of the roles and responsibilities of the appointed Environmental Clerk of Works (ECoW), Landscape Clerk of Works (LCoW), and Arboriculturalist including frequency of monitoring and any specific accountability. These responsibilities shall include the submission of monthly update reports direct to the Planning Authority and notification direct to the Planning Authority of any environmental or mitigation breaches;

c) A statement of responsibility to 'stop the job/activity' if a breach or potential breach of mitigation or legislation occurs;

d) Methods for monitoring, auditing, reporting and the communication of environmental management on site and with the client, Planning Authority and other relevant parties. This shall include monthly project update reports sent direct to the Planning Authority and notification of Planning Authority included within the emergency notification plan.

e) Individual contractor led management plans as set out in the main Construction Management Plan

f) Access to site section updated to reflect the construction traffic management plan and the 18 tonne gross weight restriction on vehicles

g) Construction Programme to be updated.

h) Update the associated Construction Method Statement to increase the post construction period for restoration monitoring and management from 3 years to 5 years.

Thereafter, the development shall be carried out in accordance with the approved Construction Management Plan and associated Construction Method Statement.

Reason: To protect the environment from the construction and operation of the development and secure final detailed information on the delivery of all mitigation proposed in this application.

4. No development shall commence until the Construction Traffic Management Plan has been updated to reflect the commitments made in the Transport Planning Report (23.11.18), the restriction on vehicles over 18 tonne gross weight and the requirement for all construction vehicles (including workforce vehicles) to use the forestry road from Invercharnan to the jetty, avoiding the lower section of the public road. Thereafter the development shall be undertaken in accordance with the approved Construction Traffic Management Plan unless prior agreement is reached with the Planning Authority on a scheme of road improvements to this section of the public

road from the Coileitir access to the end of the public road at the car park.

Reason: In the interest road safety, to minimise disruption on the public road network and recognising that the lower part of the C1094 public road is unsuitable for additional traffic without upgrading works.

5. The access onto the C1094 public road shall be upgraded in accordance with the Council's standard access drawing number SDB2 prior to the commencement of construction of any other elements of the hydro scheme hereby approved.

Reason: In the interests of road safety.

6. No development shall commence on site until a scheme of passing place improvements to the C1094 public road from the access to the forestry track at Invercharnan to the site entrance has been submitted to and approved in writing by the Planning Authority. This scheme shall be drawn up following a joint site visit by the Planning Authority with the developer and a Highland Council Community Services Roads Engineer.

Reason: In the interests of road safety to ensure commensurate improvements are made to the passing places along the public road to accommodate the additional construction traffic.

7. No development shall commence until a flood risk assessment has been submitted to, and approved in writing by, the Planning Authority. The flood risk assessment shall be carried out to inform the siting of the powerhouse and identify any mitigation measures required. For the avoidance of doubt mitigation measures should not include the creation of any bunds as this could reduce flood plain storage and conveyance which could increase flood risk elsewhere.

   Thereafter the development shall be undertaken in accordance with the approved details.

Reason: In order to minimise risk of flooding to the powerhouse.

8. No development shall commence until final drainage details for all new permanent hardstanding on the site shall be submitted to, and approved in writing by, the Planning Authority. This should demonstrate that all surface water will be managed in accordance with The Highland Council's Supplementary Guidance on Flood Risk and Drainage Impact Assessment.

   Reason: In order to ensure surface water drainage from any areas of permanent hardstanding (where not covered by the CAR licence) is sustainably managed.

9. Any new water course crossings shall be designed to convey the 1 in 200 year plus climate change return period flow with appropriate allowance for freeboard.

Reason: To ensure all water crossings are free from flood risk and do not exacerbate flood risk elsewhere

10. On completion of the replacement bridge over the River Etive the redundant bridge structures shall be removed and the ground and river banks restored.

Reason: In order to minimise the risk of blockage in the river from unnecessary structures and in the interests of visual amenity.

11. There shall be a 10m buffer between watercourse and built infrastructure/laydown areas, except where the built infrastructure, by nature of its purpose and function, requires to be within or adjacent to a watercourse, and any track widening shall be away from the water body.

Reason: In the interests of pollution prevention

12. Tracks shall be constructed to ensure they do not result in any elevation of land within the functional floodplain.

Reason: To ensure that land raising does not occur to prevent the loss of functional flood plain.

13. River fords can only be used for the single crossing of each vehicle used for the delivery of necessary equipment, unless otherwise first agreed by the Planning Authority in consultation with SEPA.

Reason: In order to minimise works within the water environment.

14. No development shall commence on the construction of the powerhouse hereby approved until the position of the powerhouse and been marked out on site and the position agreed by the Planning Authority. Thereafter the development shall be carried out in accordance with the approved details.

Reason: In the interests of landscape and visual amenity in order to secure appropriate micro-siting of the powerhouse.

15. No development shall commence on the construction of the intakes hereby approved until the final detailed designs have been submitted to, and approved in writing by, the Planning Authority. Such details shall include measures to visually soften its appearance as far as it practicable. Measures such as facing the weirs with carefully placed boulders, cobbles and using textured or coloured concrete or other materials should be considered when finalising the design. Thereafter the development shall be undertaken in accordance with the approved details.

Reason: In the interests of visual amenity to help integrate the intakes into their landscape setting as far as is practicable.

16. No development shall commence on the construction of the power house until a scheme of hard and soft landscaping works for the site of the powerhouse has been submitted to, and approved in writing by, the Planning Authority. The approved landscaping scheme shall be

implemented in full prior to the initial operation of the powerhouse. Any trees or plants which within a period of five years from the completion of the development die, or for whatever reason, are removed or damaged shall be replaced in the next planting season with others of the same size and species.

Reason: To ensure a high standard of appropriate landscaping is achieved in order to help integrate the powerhouse into its landscape setting.

17. The penstock trench will only be open for seven days per 100m, and only 100m of penstock trench open at any one time. Where not overlaid with the temporary construction track the penstock route will be fully reinstated as the trench is closed.

Reason: In order to minimise disturbance to the ground and facilitate quicker restoration of the route in in the interests of landscape and visual amenity.

18. No development shall commence on site until the Access Management Plan has been updated to reflect the comments of the Council's Access Officer, and submitted to, and approved in writing by, the Planning Authority. Thereafter the development shall be undertaken in accordance with the approved Access Management Plan.

Reason: In order to safeguard public access both during and after the construction phase of the development.

19. No development shall commence on the new section of footpath from the powerhouse to the existing path until a specification for this section of path has been submitted to, and approved in writing by, the Planning Authority. Thereafter the footpath shall be formed in accordance with the approved details prior to the commencement of works on the intakes or penstock, unless otherwise first agreed in writing by the Planning Authority.

Reason: In order to provide safe pedestrian access during construction works and to provide an improved public access route post construction.

20. No development shall commence until a Tree Planting Plan and maintenance programme has been submitted to, and approved in writing by, the Planning Authority. Thereafter the tree planting plan shall be implemented in full during the first planting season following commencement of development, or as otherwise agreed in writing by the Planning Authority.

Reason: In the interests of visual amenity and to compensate for any small loss of trees.

21. All plant, machinery and equipment associated with the hydro scheme including fans, ducts and external openings shall be installed, maintained and operated such that any associated operating noise does not exceed NR 20 when measured or calculated within any noise-sensitive premises with windows open for ventilation purposes. For the purposes of this condition,

"noise-sensitive premises" includes, but is not necessarily limited to, any building, structure or other development the lawful use of which a) falls within Classes 7 (Hotels & Hostels), 8 (Residential Institutions) or 9 (Houses) of the Town and Country Planning (Use Classes) (Scotland) Order 1997 (as amended), or b) is as a flat or static residential caravan.

Reason: In order to safeguard the amenity of neighbouring properties in accordance with Policy 28 of the Highland wide Local Development Plan.

22. The development shall be carried out in accordance with the Allt na Chaoirainn and Allt Ceitlein Golden Eagle Mitigation and Protection Plan.

Reason: To minimise disturbance to breeding eagles.

23. Unless otherwise agreed in writing by the Planning Authority, in the event of the scheme not generating electricity for a continuous period of twelve months with no realistic expectation of resumption in the foreseeable future, the site shall be reinstated within a period of two years in accordance with the scheme to be submitted to, and approved in writing by, the Planning Authority, following the expiry of such a period of cessation or within such timescales as agreed in writing by the Planning Authority. Reinstatement shall include the removal of the above ground infrastructures and restoration of the ground and restoration of the natural water regime to normal flows, to the written satisfaction of the Planning Authority in consultation with SEPA and SNH.

Reason: To ensure that the site is reinstated to the satisfaction of the Planning Authority to remove any unnecessary structures from the landscape.

REASON FOR DECISION

The application can be supported in the context of the Council's Development Plan and in particular Policy 67 Renewable Energy. All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and on balance is acceptable in terms of all other applicable material considerations.

TIME LIMIT FOR THE IMPLEMENTATION OF THIS PLANNING PERMISSION

In accordance with Section 58 of the Town and Country Planning (Scotland) Act 1997 (as amended), the development to which this planning permission relates must commence within THREE YEARS of the date of this decision notice. If development has not commenced within this period, then this planning permission shall lapse.

FOOTNOTE TO APPLICANT

Initiation and Completion Notices

The Town and Country Planning (Scotland) Act 1997 (as amended) requires all developers to submit notices to the Planning Authority prior to, and upon completion of, development. These are in addition to any other similar requirements (such as Building Warrant completion notices) and failure to comply represents a breach of planning control and may result in formal enforcement action.

