Agenda Item	6.1
Report No	PLS 031/19

HIGHLAND COUNCIL

Committee: South Planning Applications Committee

Date: 30 April 2019

Report Title: 17/01675/FUL: Corrigan Contractors Ltd

Land 3100M NW of Sallachan, Ardgour

Report By: Area Planning Manager – South

Purpose/Executive Summary

Description: Construction of a hydropower scheme (up to 600kW) to include an earth dam and reservoir, diversion intakes, tracks, powerhouse and borrow pits (Coire nam Muc)

Ward: 21 - Fort William And Ardnamurchan

Development category: Local development

Reason referred to Committee: Area Manager's discretion due to recent committee decisions on hydro applications and likelihood of the case being referred to Committee by Local Members.

All relevant matters have been taken into account when appraising this application. It is considered that the proposal does not accord with the principles and policies contained within the Development Plan and is unacceptable in terms of applicable material considerations.

Recommendation

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

1. PROPOSED DEVELOPMENT

1.1 Planning permission is sought for a hydro scheme up to 600kW, including a storage reservoir with an earth dam on the Allt Lice in Coire nam Muc, and 4 further intakes on minor burns to the east, diverting additional water into the reservoir. The 4 intakes would be linked by a pipe, discharging into a fifth watercourse that will flow into the reservoir.

1.2 The main penstock would pass under the dam and spillway, and run above the north eastern bank of the Allt Lice before crossing to follow the western bank of Allt an Tuim Uidhir, down to a powerhouse. The water would be discharged into 3 watercourses: the Allt an Tuim Uidhir, the Allt na Faing and a dry channel which leads south from the Allt na Faing into an area of bog. A number of tributaries including these burns (though not the Allt Lice) join a short distance below the powerhouse to form the Allt an t-Seana Bhaile which flows into Loch nan Gabhar at its eastern end. The Allt Lice joins with another tributary and flows into the River Gour before it flows into the top, west end of Loch nan Gabhar.

1.3 A permanent track would be constructed into the glen taken from an existing private track at Sallachan, leading to the powerhouse, and it would then mainly run over the line of the penstock up to the dam. The track would depart from the line of the penstock over the last 900m (approx.) where it would follow an elevated line to the SE side of the reservoir. The track between the powerhouse and dam would be restored down from 3m to 2m wide post construction. A further section of temporary track, approx. 300m long would lead up from the SE side of the reservoir to the outfall from the diversion intakes. No track is proposed to each of the diversion intakes – construction of these is proposed using low impact plant that does not need a track. Stream crossings along this section would nevertheless be culverted.

1.5 The scheme would take approx. 12-14 months to build, and it would have a projected working life of 100 years. It would have an energy output of around 2900MWh per year. This is equivalent to a saving in carbon dioxide production from fossil fuels of 1300 tonnes /year.

1.6 The scheme requires a CAR licence from SEPA (now issued), in addition to planning permission, and the reservoir will require to be registered under the Reservoirs (Scotland) Act 2011.

1.7 **Diversion Intakes.** One of the diversion intakes has been deleted reducing the total number from 5 to 4 (no.1 being deleted). The amended drawings for Intakes 3, 4 and 5 show a structure 2.8m across (amended dwg 2254/108A) in total, comprising a weir 1.4m across, with screens, and with concrete wing walls 600mm wide either side. Intake no.2 is slightly larger, at 3.2m wide, with a weir 1.8m wide and wing walls 675mm wide. Intakes 3, 4 and 5 would be 1.25m high, and intake 2 would be 1.4m high, as amended. The weirs would incorporate a U notch for the “Hands off flow”. A scour outlet was initially proposed for each of these intakes, but the amended plans omit this feature.

1.8 The 4 diversion intakes would be on a tributary of the Allt na Fhaing, and 3 un-named tributaries which join further downstream to become the Allt an t-Seana Bhaile. These would all ultimately flow into Loch nan Gabhar.

1.9 There would be a buried pipe 250mm in diameter connecting these 4 intakes, running 1.1km across the hillside from approx. 310m elevation to 260m asl. This pipe would discharge into a stream on the hill above the east side of the proposed reservoir, and so divert the water from these 4 watercourses into the reservoir. The outfall into the Allt Lice above the reservoir would comprise a galvanised steel outfall screen with bars, surrounded by stone facing and rock armour.

1.10 **Dam.** The dam would be 190m wide by up to 56m across at its base by 12m high. It would narrow to 4m across the top. The sides would slope at a gradient of 1 to 2.5, and it would be constructed of compacted fill, and faced with riprap on a geotextile membrane between the highest and lowest water levels. The proposed maximum and minimum water levels would be up to 4.5m apart (vertically), and the applicant has indicated that the levels would normally vary by 3m. The drawdown scar would therefore equate to 70m-80m wide at points around the reservoir, and up to 240m wide at the upper end. The downstream side of the dam would be faced in natural turves.

1.11 There would be an intake chamber 8.9m high and 3.2m in diameter built into the upstream - reservoir side of the dam. There would be a 62.13m long spillway at the eastern side of the dam. In amended drawings this feature is shown as a rock cut channel 6m wide and 1m deep, curving around to the foot of the dam to lead overflows back into the Allt Lice to the side of a double waterfall.

1.12 There would be a diversion/scour pipe with screened intake under the dam, and the penstock would also go from the reservoir under the dam via the intake chamber, and lead out from under the dam and spillway in a south-easterly direction.

1.13 **Reservoir**. The reservoir would lie in the hanging valley of Coire nam Muc and inundate an area around the Allt Lice. It would cover an area varying from 5.6Ha to 14.4Ha in size, depending on the water level. It would therefore cover an area 2½ times its size when at its maximum level, compared with its minimum. It would have a max capacity of 366,000m³.