1. The developer must submit a Notice of Initiation of Development in accordance with Section 27A of the Act to the Planning Authority prior to work commencing on site.

2. On completion of the development, the developer must submit a Notice of Completion in accordance with Section 27B of the Act to the Planning Authority.

Copies of the notices referred to are attached to this decision notice for your convenience.

Accordance with Approved Plans & Conditions

You are advised that development must progress in accordance with the plans approved under, and any conditions attached to, this permission. You must not deviate from this permission without consent from the Planning Authority (irrespective of any changes that may separately be requested at the Building Warrant stage or by any other Statutory Authority). Any pre-conditions (those requiring certain works, submissions etc. prior to commencement of development) must be fulfilled prior to work starting on site. Failure to adhere to this permission and meet the requirements of all conditions may invalidate your permission or result in formal enforcement action.

Flood Risk

It is important to note that the granting of planning permission does not imply there is an unconditional absence of flood risk relating to (or emanating from) the application site. As per Scottish Planning Policy (paragraph 259), planning permission does not remove the liability position of developers or owners in relation to flood risk.

Local Roads Authority Consent

In addition to planning permission, you may require one or more separate consents (such as road construction consent, dropped kerb consent, a road openings permit, occupation of the road permit etc.) from the Area Roads Team prior to work commencing. These consents may require additional work and/or introduce additional specifications and you are therefore advised to contact your local Area Roads office for further guidance at the earliest opportunity.

Failure to comply with access, parking and drainage infrastructure requirements may endanger road users, affect the safety and free-flow of traffic and is likely to result in enforcement action being taken against you under both the Town and

Country Planning (Scotland) Act 1997 and the Roads (Scotland) Act 1984.

Further information on the Council's roads standards can be found at: http://www.highland.gov.uk/yourenvironment/roadsandtransport

Application forms and guidance notes for access-related consents can be downloaded from:

http://www.highland.gov.uk/info/20005/roads_and_pavements/101/permits_for_working_on_public_roads/2

Mud & Debris on Road

Please note that it an offence under Section 95 of the Roads (Scotland) Act 1984 to allow mud or any other material to be deposited, and thereafter remain, on a public road from any vehicle or development site. You must, therefore, put in place a strategy for dealing with any material deposited on the public road network and maintain this until development is complete.

Construction Hours and Noise-Generating Activities

You are advised that construction work associated with the approved development (incl. the loading/unloading of delivery vehicles, plant or other machinery), for which noise is audible at the boundary of the application site, should not normally take place outwith the hours of 08:00 and 19:00 Monday to Friday, 08:00 and 13:00 on Saturdays or at any time on a Sunday or Bank Holiday in Scotland, as prescribed in Schedule 1 of the Banking and Financial Dealings Act 1971 (as amended).

Work falling outwith these hours which gives rise to amenity concerns, or noise at any time which exceeds acceptable levels, may result in the service of a notice under Section 60 of the Control of Pollution Act 1974 (as amended). Breaching a Section 60 notice constitutes an offence and is likely to result in court action.

If you wish formal consent to work at specific times or on specific days, you may apply to the Council's Environmental Health Officer under Section 61 of the 1974 Act. Any such application should be submitted after you have obtained your Building Warrant, if required, and will be considered on its merits. Any decision taken will reflect the nature of the development, the site's location and the proximity of noise sensitive premises. Please contact env.health@highland.gov.uk for more information.

Protected Species – Halting of Work

You are advised that work on site must stop immediately, and Scottish Natural Heritage must be contacted, if evidence of any protected species or nesting/breeding sites, not previously detected during the course of the application and provided for in this permission, are found on site. For the avoidance of doubt, it is an offence to deliberately or recklessly kill, injure or disturb protected species or to damage or destroy the breeding site of a protected species. These sites are protected even if the animal is not there at the time of discovery. Further information regarding protected species and developer responsibilities is available from SNH: www.snh.gov.uk/protecting-scotlands-nature/protected-species

Signature:	David Mudie
Designation:	Area Planning Manager – South
Author:	Susan Macmillan
Background Papers:	Documents referred to in report and in case file.
Relevant Plans:	Plan 1 - Location Plan (102 Rev 6)
	Plan 2 - Site Plan (103 Rev 3)
	Plan 3 - Site Plan (103 Rev 6)
	Plan 4 - Site Plan (105 Rev 4)
	Plan 5 - Site Plan (106 Rev 5)
	Plan 6 - Site Plan (107 Rev 2)
	Plan 7 - Intake details (108 Rev 1)
	Plan 8 - Intake details (109 Rev 1)
	Plan 9 - Powerhouse Elevations (115 Rev 2)
	Plan 10 - Pipe Bridge Details (110 Rev 1)
	Plan 11 - Etive Bridge Details (111 Rev 1)
	Plan 12 - Powerhouse Elevations (112 Rev 1)
	Plan 13 - Powerhouse Plans (113 Rev 3)
	Plan 14 - ZTV Chaoirain at 10km

Appendix 2: Appropriate Assessment

Consideration of Proposals Affecting European Sites

The sites status as an SPA under EC Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna (the "Habitats Directive") means that the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended), the 'Habitats Regulations,' apply.

This means that where the Planning Authority concludes a development proposal (unconnected with the nature conservation management of a Natura 2000 site) is likely to have a significant effect on that site, it must undertake an appropriate assessment of the implications for the conservation interests for which the area has been designated. The need for appropriate assessment also extends to any plans or projects outwith the boundary of the site in order to determine their implications for the interest protected within the site.

This means that the Council, as competent authority, has a duty to:

- determine whether the proposal is directly connected with or necessary to site management for conservation; and, if not,
- determine whether the proposal is likely to have a significant effect on the site either individually or in combination with other plans or projects; and, if so, then
- make an appropriate assessment of the implications (of the proposal) for the site in view of that site's conservation objectives.

The competent authority can only agree to the proposal after having ascertained that it will not adversely affect the integrity of the site. If this is not the case, and there are no alternative solutions, the proposal can only be allowed to proceed if there are imperative reasons of overriding public interest, which in this case can include those of a social or economic nature.

It is evident that the proposal is not connected with or necessary to site management for conservation, hence further consideration is required.

The proposed development lies outwith but immediately adjacent to the Glen Etive and Glen Fyne Special Protection Area (SPA). This SPA is classified for its golden eagles. This proposal is one of seven applications for hydro schemes within Glen Etive

Taking into account advice from Scottish Natural Heritage, it is considered that the proposal is likely to have a significant effect on golden eagle for this the Glen Etive and Glen Fyne SPA is designated, therefore an appropriate assessment is required in view of the site's conservation objectives for its qualifying interest.

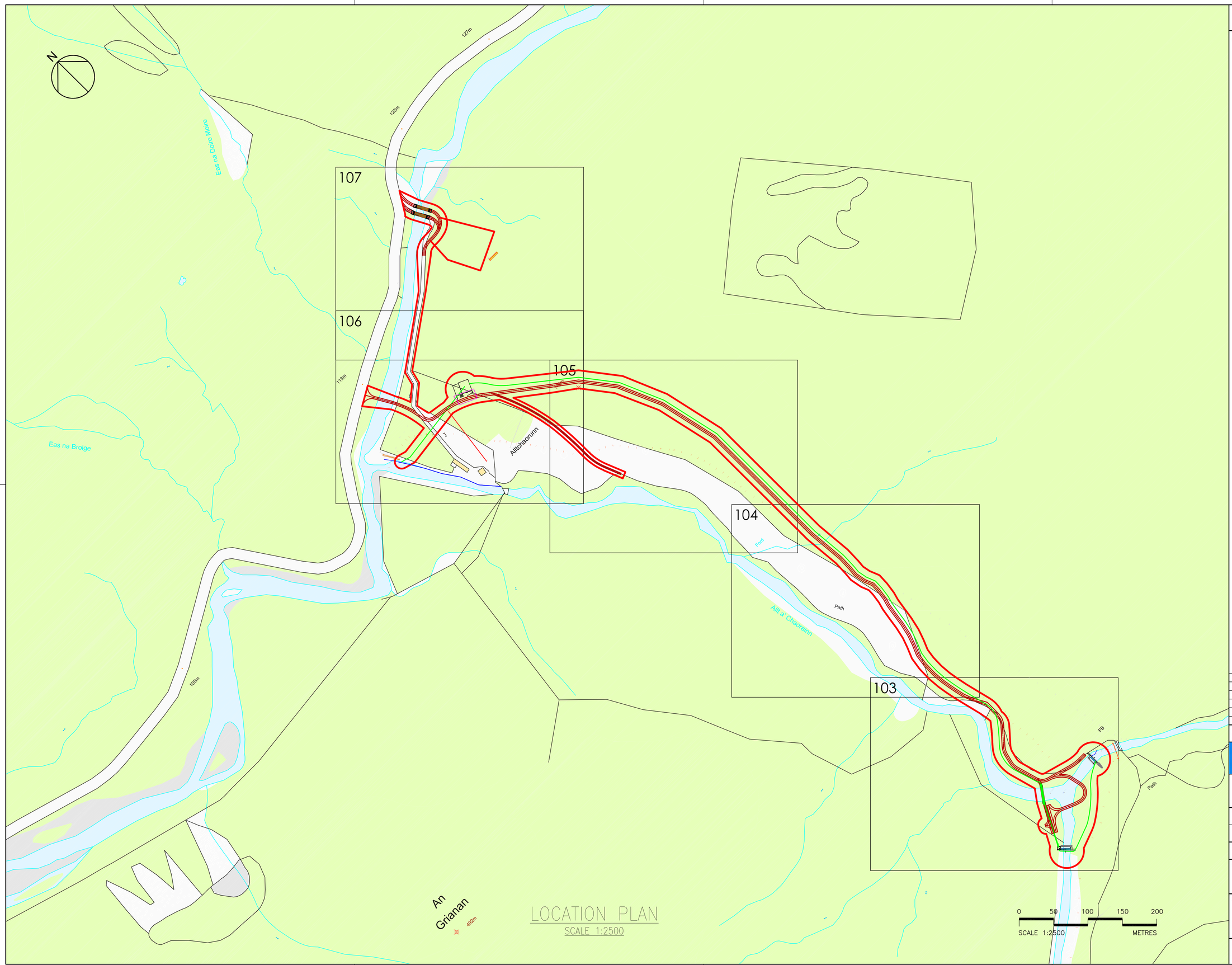
Appropriate Assessment

Based on the information provided and advice from Scottish Natural Heritage it is considered the Allt Chaorainn scheme could affect two eagle ranges. Both ranges have nests within 1km of the proposals. However, provided the mitigation measures in the Allt

Chaorainn and Allt Ceitlein Golden Eagle Mitigation and Protection Plan are carried out exactly as detailed, there will be no significant disturbance of breeding eagles and the conservation objectives will be met.

Conclusion

It is concluded that the proposal will not have an adverse effect on the integrity of the Glen Etive and Glen Fyne SPA, individually or cumulatively.



LOCATION PLAN
SCALE 1:2500

0 50 100 150 200
SCALE 1:2500 METRES

Original Size A1

Notes:

Legend:

- Penstock
- New Access Track
- Land Ownership Boundary
- Planning Boundary

Rev	Description	Drawn	Chk'd	App'd.	Date
0.5	Power house relocated	JA	JH		8.11.18
0.4	Power house relocated	JA	JH		19.1.18
0.3	Track route amended	JA	JH		30.11.17
0.2	Pipeline amended	JA	JH		30.10.17
0.1	INITIAL ISSUE	JA			

Dickins Hydro Resources Ltd
Chester House
81-83 Fulham High Street
London SW6 3JA
w: www.dickinshydro.com
t: 020 3286 2203

Originated By	Drawn By	Checked By	Approved By
J Appleby	J Appleby		
Date 2.10.17	Date 2.10.17	Date	Date
Scale As shown		Status Planning	

Project Title
Allt Chaorainn

Drawing Title
Location Plan

Drawing No.
C083.3 - 102 Rev0.6

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103

170m

Secondary Intake

FB

Crossing C02

Temporary fords during construction

Pipe Bridge

Crossing C04

180m

Crossing C03

Intake

N

0 10 20 30 40 50

SCALE 1:500 METRES

SITE PLAN

SCALE 1:500

Original Size A1

Notes:

Legend:

- Penstock
- New Access Track
- Land Ownership Boundary
- Planning Boundary

Rev	Description	Drawn	Chk'd	App'd.	Date
0.2	Pipeline amended	JA	JH		30.10.17
0.1	INITIAL ISSUE	JA			

Dickins Hydro Resources

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Originated By	Drawn By	Checked By	Approved By
J Appleby	J Appleby		
Date 2.10.17	Date 2.10.17	Date	Date

Scale: As shown

Status: Planning

Project Title: Allt Chaorainn

Drawing Title: Site Plan Sheet 1 of 5

Drawing No.: C083.3 - 103 Rev0.3

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104

Ford

Crossing C01
pipeline under burn
track over burn

Temporary access
track to be fully
restored

Path

Allt a' Chaorainn

103

0 10 20 30 40 50
SCALE 1:500 METRES

SITE PLAN
SCALE 1:500

Original Size
A1

Notes:

Legend:
- Penstock
- New Access Track
- Land Ownership Boundary
- Planning Boundary

Rev	Description	Drawn	Chk'd	App'd.	Date
0.3	Track removed	JA	JH		8.11.18
0.2	Pipeline amended	JA	JH		30.10.17
0.1	INITIAL ISSUE	JA			

Dickins Hydro Resources Ltd
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81-83 Fulham High Street
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Originated By	Drawn By	Checked By	Approved By
J Appleby	J Appleby		
Date 2.10.17	Date 2.10.17	Date	Date

Scale: As shown
Status: Planning

Project Title: Allt Chaorainn

Drawing Title: Site Plan
Sheet 2 of 5

Drawing No. C083.3 - 104 Rev0.3

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105

143m

Temporary access track to be fully restored

104

Ford

0 10 20 30 40 50
SCALE 1:500 METRES

SITE PLAN
SCALE 1:500

Original Size
A1

Notes:

Legend:

- Penstock
- New Access Track
- Land Ownership Boundary
- Planning Boundary

Rev	Description	Drawn	Chk'd	App'd.	Date
0.4	Track removed	JA	JH		8.11.18
0.3	Track route amended	JA	JH		30.11.17
0.2	Pipeline amended	JA	JH		30.10.17
0.1	INITIAL ISSUE	JA			

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Originated By	Drawn By	Checked By	Approved By
J Appleby	J Appleby		
Date: 2.10.17	Date: 2.10.17	Date	Date

Scale: As shown
Status: Planning

Project Title
Allt Chaorainn

Drawing Title
Site Plan
Sheet 3 of 5

Drawing No.
C083.3 - 105 Rev0.4

C:\Users\M4800\Dropbox (Glen Hydro)\Glen Hydro Consulting (1)\Projects\C083 Glen Etive\03 Technical Design\Civil\C083.3-100 Layouts Rev0.3

106

105

Crossing C06

Temporary construction
access to intake.
To be fully restored

Temporary ford
for use during
construction

113m

Power house

143m

Alltchaorunn

Outfall

0 10 20 30 40 50
SCALE 1:500 METRES

SITE PLAN
SCALE 1:500

N

Original Size
A1

Notes:

Legend:
- Penstock
- New Access Track
- Land Ownership Boundary
- Planning Boundary

Rev	Description	Drawn	Chk'd	App'd.	Date
0.5	Power house relocated	JA	JH		8.11.18
0.4	Power house relocated	JA	JH		19.1.18
0.3	Track route amended	JA	JH		30.11.17
0.2	Pipeline amended	JA	JH		30.10.17
0.1	INITIAL ISSUE	JA			

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t: 020 3286 2203

Originated By	Drawn By	Checked By	Approved By
J Appleby	J Appleby		
Date: 2.10.17	Date: 2.10.17	Date	Date

Scale: As shown
Status: Planning

Project Title
Allt Chaorainn

Drawing Title
Site Plan
Sheet 4 of 5

Drawing No.
C083.3 - 106 Rev0.5

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107

Alternative location for new bridge

New bridge at existing bridge location

Borrow Pit during construction (to be reinstated)

Crossing C07

130m

130m

120m

106

0 10 20 30 40 50

SCALE 1:500 METRES

SITE PLAN

SCALE 1:500

Original Size A1

Notes:

Legend:

- Penstock
- New Access Track
- Land Ownership Boundary
- Planning Boundary

Rev	Description	Drawn	Chk'd	App'd.	Date
0.2	Borrow Pit added	JA	JH		30.11.17
0.1	INITIAL ISSUE	JA			

Dickins Hydro Resources

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Originated By	Drawn By	Checked By	Approved By
J Appleby	J Appleby		
Date 2.10.17	Date 2.10.17	Date	Date