1.14 A borrow pit is proposed at the SE side of the reservoir, partly within the proposed inundation zone.

1.15 **Penstock.** The main penstock from the reservoir to the powerhouse would be buried; it would be 560m in diameter and 1600m long. It is proposed to transport penstock pipes to intermediate points on the hillside where they can be welded into strings before being dragged into position. The earthworks, pipe laying and materials handling will be carried out by rubber tyred load handlers and up to 20T tracked excavators.

1.16 **Powerhouse**. The powerhouse would be 9.6m by 6.5m in size and 4.325m high, with a separate area for a transformer on the end, 3.6m by 4m in size. It would

include a facility to enable pigging of the pipeline to clean it. It would be built against a slope and then covered over to "underground" the structure. The front elevation would have two 3m wide double doors serving the powerhouse and transformer, respectively.

1.17 The water would be returned to 3 separate watercourses to avoid putting 10 times normal flows of water into the Allt an Tuim Uidir. Two pipes would lead from the powerhouse; one a 600mm diameter pipe with a galvanised steel outfall screen on the end, leading water onto rock armour where it would discharge into the Allt an Tuim Uidir, where flows would increase from 0.033 m^3/s to 0.049 m^3/s. A second outfall pipe would lead water into the Allt an Fhaing where flows would increase from 0.046 m^3/s to 0.07m^3/s; and here a small control structure including a fish screen is proposed to divert half of this flow into an existing dry channel where flows of 0.299m^3/s would be introduced. The dry channel currently disperses across grass into a boggy area.

1.18 There would be a temporary laydown area during construction for material storage next to the powerhouse. This would facilitate the transportation of concrete up to the dam by helicopter.

1.19 **Tracks.** The 1.25km section of track from the access to the powerhouse would be permanent. From the powerhouse to the dam a construction track 1.5km in length, by 4m wide – revised to 3m wide (March 2019) plus ditches at either side - would be constructed, later restored down to 2m wide for maintenance purposes. It would follow the line of the penstock for most of the way, from 100m north of the powerhouse, diverging from the route of the pipe approx. 400m below the dam. The track would lead up to the eastern end of the dam alongside the top of the spillway. The developer has now agreed to work with a 3m wide track from the powerhouse to the dam rather than 4m as originally proposed. This will be reduced to 2m wide post construction. The access to the powerhouse would be a permanent 3m wide track.

1.20 The route of the pipe and penstock would largely follow an existing quad bike track, which has become abraided with use.

1.21 There would be a second borrow pit between the site access and the powerhouse, on the shoulder of Creag Shallachan, NE of Loch nan Gabhar. Blasting would be required at the two borrow pits.

1.22 **Grid Connection**. A 33kV cable would be buried for 1.25km along the access route to the powerhouse. An existing overhead line passes the site access off the minor public road by Sallachan Farm.

1.23 **Access**. The site is 4.5km west of the Corran Ferry at Ardgour. It would be accessed from the A861, via a loop of minor road that crosses the river further upstream than the modern road bridge. Access would be taken from the eastern end of this loop, and then on to a private track that runs past Sallachan and through to Ardgour House and Home Farm (which are principally served from the Clovullin side).

1.24 The site access would be created off a corner of the track NW of Sallachan, and a new track would be constructed along the edge of a field at the foot of the wooded hillside, around a rocky shoulder of the hill into Glen Gour.

1.25 Pre Application Consultation: No pre-application enquiries.

1.26 Supporting Information:

April 2017: Field Survey Form, Habitat Survey, Bryophyte survey, Design Statement, Habitat Plan.

21 August 2018 (following Council determining this is EIA development): Environmental Statement & Non Technical Summary; LVIA, Photomontages, Archaeological Walkover Survey, Construction Environmental Management Plan (CEMP), Construction Method Statement (CMS), Mitigation Summary, Flow Monitoring Survey, Fish Habitat Survey, Peak Flood Flow, Habitat Survey, Habitat Plan, Impact of Development on Trees, Tree Protection Plan, Peat Survey, Bryophyte Survey,

17 January 2019: Transport Statement.

20 Feb 2019: Species Protection Plan for Adders

22 Feb 2019: revised CEMP; track and earth embankment dam construction - photos of examples of similar works elsewhere in Argyll.

10 April 2019: additional drawings and information on storage and the operational comparison of run of river and storage schemes.

1.27 Variations: Amended drawings submitted 21 August 2018.

Further amended plans submitted 20 Feb 2019 comprising site layout plans, powerhouse plan, dam site plan, reservoir site plan, habitat sketch map, track plan, dam site peat plan, reservoir habitats plan, minor intakes plan, intake details, diversion outfall plan, section plan of outfall, access track plans, section plan through dam, spillway section, section plans for diversion intakes, borrow areas, powerhouse plan, elevations and isometric drawing, typical burn crossing, pipe bridge.

13 March 2019: outflow amended (amended drawing received via SEPA) – discharge to 3 watercourses instead of one

21 March 2019: track between powerhouse and dam to be 3m wide rather than 4m wide for construction purposes.

10 April 2019: updated site plan 2254/2 Rev B, track sections 2254/205 Rev A, and operation of dam drawing 2254/114 Rev A; track to be restored to 2m wide for use by ATV and suitable for use by plant needed for sediment management; the route from the end of the track [to the top end of the reservoir] is relatively flat therefore does not require a track for machinery to access this area – required once every 2 years approx. for sediment management purposes.