Scale: As shown

Status: Planning

Project Title: Allt Chaorainn

Drawing Title: Site Plan Sheet 5 of 5

Drawing No. C083.3 - 107 Rev0.2

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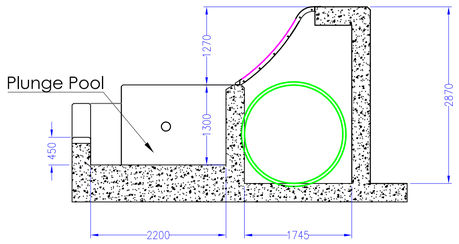
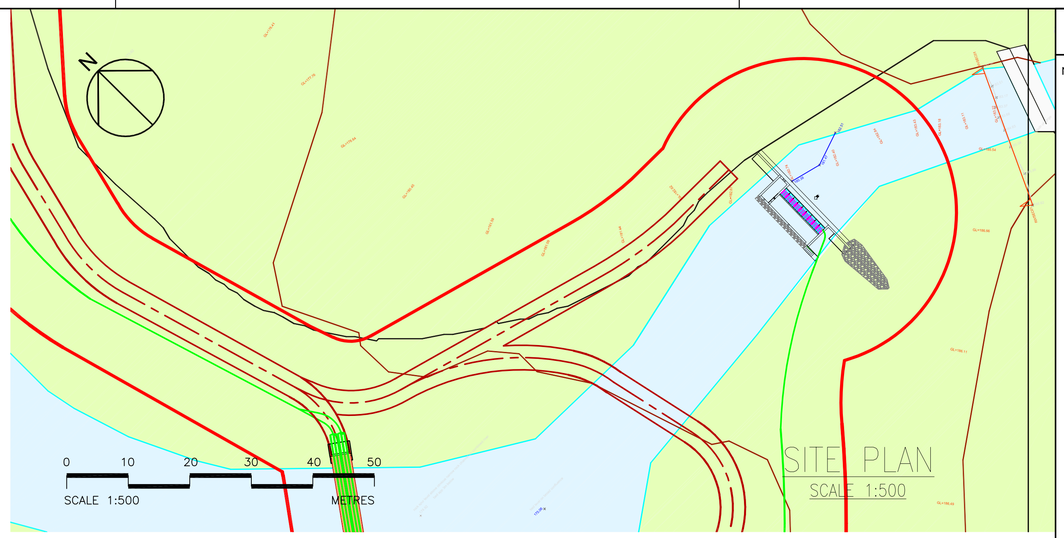
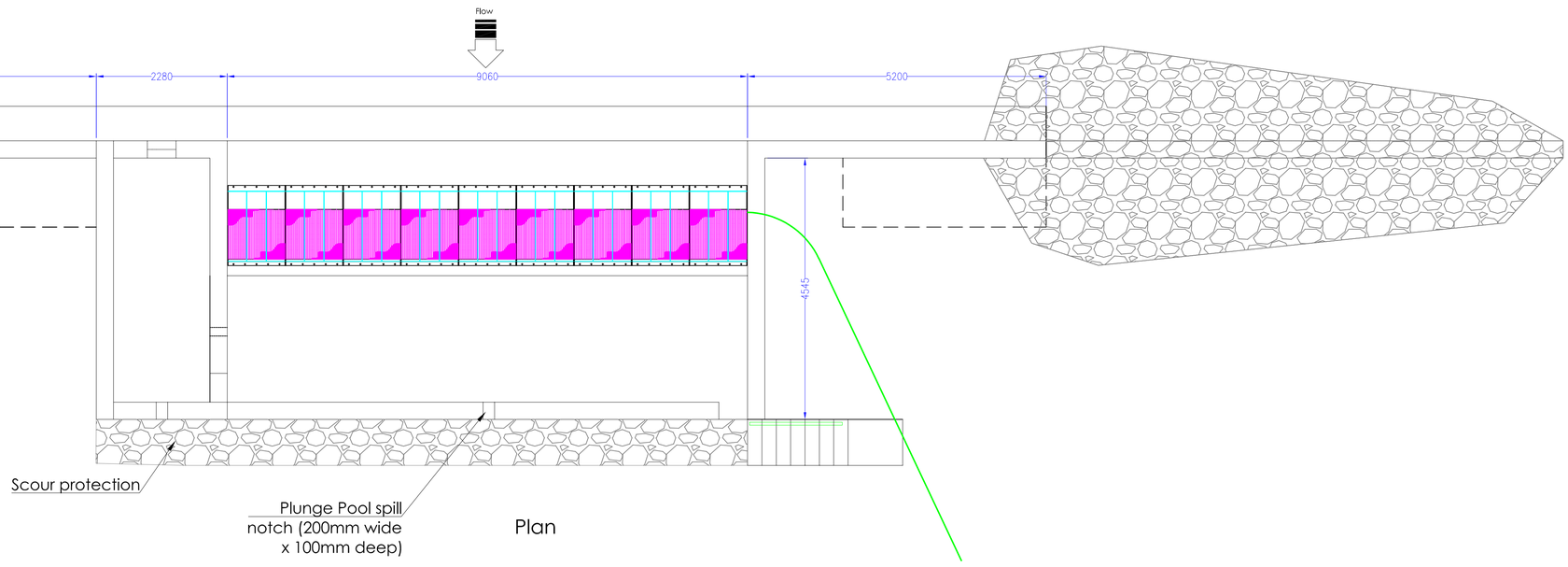
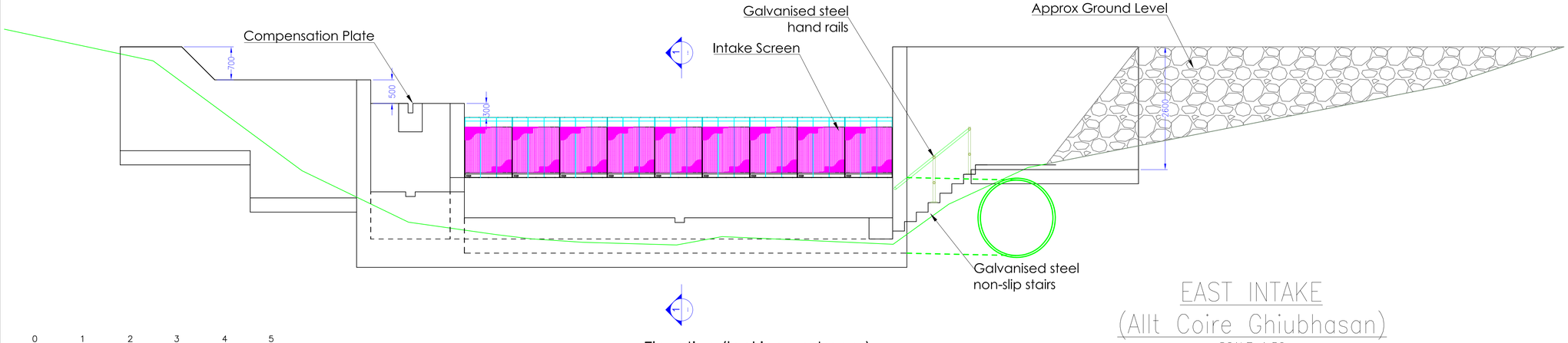


Section 1-1





Plan



Elevation (looking upstream)

EAST INTAKE
(Allt Coire Ghiubhasan)
SCALE 1:50

Original Size A1

Notes:

Legend:

- Penstock
- New Access Track
- Land Ownership Boundary
- Planning Boundary

Rev	Description	Drawn	Chk'd	App'd.	Date
0.1	INITIAL ISSUE	JA			

Dickins Hydro Resources

Dickins Hydro Resources Ltd
Chester House
81-83 Fulham High Street
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w: www.dickinshydro.com
t: 020 3286 2203

Originated By	Drawn By	Checked By	Approved By
J Appleby	J Appleby		
Date 21.11.17	Date 21.11.17	Date	Date

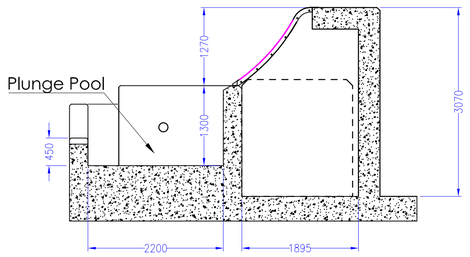
Scale: As shown
Status: Planning

Project Title: Allt Chaorainn

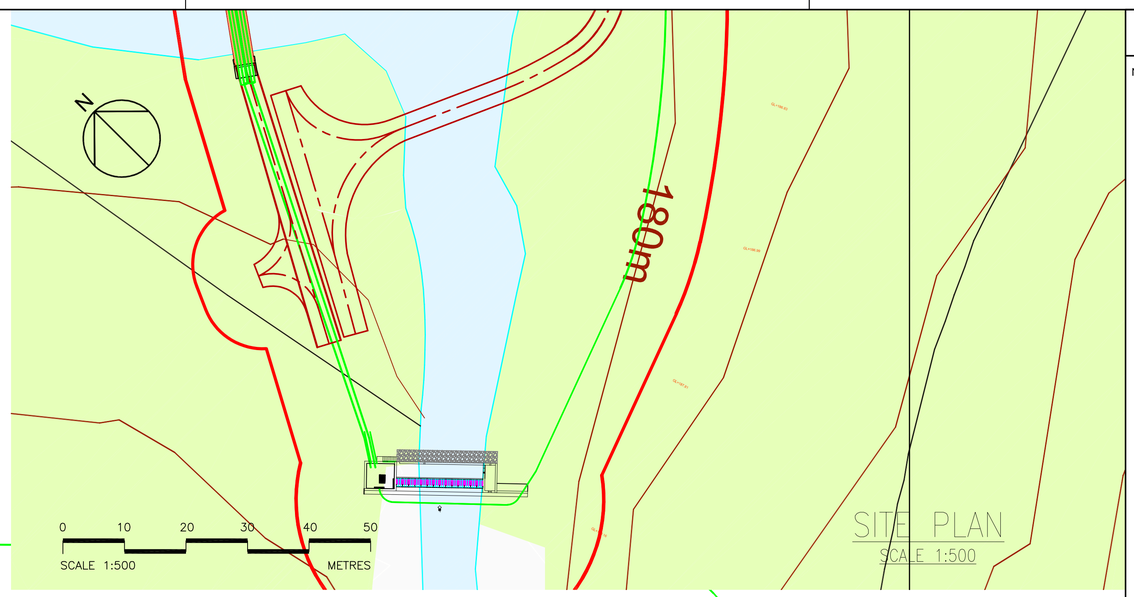
Drawing Title: Intake Details Sheet 1 of 2

Drawing No.: C083.3 - 108 Rev0.1

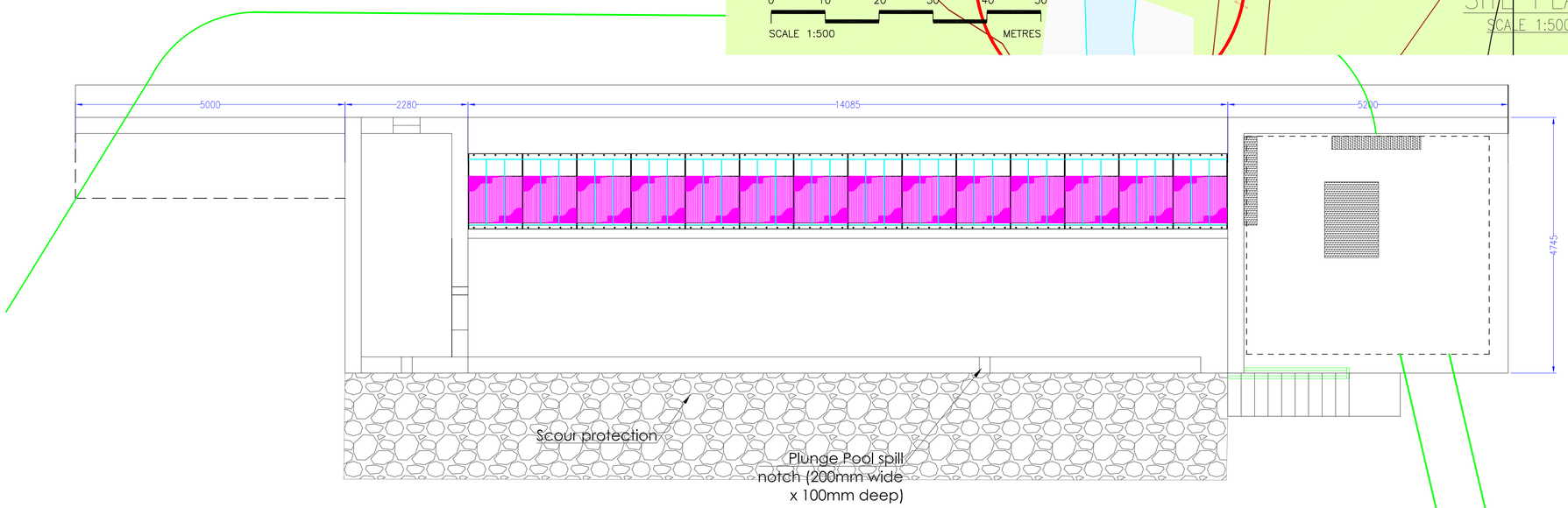
C:\Users\Jonathan\Dropbox (Glen Hydro)\Glen Hydro Consulting (1)\Projects\C083 Glen Etive\03 Technical Design\Civil\C083.3-100 Layouts Rev0.1



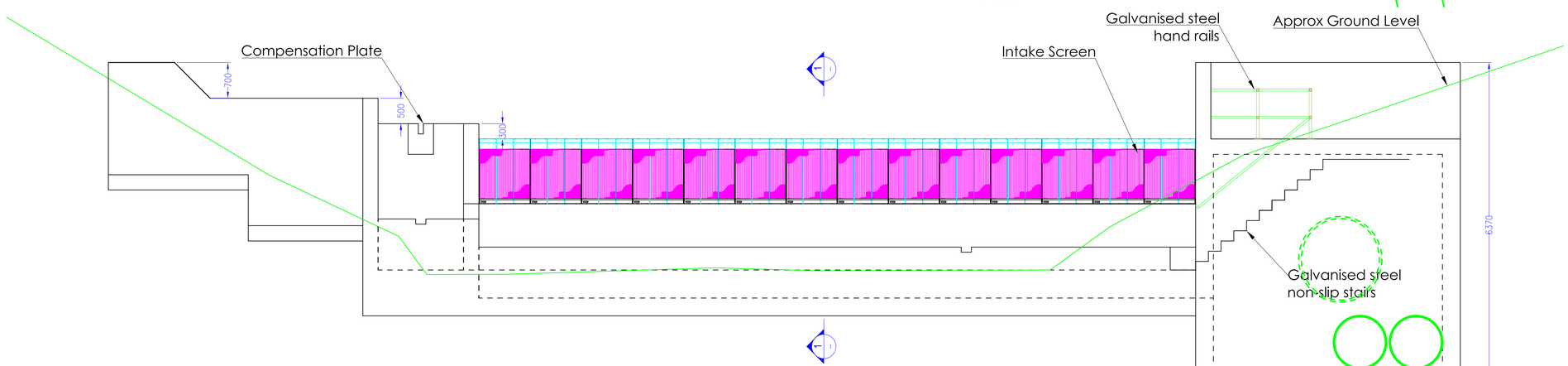
Section 1-1



SITE PLAN
SCALE 1:500



Plan



Elevation (looking upstream)

WEST INTAKE
Allt Coire a'Chaolain
SCALE 1:50

0 1 2 3 4 5
SCALE 1:50 METRES

Original Size A1

Notes:

Legend:
- Penstock
- New Access Track
- Land Ownership Boundary
- Planning Boundary

Rev	Description	Drawn	Chk'd	App'd.	Date
0.1	INITIAL ISSUE	JA			

Dickins Hydro Resources

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Originated By	Drawn By	Checked By	Approved By
J Appleby	J Appleby		
Date: 21.11.17	Date: 21.11.17	Date	Date

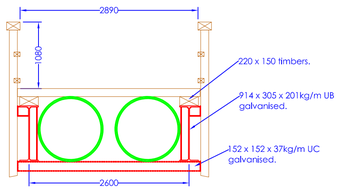
Scale: As shown
Status: Planning

Project Title: Allt Chaorainn

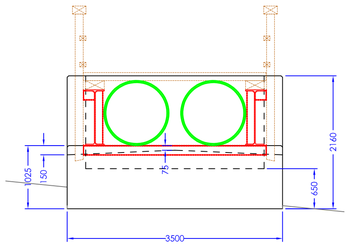
Drawing Title: Intake Details Sheet 2 of 2

Drawing No.: C083.3 - 109 Rev0.1

C:\Users\Jonathan\Dropbox (Glen Hydro)\Glen Hydro Consulting (1)\Projects\C083 Glen Etive\03 Technical Design\Civil\C083.3-100 Layouts Rev0.1

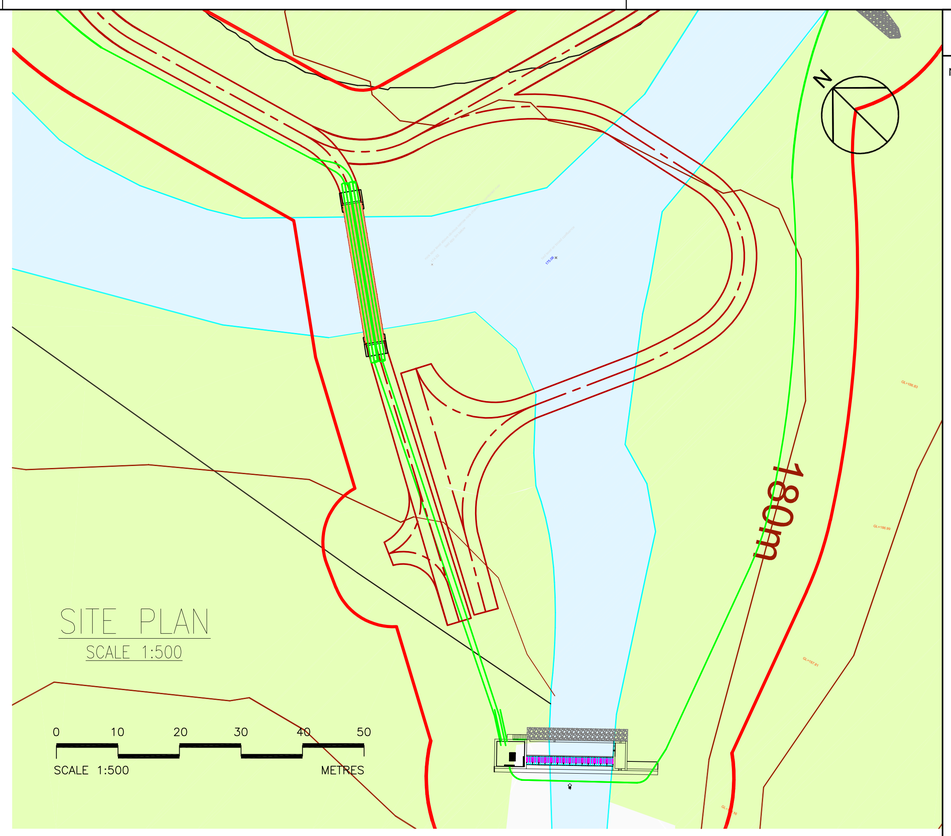


SECTION THRU BRIDGE DECK
SCALE 1:50



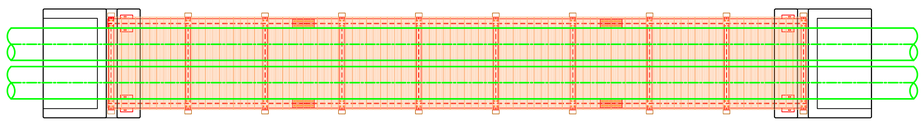
SECTION THRU DECK & ABUTMENT
SCALE 1:50

0 1 2 3 4 5
SCALE 1:50 METRES

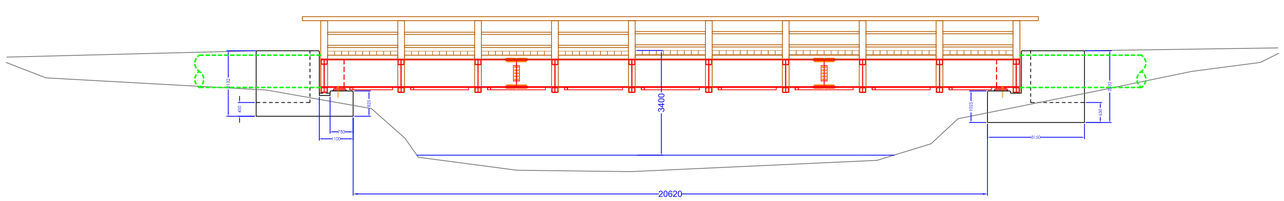


SITE PLAN
SCALE 1:500

0 10 20 30 40 50
SCALE 1:500 METRES



PLAN
SCALE 1:100



DOWNSTREAM ELEVATION
SCALE 1:100

0 5 10
SCALE 1:100 METRES

Original Size A1

Notes:

Legend:
- Penstock
- New Access Track
- Land Ownership Boundary
- Planning Boundary

Rev	Description	Drawn	Chk'd	App'd.	Date
0.1	INITIAL ISSUE	JA			

Dickins Hydro Resources

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Originated By	Drawn By	Checked By	Approved By
J Appleby	J Appleby		
Date 21.11.17	Date 21.11.17	Date	Date

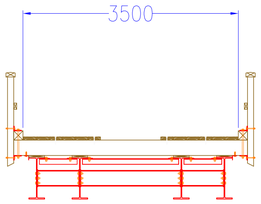
Scale	Status
As shown	Planning

Project Title
Allt Chaorainn

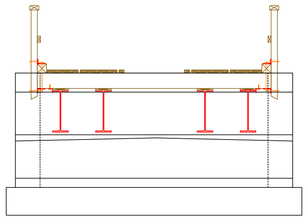
Drawing Title
Pipe Bridge over Allt Chaorainn

Drawing No.
C083.3 - 110 Rev0.1

C:\Users\Jonathan\Dropbox (Glen Hydro)\Glen Hydro Consulting (1)\Projects\C083 Glen Etive\03 Technical Design\Civil\C083.3-100 Layouts Rev0.1

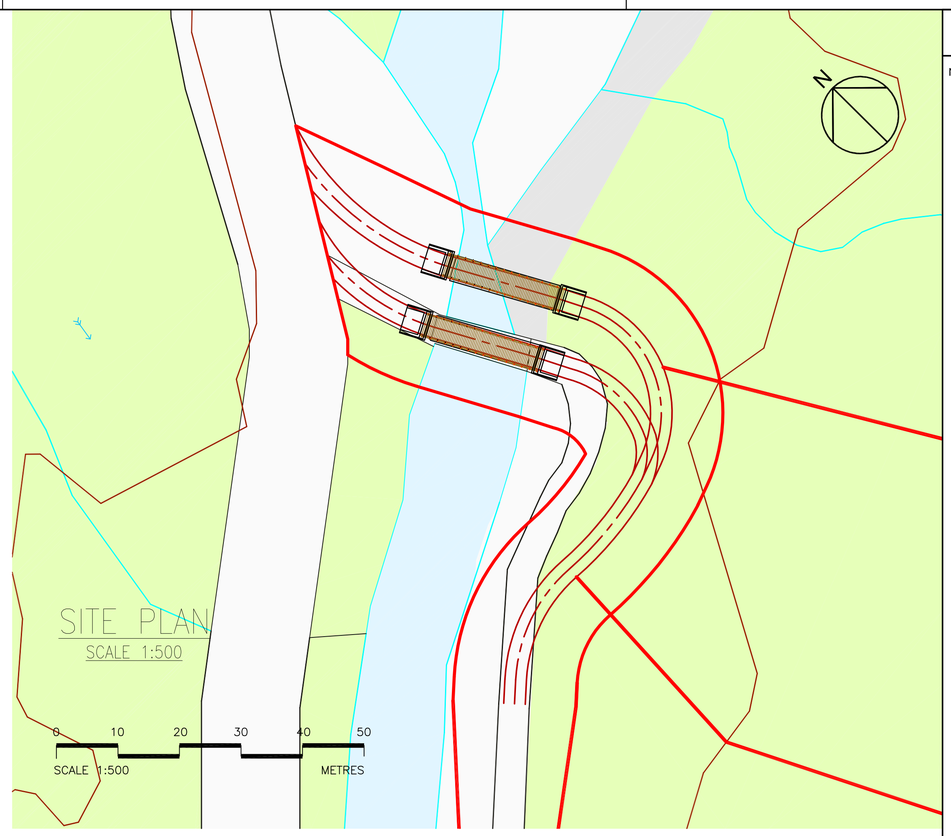


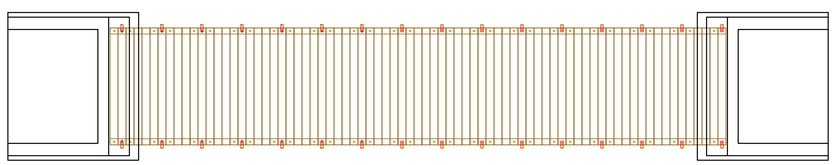
SECTION THRU
BRIDGE DECK
SCALE 1:50



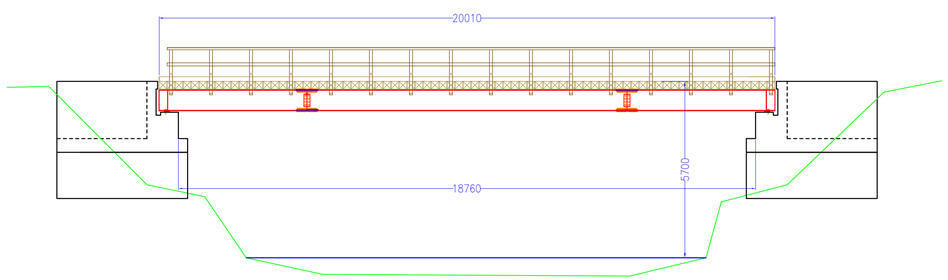
SECTION THRU
DECK & ABUTMENT
SCALE 1:50

0 1 2 3 4 5
SCALE 1:50 METRES





PLAN
SCALE 1:100



DOWNSTREAM ELEVATION
SCALE 1:100

0 5 10
SCALE 1:100 METRES

Original Size
A1

Notes:

Legend:
- Penstock
- New Access Track
- Land Ownership Boundary
- Planning Boundary

Rev	Description	Drawn	Chk'd	App'd.	Date
0.1	INITIAL ISSUE	JA			

Dickins Hydro Resources

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Originated By	Drawn By	Checked By	Approved By
J Appleby	J Appleby		
Date: 21.11.17	Date: 21.11.17	Date	Date

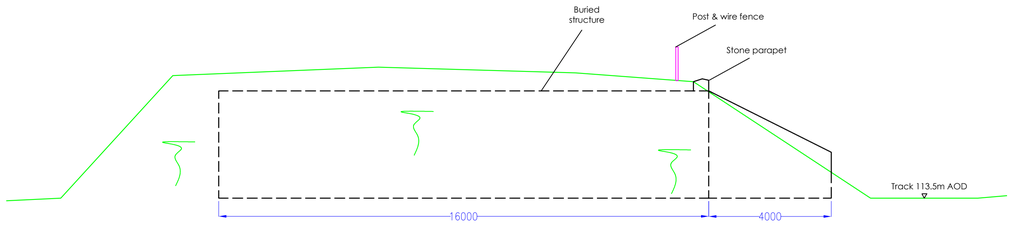
Scale: As shown
Status: Planning

Project Title
Allt Chaorainn

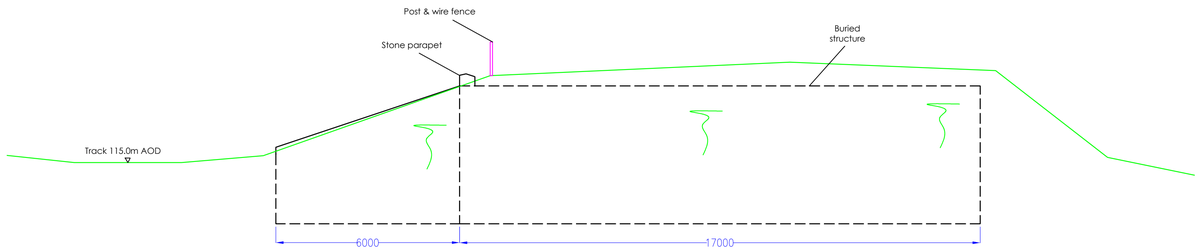
Drawing Title
Access Bridge over River Etive