2. SITE DESCRIPTION

2.1 Coire nam Muc lies above and to the north of Glen Gour and Loch nan Gabhar. The proposed site of the reservoir is a flat bottomed valley at approx. 200m

above sea level. The Allt Lice forms a meandering watercourse through this glen, before dropping over a waterfall where the land falls to the south towards the main glen. The waterfall is a significant feature; the watercourse splits around a large rock outcrop, with the western part dropping over a smooth slab, and the eastern half dropping in two steps with a pool at half height and a larger plunge pool at its foot. There are numerous streams coming down from Meall Dearg, which forms a steep rocky escarpment at 510m AOD – this is the SW flank of Sgurr na Eanchainne – the hill that rises above Ardgour. These streams flow NE – SW down this steep rocky ground and provide the diversion intakes. The steep ground continues as crags above and to the east of the proposed reservoir site.

2.2 Glen Gour is a wide marshy glen with the loch at a point where numerous watercourses meet. There is a Dùn (Torr an Duin) on the north side of the loch sitting atop a pronounced rocky knoll, which is almost an island surrounded by wetland.

2.3 The slopes above the loch and marshy area are grazed by sheep. Higher up the terrain becomes rougher with bog and rocky outcrops.

2.4 The glen narrows where the river flows out of the loch across pasture with the wooded shoulder of Creag Shallachan to the NE. There is an existing rough track into the glen on the north side of the river, and an old drove road follows through the south side of the glen.

2.5 The proposed development would be in Moidart and Ardgour Special Protection Area – a European designation, Moidart – Ardgour Wild Land Area – of National importance, and Ardgour Special Landscape Area - a regional designation. Part of the access briefly passes through an area of woodland listed on the Ancient Woodland Inventory and Native Woodland Survey of Scotland.

2.6 There is no habitation in the glen itself, the nearest residential properties being at Sallachan, close to the access off the public road. Torr an Duin is a bronze age fort, which is a Scheduled Monument, approx. 400m to the SW of the access track into the site, and there is a former settlement close to the site of the powerhouse. A ruined cottage, Tigh Ghlinnegabhar, is situated approx. 1km SW of the powerhouse site, on the old drove road through Glen Gour from Ardgour to Strontian.

3. PLANNING HISTORY

3.1 There is no relevant planning history associated with this development.

4. PUBLIC PARTICIPATION

4.1 Advertised: Oban Times and Edinburgh Gazette

Date Advertised: 04.10.18 & 05.10.18

Representation deadline: 04.11.18

Timeous 3 (2 objections, 1 neutral)

representations:

Late representations: 1(objection)

4.2 Material considerations raised are summarised as follows:

North East Mountain Trust (in time):

a) Inadequate information to allow Highland Council to make a decision
b) No Wild Land Assessment
c) Inadequate information regarding the upgrading of the track – the proposed track will follow the line of an existing ATV track and the use of helicopters to minimise the use of the track for construction is welcome, however it will be visible from Glen Gour. Details of the width of the track, its construction, storage of turves, reinstatement of the verges and the creation of a central vegetated strip should be sought
d) Inadequate information regarding the borrow pits and how material is to be sourced from along the route of the track. It is likely that the borrow pit will be required for occasional future maintenance of the track – to what extent would it be reinstated

Dr Foxley (10 May 2017 & 5 Nov 2018 - in time): neutral comments

a) Supports well designed hydro schemes
b) No archaeological survey
c) The access track should be folded into the landscape and vegetation restored to minimise its impact
d) Community benefit should be discussed with Ardgour Community Council
e) The landscape is genuinely Wild land – the landscape is of high value and sensitivity
f) The drawdown scar around the reservoir should be minimised
g) It will be viewed from the Ardgour Hills and from the mountains on the SW side of Glencoe
h) There is a well used right of way (an old drove road) from Sallachan through Glen Gour to Ariundle, Strontian
i) The topography where the penstock leaves the track near the dam is a deep gorge with exposed solid rock – the penstock is proposed to be buried – it doesn't look feasible
j) The existing ATV track has substantially increased in the past 18 months – it is imperative the track is kept to a minimum – there are too many wide raw exposed access tracks to hydro schemes
k) The proposed borrow pit site looks unviable/unacceptable
l) The impact on archaeology is massively understated in the report: the vitrified hill fort on the Torr was predated by a bronze age fort and associated with this are several bronze age cists at a funerary site, found over a century ago below Coire Liath, containing weapons, coins etc.; a bronze ago axe head was found in a cave NE of Sallachan and there was a fish trap in the bay – evidence of an extensive bronze age site
m) The original crofting settlement was adjacent to the Allt an t-Seann Bhaille and has the ruins of several buildings and extensive lazy beds. Maclean of Ardgour moved his tenants to better ground in Clovullin in the 1830s, so it would have been more extensive than shown.
n) A knowledgeable archaeologist would need to be on site throughout the

ground clearance

RSPB Scotland (10 May 2017):

Objects, due to inadequate information to allow proper assessment of the impact of the proposed development on the integrity and conservation objectives of the SPA.

The site is within the Moidart and Ardgour Special Protection Area designated for golden eagle. Golden eagles are listed under Annex 1 of the Birds Directive (2009/147/EC and Schedule 1 of the Wildlife and Countryside Act (1981). The development is within sight of a golden eagle eyrie which is occupied and the development could cause disturbance to golden eagle during and after construction. This is a particularly remote and undeveloped area and the pair holding this territory is very successful, partly because of this situation.

Mitigation must be presented in enough detail to adequately address the application before it is determined.

Mr and Mrs MacLaren (18 Feb 2019 - late rep)

a) Impact on wild land – this is the "most easily accessible wilderness country in Western Europe"
b) Glen Gour is relatively unspoilt – there are numerous other hydro schemes in this area
c) The proposed access track is too straight and not sympathetic to the lie of the land
d) Impact on their water supply – which is a private supply shared with Ardgour estate. Historically the estate has caused disruption to their supply and not allowed Ard Daraich to be connected to the mains by refusing to allow the existing pipework to be converted to mains, and the consequential price for connection with new pipework proved unaffordable.
e) Concern regarding the impact of pylons once the cable re-emerges from the ground at Sallachan – the pylons already ruin an otherwise beautiful place

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 **Ardgour Community Council**: *Since our previous correspondence* [in which no comment was made] *regarding the above planning application we have had further discussions within Ardgour Community Council and have also had a chance for further engagement with the developer. In light of this, we have reached a majority decision to support the application on the following grounds:*

We recognise the importance of hydropower developments in making a contribution towards Scotland's renewable energy targets.

The developer has strong personal, as well as business, ties to the area and we

are comfortable that the work will be undertaken to a high standard and efforts will be made to mitigate any adverse effects on the landscape. We have also been reassured by the responses from other consultees regarding the environmental impact of the scheme.

The proposed scheme will also provide employment and help ensure the sustainability of our small community.

5.2 **Historic Environment Team** is satisfied with the archaeology survey report but additionally recommend that a watching brief is carried out and that a small section to the north of Site 3 (the longhouse) is the subject of resurvey. The report notes that a number of sites will be impacted by the proposed development and makes recommendations to mitigate specific impacts. It recommends that an Archaeological Management Plan including the works listed in the report as well as the results of the resurveyed section be put in place to mitigate these impacts. A condition is recommended requiring a programme of work for the evaluation, preservation and recording of any archaeological and historic features affected by the proposed development work.

The advice received is that the watching brief should be carried out on the lower slopes of the scheme from the eastern end to NGR 197000 764250. The additional section of precautionary survey will investigate possible features visible on the satellite and aerial photographs around and to the north of the proposed powerhouse (between NGR197084 763872 and 197070 763922). If any structures are identified in that location, then recommendations to avoid them where possible, or excavate as necessary, would need to be included in the AMP and agreed with the Council's Historic Environment Team.

5.3 **Transport Planning Team** has no objection. Given that vehicular access is from the U1389 Sallachan loop road via an existing private access track, a Wear and Tear Agreement in accordance with S96 of the Roads (Scotland) Act 1984 may be required. Transport Planning advise that pre and post construction road condition surveys will need to be carried out by the developer.

5.4 **Forestry Officer**: An Arboricultural Impact Assessment (AIA) notes that mature trees are not expected to be felled, but a few young alder would need to be removed - riparian trees at some of the burn crossings. A few scattered birch at the open western end of the woodland on Creag Shallachain would need to be pruned in order to upgrade the track in this area. Mitigation is recommended for the protection of trees. No objection subject to a tree planting plan and retained trees are to be protected on site as set out in the AIA.

5.5 **Access Officer**: No response received.

5.6 **Environmental Health**: No response received.

5.7 **Lochaber District Salmon Fishery Board** has raised concerns over the scheme. It advised that the scheme would result in reduced flows in 3500m² of spawning, good/moderate juvenile salmonid habitat, of which 2723m² is accessible to migratory salmonids. The creation of a storage reservoir would result in a loss of 1380m² favourable resident trout habitat (not accessible to migratory fish) due to flooding. Below the power house increased water flows

would affect 203m² of good/moderate habitat on the Allt an Tuim Uidhir in an area noted as being very important for spawning trout in previous fish surveys. The proposed dam is close to an existing natural waterfall so there would be little additional restriction of migratory fish movement if the scheme went ahead, however sediment transport through the watercourses would be affected and could have a negative effect on existing fish habitat.

It further advised that while a fish habitat survey had been supplied, there was an absence of a current fish population baseline survey. Also there was no mention of post construction habitat and population surveys, required to assess the impact on the habitat and numbers of salmon and sea trout from this scheme.

On submission of a salmonid population survey November 2018 Lochaber District Salmon Fishery Board further advised that in the absence of salmon and sea trout juveniles at some sites should not be taken as proof that they are not present some years. Its view is that there would be very large areas of good and suitable salmon habitat affected by these proposals and the last few years have seen very poor runs of migratory fish in the whole Lochaber region – which would result in low juvenile numbers.

While the survey indicates that should the outflow be moved, compensation flows be carefully measured and delivered, and the dam was used for flushing, some of the loss of habitat and sediment transport issues could be addressed. Although Lochaber District Salmon Fishery Board believe that this may well be the case, its view is that significant impacts would still remain on the potential of the habitat within these watercourses to support their optimum amount of juvenile salmon and sea trout.

As such the initial concerns raised by Lochaber District Salmon Fishery Board remain.

[LDSFB liaised with SEPA with respect to the CAR licence which was granted end March 2019]

5.8 **Scottish Natural Heritage** initially objected to the proposal on the basis of insufficient information to assess impacts on the Moidart-Ardgour Wild Land Area or mitigation and that further survey for adders and a species protection plan required. SNH also advised that in its view the proposal is likely to have a significant effect on golden eagle of Moidart and Ardgour SPA. It advised that further information in relation to a Prey Availability Survey and updated golden eagle species protection plan would be required to asses this.

SNH advised that the inundation area is priority 2 peatland, habitat that SPP recognises as a nationally important resource. While inadequate information has been provided, and it does not agree that peat will be undisturbed in and around the impoundment area, with the drawdown scar likely to expose peat and therefore result in a loss of carbon resource, its opinion is that the overall impact on the peat resource will be limited in extent provided the mitigation and water management plan is followed exactly as described.