Drawing No.
C083.3 - 111 Rev0.1

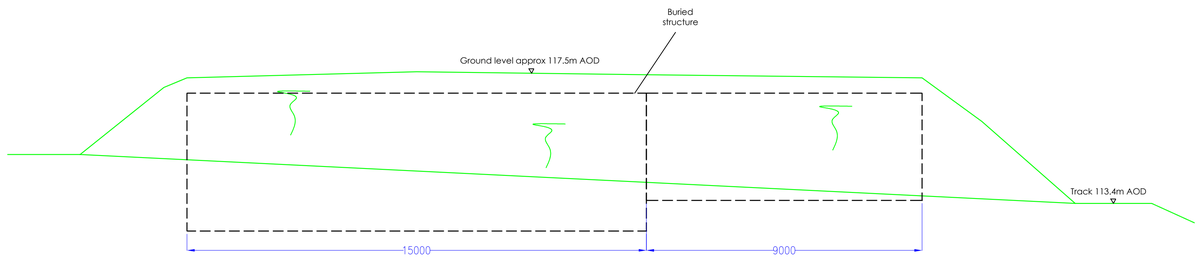
C:\Users\Jonathan\Dropbox (Glen Hydro)\Glen Hydro Consulting (1)\Projects\C083 Glen Etive\03 Technical Design\Civil\C083.3-100 Layouts Rev0.2



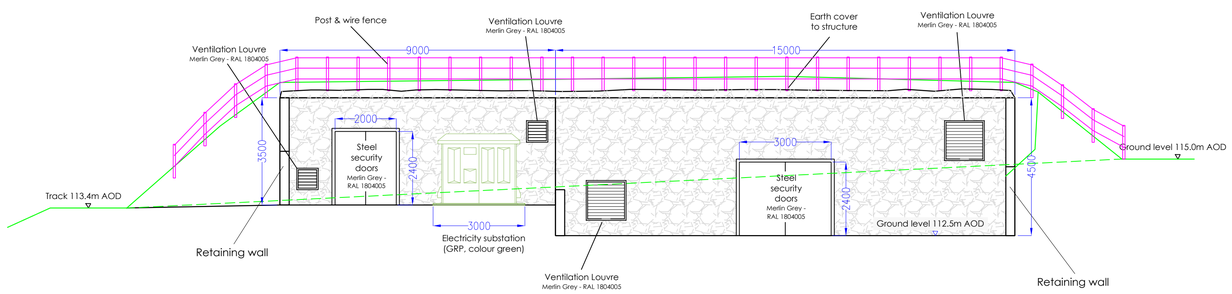
West Elevation



East Elevation



North Elevation



South Elevation

0 2 4 6 8 10

SCALE 1:100 METRES

C:\Glen Hydro\Dropbox (Glen Hydro)\Glen Hydro Consulting\Projects\C083 Glen Etive\03 Technical Design\Civil\C083.3-100 Layouts Rev0.2a

Original Size A1

Notes:

Legend:

- Penstock
- New Access Track
- Land Ownership Boundary
- Planning Boundary

Rev	Description	Drawn	Chk'd	App'd.	Date
0.3	Cladding amended	TC	JH		
0.2	Turbine house moved	TC	JH		
0.1	INITIAL ISSUE	TC	JH		

Dickins Hydro Resources

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Originated By	Drawn By	Checked By	Approved By
T Copeland	T Copeland		
Date 12.12.17	Date 12.12.17	Date	Date

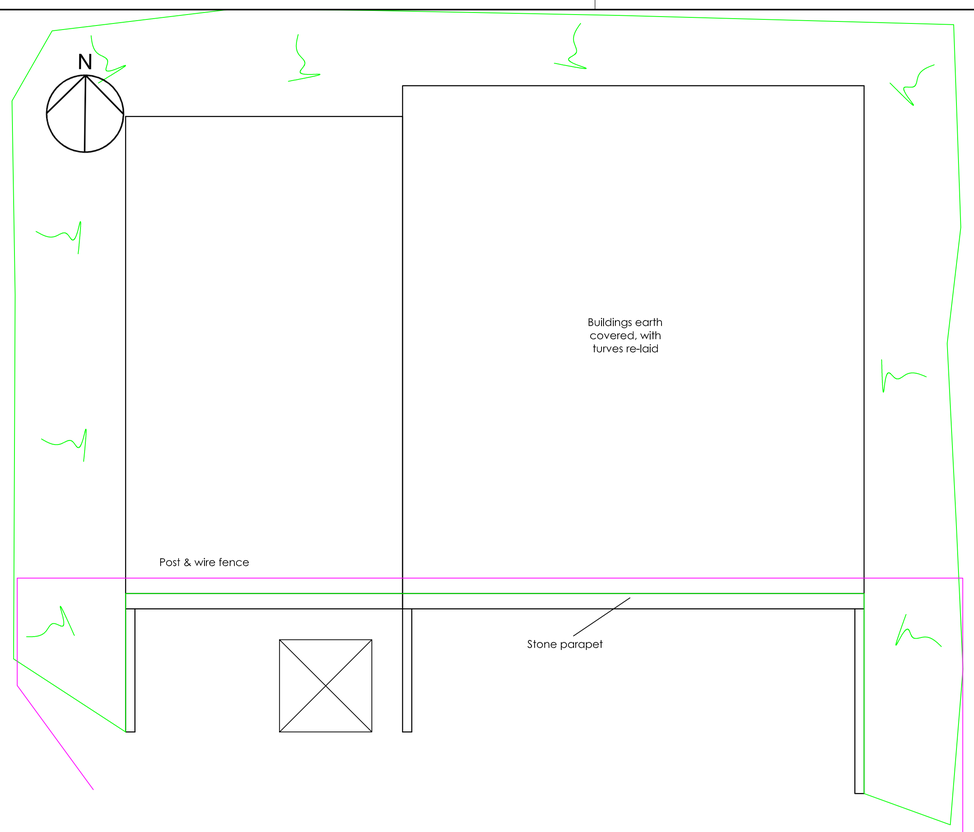
Scale: As shown

Status: Planning

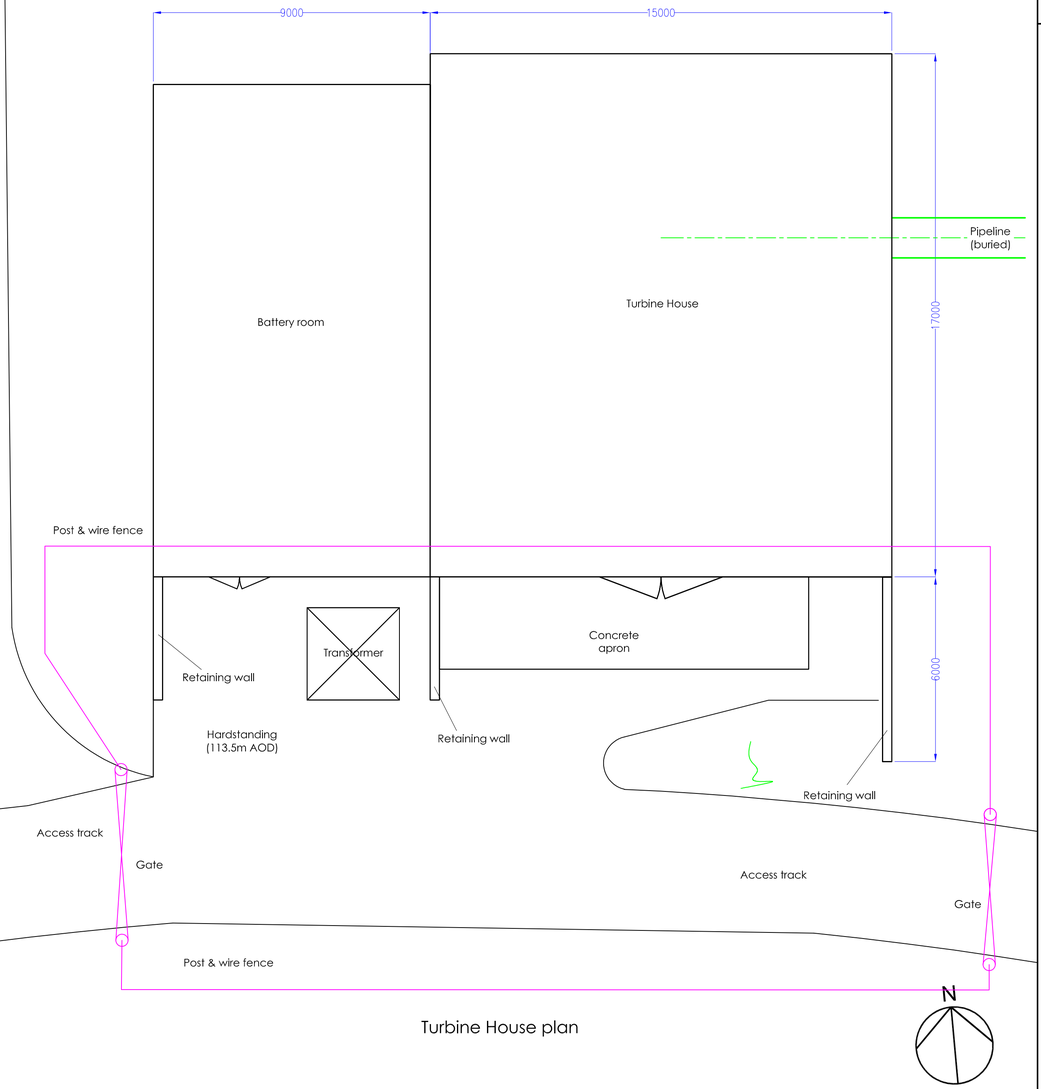
Project Title: Allt Chaorainn

Drawing Title: Power House Details 1 (elevations)

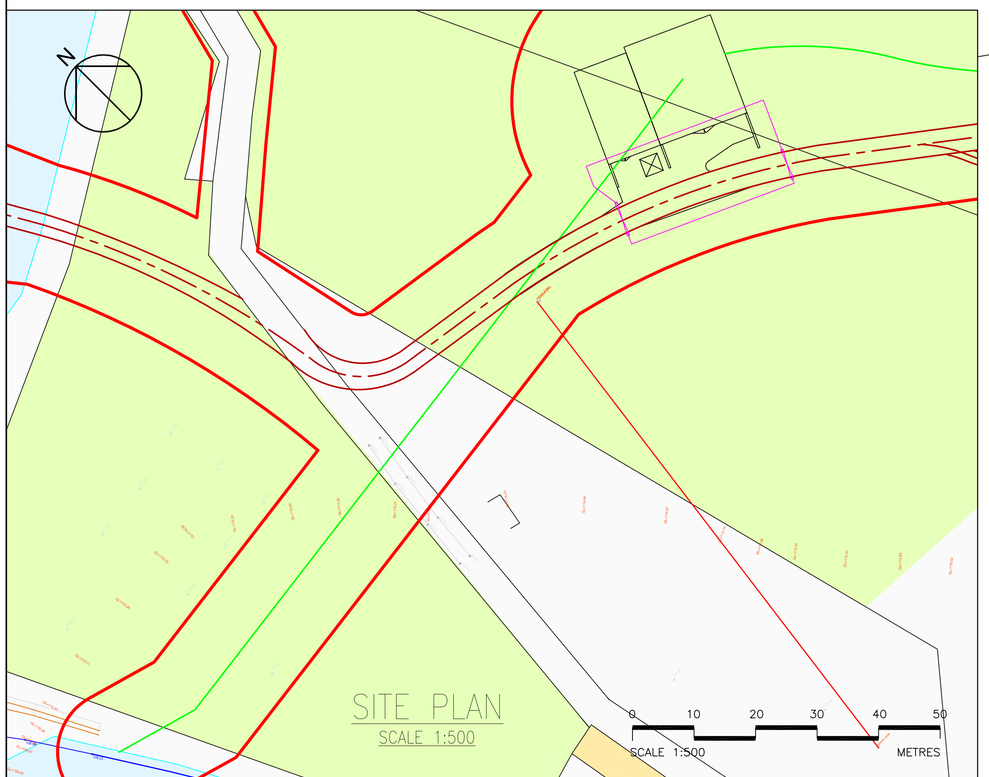
Drawing No.: C083.3 - 112 Rev0.1

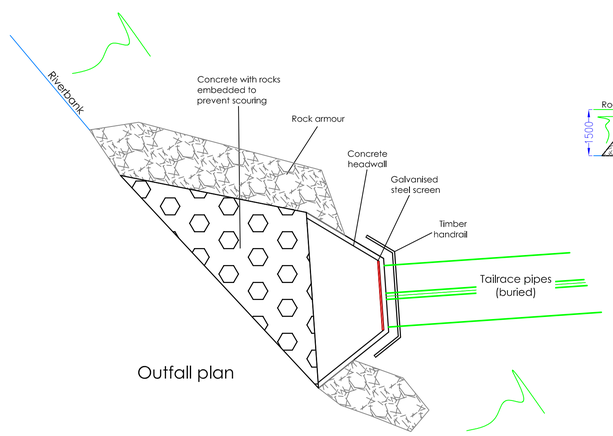


Turbine House roof plan

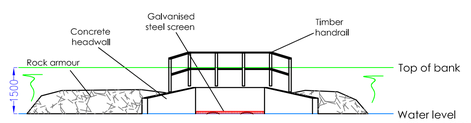


Turbine House plan





Outfall plan



Outfall - north west elevation

0 2 4 6 8 10
SCALE 1:100 METRES

Original Size A1

Notes:

Legend:

- Penstock
- New Access Track
- Land Ownership Boundary
- Planning Boundary

Rev	Description	Drawn	Chk'd	App'd.	Date
0.3	Power house relocated	JA	JH		8.11.18
0.2	Power House relocated	TC	JH		18.1.18
0.1	INITIAL ISSUE	TC	JH		

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T Copeland	T Copeland		
Date 12.12.17	Date 12.12.17	Date	Date

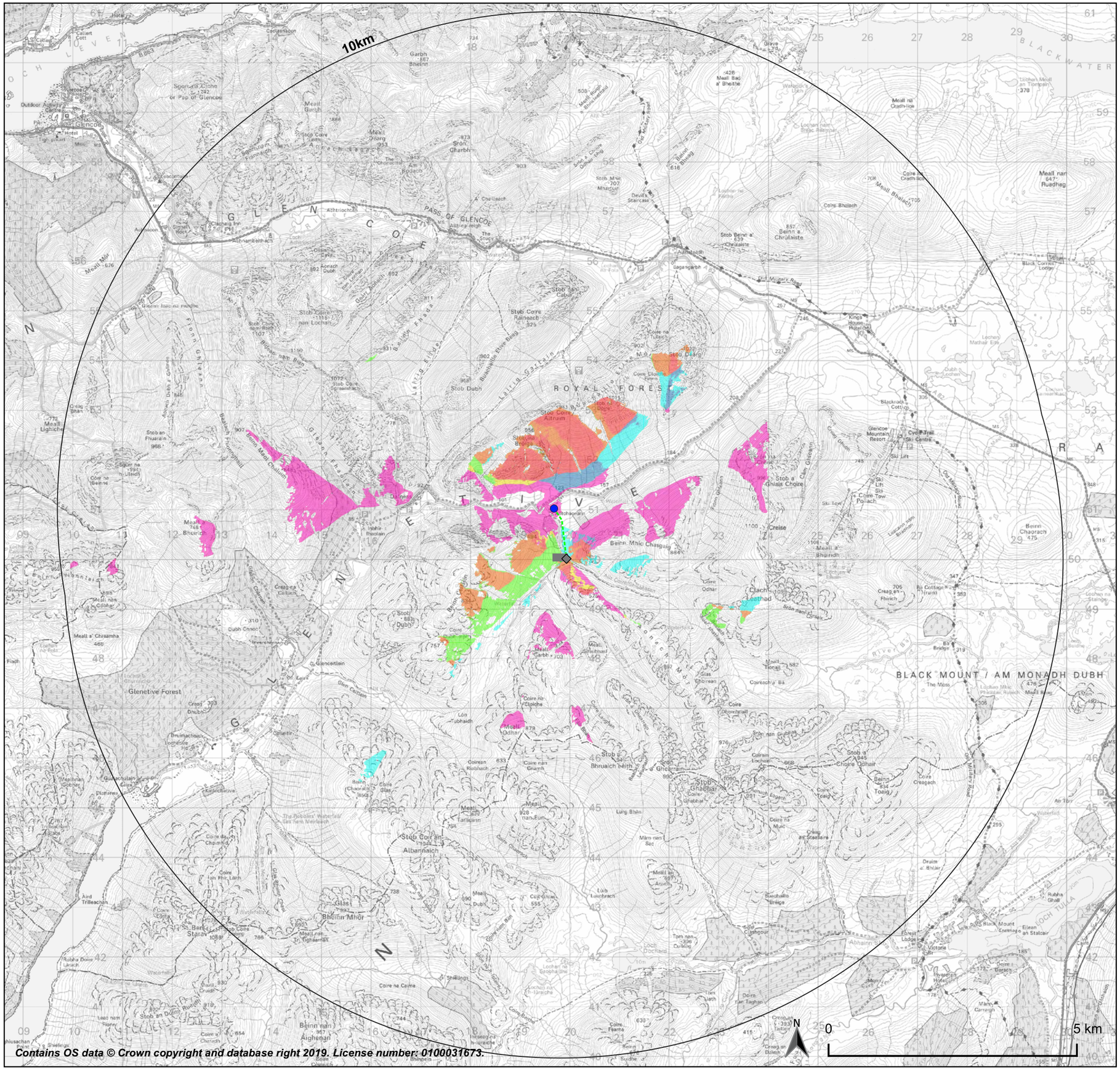
Scale: As shown
Status: Planning

Project Title: Allt Chaorainn

Drawing Title: Power House Details 2 (plans)

Drawing No. C083.3 - 113 Rev0.3

C:\Users\M4800\Dropbox (Glen Hydro)\Glen Hydro Consulting (1)\Projects\C083 Glen Etive\03 Technical Design\Civil\C083.3-100 Layouts Rev0.3



Douglas Harman CMLI
Landscape Planning

LEGEND

- 10km study area

Intake and powerhouse locations:

- Main intake
- Top-up intake
- Powerhouse
- Indicative penstock/track route (not included in ZTV)

ZTV shading:

- Powerhouse
- Main intake
- Powerhouse + Main intake
- Top-up intake
- Powerhouse + Top-up intake
- Main intake + Top-up intake
- Powerhouse + Main intake + Top-up intake

NOTE
This drawing shows the Zone of Theoretical Visibility ('ZTV') of all intakes and powerhouses.

The calculation assumes a powerhouse height of 5.0m and an intake height of 2.0m. The viewer height is 1.6m.

The calculation uses OS Terrain 5 gridded height data which has a 5.0m post spacing. The ZTV for each intake and powerhouse is restricted to a 10.0km radius of each point.

PROJECT:	GLEN ETIVE HYDRO
DRAWING TITLE:	ZTV (Allt Chaorain)
DRAWING NO:	5.5
DOCUMENT SIZE:	A3
SCALE:	1:76000
DATE:	2019-01-24
DRAWN BY:	MW
APPROVED BY:	DH