Further information was submitted in February 2019. This included an Adder

Species Protection Plan and mitigation proposals for the eagles prey species. SNH advice is that both submissions seem appropriate and address the earlier concerns.

Following submission of further information to address their concerns with regard to the impact on Wild Land, in February 2019, SNH advised that the assessment is now fit for purpose, and while indicating that it could still be improved that it largely agrees with the conclusions.

In its most recent response from March 2019 SNH considers that the natural heritage interests of the Moidart and Ardgour Special Protection Area will not be adversely affected by the proposal based on the further information and mitigation provided. The species protection plan outlines important mitigation. In its view SNH considers that following this closely will be crucial, especially in relation to monitoring nest usage and the timing of works. It welcomes the commitment for this to be overseen by an Ecological Clerk of Works who is experienced in raptor ecology.

It advises that the proposal will result in significant localised effects on the Wild Land Area and it provides advice on mitigation measures and restoration plans to minimise these localised impacts. Due to the localised nature of these effects SNH do not object to this proposal. However it advises that the mitigation and restoration, as outlined in the CMS and CEMP require to be completed to a high standard to ensure these effects are minimised and do not impact the wider area.

SNH highlight that while it is stated the access tracks will be restored to ATV width, the submitted information does not give dimensions. The restored tracks should be a max 2-2.5m width. SNH understands the proposed draw down scar will be a maximum of 3 (vertical) m. While it considers that at the lower end of the inundation area this is quite a small area, the upper part where the topography is flatter leaves a much larger area exposed in low water conditions. Ways to further minimise the visual impact of the draw down scar would be welcomed. It advises that this may include planting of species such as alder to help screen the scar.

The following points could be agreed post determination:

- The restoration /mitigation information should include details on how the steep surface of the dam will be vegetated and stabilised.
- We welcome the commitment to employ a Landscape Clerk of Works on this project, but clarification of their specific role including frequency of visits should be added to the CEMP.

Given the sensitivity of the site and the possibility that unexpected ground conditions may be encountered, we would be happy to be involved further during construction to advise on emerging issues.

5.9 **Scottish Environment Protection Agency** initially objected on grounds of lack of information, principally relating to pollution prevention measures, details of reinstatement and materials handling.

It advised that 4 GWDTEs will be directly affected: M17, M15, M25, and M23. Almost the entirety of the reservoir area consists of these 4 habitats. There will be 5.6ha of permanent inundation and a further 9ha in the drawdown area which is expected to be inundated for 20% of the year. The peatland and its environs would seem to fit the potentially high conservation value and restoration potential due to the significant reduction in sheep on the site from 2004. This habitat is therefore in a state of recovery.

Due to the amount of habitat loss, SEPA expects habitat compensation of an equivalent area to be provided.

Following a site visit and submission of additional information received in Jan 2019, and amended an CEMP (revision 2) and CMS (revision 2) in February 2019 SEPA withdrew its objection subject to conditions, including the need to update some plans and detail relating to surface water management contained within the CMS and provision of compensatory GWDTE habitat in the form of (W4) wet woodland, birch and alder by the Allt an t-seana Bhaile and Allt an Faing downstream of the powerhouse.

5.10 **Historic Environment Scotland**: The proposals have the potential to affect Torr an Duin – a scheduled fort adjacent to Loch nan Gabhar. Torr an Duin is a stone walled fort of later prehistoric or early medieval date situated on a rock outcrop that dominates the floor of Glen Gour at its SE end. The fort is likely to have been located here to control movement and the settlement and resources occupying the lower lying ground along the glen. Its setting on a rock outcrop overlooking the flatter glen bottom contributes strongly to its cultural significance.

The proposed scheme would include the creation of an access track and other relatively small scale infrastructure close to the bottom of slopes that form the north of Glen Gour some 300m from the monument. While this would introduce modern development into the setting of the fort, the impact of the proposal is not likely to be significant because of the nature of that development and its topographic separation from the fort.

The proposals do not raise historic environment issues of national significance.

5.11 **Scottish Water**: No objection.

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

36 - Development in the Wider Countryside

43 - Tourism

51 - Trees and Development

55 - Peat and Soils

56 - Travel

57 - Natural, Built & Cultural Heritage

58 - Protected Species

59 - Other important Species

60 - Other Importance Habitats

61 - Landscape

63 - Water Environment

64 - Flood Risk

66 - Surface Water Drainage

67 - Renewable Energy Developments

69 - Electricity Transmission Infrastructure

77 - Public Access

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

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)

Green Networks (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)

Special Landscape Area Citations (June 2011)

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.

SPP Para 154. The planning system should:

- support the transformational change to a low carbon economy, consistent with national objectives and targets, including deriving:
  - 30% of overall energy demand from renewable sources by 2020;
  - 11% of heat demand from renewable sources by 2020; and
  - the equivalent of 100% of electricity demand from renewable sources by 2020;
- 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;

Para 200. 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. Plans should identify and safeguard the character of areas of wild

land as identified on the 2014 SNH map of wild land areas.

Para 202. The siting and design of development should take account of local landscape character. Development management decisions should take account of potential effects on landscapes and the natural and water environment, including cumulative effects. Developers should seek to minimise adverse impacts through careful planning and design, considering the services that the natural environment is providing and maximising the potential for enhancement.

Para 203. Planning permission should be refused where the nature or scale of proposed development would have an unacceptable impact on the natural environment. Direct or indirect effects on statutorily protected sites will be an important consideration, but designation does not impose an automatic prohibition on development.

Para 204. Planning authorities should apply the precautionary principle where the impacts of a proposed development on nationally or internationally significant landscape or natural heritage resources are uncertain but there is sound evidence indicating that significant irreversible damage could occur. The precautionary principle should not be used to impede development without justification. If there is any likelihood that significant irreversible damage could occur, modifications to the proposal to eliminate the risk of such damage should be considered. If there is uncertainty, the potential for research, surveys or assessments to remove or reduce uncertainty should be considered.

Para 215. In areas of wild land (see SPP paragraph 200), 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 or other mitigation.

Para 216. Ancient semi-natural woodland is an irreplaceable resource and, along with other woodlands, hedgerows and individual trees, especially veteran trees of high nature conservation and landscape value, should be protected from adverse impacts resulting from development.

Para 217. Where appropriate, planning authorities should seek opportunities to create new woodland and plant native trees in association with development. If a development would result in the severing or impairment of connectivity between important woodland habitats, workable mitigation measures should be identified and implemented, preferably linked to a wider green network.

Para 218. The Scottish Government's Control of Woodland Removal Policy includes a presumption in favour of protecting woodland. Removal should only be permitted where it would achieve significant and clearly defined additional public benefits. Where woodland is removed in association with development, developers will generally be expected to provide compensatory planting. The criteria for determining the acceptability of woodland removal and further information on the implementation of the policy is explained in the Control of Woodland Removal Policy, and this should be taken into account when preparing development plans and determining planning applications.

7.3 **Scottish Government Advice**

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

Assessing Impacts on Wild Land Areas - technical guidance (SNH)

7.4 **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 electricity 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*.

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) socio-economic impacts

c) landscape and visual impact and impact on a Wild Land Area including cumulative impacts

d) impact on the water environment and flood risk

e) impact on protected species

f) impact on trees, woodland and other habitats

g) impact on historic assets including a scheduled monument

h) impact of construction access and traffic

i) impact on public access

j) impact on amenity and noise

k) impact on private water supplies

l) 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 needed 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, the Highland Renewable Energy Strategy 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 approx. 5km (just over 3 miles) west of Ardgour, on the north side of Glen Gour. There are several run of river hydro schemes in Glen Tarbert, off the A861, west of here, however this scheme would not be visible together with any of these other hydro schemes. This proposal is therefore to be considered individually. There are no cumulative implications.

8.7 Subject to the proposal having no overall significant detrimental impacts on the following matters, the proposal could 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. 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 income from this hydro scheme would be shared between the landowner and developer. It will help sustain employment on the estate and the applicant's civil engineering business. The development will require relatively low levels of input once constructed. During construction there would be short term benefits to the local economy in providing local employment, and there would be benefits in bringing in additional specialist contractors who might make use of local accommodation and supplies. No figures are provided regarding the number of jobs created or safeguarded by the development of the proposed scheme. The applicant, Corrigan Construction, are understood to employ 15 people locally.

Individuals employed by the estate and Corrigans, and their families, make a significant contribution to the local community and economy of Ardgour.

8.10 The glen is mainly used for sporting purposes - deer stalking and fishing, a small number of sheep are on the hill, and it is used by walkers as a route through to Strontian via an old drove road, and by hill goers accessing Beinn na h-Uamha – a Corbett - to the west, and Beinn Bheag and Sgorr Mhic Eacharna, to the SW, which are both "Grahams". It is difficult to predict to what extent tourism would be adversely affected as a result of this development, however it is not expected to be significant. There have been complaints received by the Council about the visual impact of tracks left post construction to several hydro schemes in Glen Tarbert, which are visible from the main road to Strontian.

Impact on Wild Land Area and Landscape and Visual Impact

Wild Land Areas

8.11 A WLA Assessment is contained within the revised LVIA. The entire site, except for the access as far as Loch nan Gabhar, is within the Moidart – Ardgour WLA. This WLA extends to 374km² in total. The proposed development would extend approx. 3km into an area that is approx. 17km across north to south at this point. It would affect the SE part of the WLA. The WLA coincides with, and is strongly influenced by several landscape designations – the Morar, Moidart and Ardnamurchan NSA, the Loch Shiel NSA, and Moidart, Morar and Glen Shiel Special Landscape Area, and the Ardgour SLA.

8.12 The key attributes and qualities of this WLA include:

- a complex range of irregular, high, steep, rugged and rocky mountains with a strong sense of naturalness
- deep, long glens that penetrate the remote interior and contain a strong sense of seclusion and sanctuary
- the dynamic nature of waterfalls and watercourses

8.13 The study area comprises the main part of Glen Gour which contains the River Gour, Loch nan Gabhar, and an historic drove road which links Ardgour to Strontian. Torr Duin - a scheduled fort lies next to the loch, and the Allt Lice is contained in a hanging, side valley, with crags lining its eastern side.

8.14 The Wild Land qualities affected comprise physical attributes and perceptual responses :

- a lack of modern artefacts, structures
- a high degree of naturalness
- remoteness, inaccessibility
- little evidence of contemporary land uses
- a rugged land form
- a sense of sanctuary, solitude
- a perception that the landscape has arresting or inspiring qualities
- a sense of risk or fulfilment from the physical challenge required to penetrate these areas

8.15 The baseline qualities list the attributes and responses which would be impacted by the proposed development in this area:

- modern artefacts – There is no evidence of human artefacts in the upper part of the site, where the reservoir is proposed. Within the main Glen, once into the WLA there are no modern houses, other buildings, overhead lines, masts or other permanent signs of human intervention. The landscape changes markedly as you go round the corner of Creag Shallachan and leave the developed coastal area, and enter the glen itself. The only recent signs of human intervention are the informal quad tracks which run up the hillside from the valley floor towards the dam site. There are no permanent modern tracks in this area. Glen Gour contains evidence of past human occupation in the remains of a settlement with ruined croft cottages and a sheep fank close to the powerhouse site; however these remain as low stone walls only and have largely assimilated into the landscape. The Dun has no significant above ground structure remaining. The ruined cottage at Tigh Ghlinnegabhar is on the drove road on the other side of the glen.
- degree of naturalness – the classic glaciated landforms of the main U shaped valley, the hanging valley and moraines provide a strong sense of naturalness. The level of sheep grazing is minimal, and has reduced in recent years; the hanging valley is rugged. The dynamic, split, double waterfall on the Allt Lice contributes to the sense of naturalness, together with the meandering river in the hanging valley, the numerous small "flashy" burns that streak the crags to the east of the proposed reservoir, and the marshy area in the floor of Glen Gour. The main glen together with the hanging valley of the Allt Lice is an inspiring, unspoilt landscape.
- The area is fairly remote from centres of population and requires effort and commitment to access, particularly the upper coire. The extensive area of wet ground around the floor of the glen, contributes to the area's inaccessibility – and the Dun's defensive siting.
- The deep, long Glen Gour penetrates the remote interior away from the public road, which hugs the coast, before crossing the hills via Glen Tarbert to Strontian. This glen has a strong sense of seclusion and sanctuary, and the upper hanging valley feels like a place apart from the main glen.

8.16 The sensitivity of the baseline qualities to the proposed development are assessed as being high in the submitted WLA. The site of the reservoir is sensitive to a man made engineered feature, and the constructed access tracks will make the place more accessible, reducing the sense of remoteness. The introduction of the powerhouse will introduce a visible, man made element. Glen Gour and Loch nan Gabhar are sensitive to intrusion by contemporary land uses. Any loss of hillside watercourses would affect landscape character.

8.17 There are few trees within the development area, and only a very small number would be lost as a result of the development, along the line of the track to the powerhouse. The sensitivity of the study area to this loss is considered to be small – given their sparsity. In any event most of the tree loss would be outwith the WLA.

8.18 The effects of the development are set out in the submitted WLA as follows:

1. “Complex of rugged mountains with strong sense of naturalness, seclusion and challenge – **Medium adverse** in the long term; the dam, reservoir, powerhouse and track introduce large new man-engineered elements to this section of the WLA. There will be a continued presence of a draw down scar (albeit intermittent) of the reservoir and long term occasional presence of vehicles for maintenance. The reservoir will be visible only to the few people that may walk at high level in this area. There are no existing formal tracks, or walks in the high ground north of Coire nam Muc. Increased access would be unwelcome due to bird protection.”

   Comment: It is considered this should be **high** rather than medium – the replacement of the meandering river by a reservoir isn’t listed as a factor that would significantly diminish the sense of naturalness. Also, the site’s remoteness and inaccessibility are physical attributes that contribute to the qualities of the WLA. Therefore the fact that few people go there is an inherent quality that significantly contributes to the character of the WLA. This should increase the effect rather than reduce it.

2. “Long, deep glens penetrating remote interior and containing a strong sense of seclusion and sanctuary – **Medium adverse** from a short section of Glen Gour track. From the most significant viewpoint, the Glen Gour track, the reservoir and dam will not be seen, and the powerhouse entrance, if discernible, is at 0.6km distance. The tracks, and certainly any vehicles using them, would be visible and detract from a sense of seclusion.”

   Comment: Again, it is considered this should be **high** rather than medium – as the sense of sanctuary and seclusion is not dependent upon the extent of views into the study area. According to SNH’s guidance, the effects should be assessed in terms of the size or scale of change, geographical extent of the area influenced, and in their duration or reversibility. The reservoir would affect a relatively large area, 14.4ha, the dam including the intake chamber would be a feature 12m high and 190m wide, the track up to the dam would be 2.75km long and 3m wide, when constructed, and require significant benching in its upper section for its construction. It is accepted that the powerhouse would be likely to have a lesser effect, because of being partially buried, however it would be in quite a prominent position in Glen Gour. The development would affect a significant area, given it is a series of linear features stretching from the access track to the reservoir and diversion intakes. The track to the dam, the dam itself and the reservoir would be permanent, irreversible features.

3. “Hillside watercourses – **Low adverse** impact. There will be no overall loss of water quality and the streams will remain as a landscape feature. Where tracks cross a stream the culvert will be wide enough to ensure natural fluctuations in flow are accommodated.”

Comment: This impact is considered to be **medium**, rather than low. The CAR licence considers the impacts on hydrology and the ecology of watercourses, however it does not take into account the impacts that changes to watercourses would have on the Wild Land attributes. CAR requirements generally mean that the middle range of flows are affected the most, whilst preserving the extremes of low flows and spate flows. Nevertheless, this scheme would divert water from 4 additional streams into the reservoir, thereby diminishing the flows from what are already small, ephemeral watercourses that flow down very steep ground from the upper slopes defining the eastern side of Coire nam Muc.

The greatest impact however would be on the Allt Lice itself. The water taken out of this watercourse would not be put back into the same burn. It would be depleted for all of its length downstream from the reservoir, and its character must therefore be affected. The compensation flow would seek to minimise the impact on migratory fish, however the depleted reach is quite extensive, 1.5km, and a waterfall which contributes to the key attributes of the WLA would be affected. This waterfall would be immediately below the dam and its proximity would reduce the natural quality of this feature. It is proposed that the spillway would direct overflows into the plunge pool of the waterfall. The spillway structure would similarly introduce a man made feature which would introduce water at an angle perpendicular to the flow of the watercourse, thereby detracting from its naturalness.
Also, the outfall from the powerhouse would be returned to 3 watercourses, rather than just the Allt an Tuim Uidhir as originally proposed, in order to address SEPA's concerns regarding fish habitat. Of the flows that would be abstracted from the Allt Lice, the amount that would be put into the Allt an Tuim Uidhir would represent a 48% increase in the flows in that burn, the amount going into the Allt na Fhaing would represent a 52% increase in flows to that burn, and the dry channel would have a 100% increase in flows (based on information in email dated 13 March from SEPA). The character of these watercourses from the point of these discharges downstream must be likely to change as a result of the significance of these flow increases. No information has been provided to show to what extent these watercourses would change in character, or how their morphology may change over time as a result of the additional flows.

8.19 The submitted WLA judges the significance of effects to be **minor**. It concludes "there will be adverse change arising from construction of a permanent man-made feature in the landscape but this is not judged to significantly affect the quality of the WL landscape experience due to:

a) Visually discreet siting of the reservoir and buried power house in relation to principal users of the area
b) Mitigation measures designed to reduce visual impact of tracks
c) Unobtrusive nature of the development during operational phase"

This conclusion is considered to be flawed for a number of reasons:

1. It focuses solely on landscape and visual impacts and doesn't acknowledge that the physical attributes and perceptual responses to WLAs are qualities which include, but are not limited to landscape and visual impacts,
2. It assumes that the proposed mitigation will reduce the effects from "medium", "medium" and "low", to result in "minor significance", without adequately identifying the mitigation measures necessary to result in this outcome,
3. The effects are considered to be understated as set out above.

8.20 The effects are considered to be **significant** for the following reasons:

1. The reservoir itself would appear obviously man made due to the uniform linear nature of the dam, the design and materials for the concrete intake chamber, the creation of a spillway, the crest of which would be concrete and the constructed access track to the dam. Whilst the facing material would mitigate the appearance of the front face of the dam, there is insufficient detail to demonstrate what vegetation would be planted and how it would be stabilised

2. Up to 4½m difference in the maximum and minimum water levels over a shallow water body would result in a significant draw down scar, especially towards the top end of the reservoir. This would expose an area up to 80m wide around much of the reservoir, and up to 240m at the top end. The LVIA assumes that vegetation would remain in this area. The excavation of the borrow pit at the SE corner of the reservoir to provide the material for the dam, will result in the loss of this section of vegetation. Although the surface of the borrow pit would be reinstated, the chances of this material recovering and becoming fully re-established when it would also be subject to periodic inundation, is questionable. It is not considered realistic to expect the natural vegetation to remain unaffected by the artificial fluctuation of the water level, which will be dictated by the management of the scheme taking into consideration the requirements of CAR superimposed on natural fluctuations as a result of the weather.
    a. The agent states that the reservoir would be drawn down during the growing season to encourage vegetation growth around the edges, and during this period the level would typically fluctuate by around 1m. During October and November the reservoir would be kept full because of the need to maintain good flow standards for fish as required by the CAR licence. The remainder of the year, Dec – April, the reservoir would fluctuate between these levels; the agent states that typically it would be 2m above the lowest level. In order to get the most out of the scheme however, the incentive would be to keep the water level drawn down as much as possible to ensure there is maximum capacity available for the reservoir to fill up in periods of wet weather. When it is full it would operate in a similar way to a run of river scheme and so the advantages of the storage capacity would be lost.
    b. On this basis, it is estimated that the drawdown area would vary between 27m – 80m wide around much of the reservoir, and

between 80m and 240m wide at the upper end. The draw down scars around most reservoirs in the area consists of a light grey mineral soil and gravel containing streaks of black eroded peat. It is anticipated that this is what would occur here, and that peat would be eroded or degraded as part of this element of the development. It was suggested (by SNH) that the edges of the reservoir could be planted with alder to mitigate the draw down scar, however this suggestion has not been investigated further. Trees would need fencing and this would in turn introduce another man made element to the landscape, reducing its naturalness. The impacts of the reservoir and dam would be irreversible and permanent.

3. Periodically sediment would need to be removed from the upstream end of the reservoir, and taken and placed into the Allt Lice below the dam. It is estimated this would need to be done every couple of years. This is a requirement of the CAR licence, necessary to maintain sediment transportation to safeguard fish spawning habitat. No details are available of the quantities involved. The applicant has stated that there is no need for a track to facilitate this, and that low ground pressure vehicles would be used between June and Sept when the reservoir was drawn down, and they would take a route above the inundation area. The anticipated impacts of this requirement have not been assessed.

4. The retention of a permanent constructed track to the dam, even if restored down to 2m, would significantly reduce the sense of naturalness, it would introduce another man made artefact, and it would reduce the sense of seclusion due to the increased accessibility of the upper valley. The existing argo tracks have multiplied recently and their rationalisation with one constructed track would mitigate their impact, however if there was no reservoir it is anticipated that the visual impact and scarring created by the existing tracks would diminish quite quickly. The existing visible argo tracks are understood to be largely generated during the stalking season, and they reinstate over the following growing season.

5. The proposed development largely matches that given in example 1b of SNH's technical guidance on assessing impacts on Wild Land Areas. This contains the following conclusions: The development would introduce human features into an area where these are currently not apparent. The impoundment will introduce a contemporary land use indicated by the fluctuating water levels which will result in a draw down scar. The water flow from the existing burn will be altered to the degree that in some periods, the flow will be substantially reduced, including over the waterfall. This will affect the perception of naturalness. This impact will be on a part of the WLA which is not currently influenced by contemporary land use and has high naturalness. The site of the proposed impoundment is some distance from and does not have visibility of other hydro lochs in the WLA. **In conclusion therefore, the effect on the WLA would be significant.** The area is of high naturalness and remoteness. It is not affected by contemporary land

uses. The proposed development will affect these attributes, with the access track, dam and the draw down scar resulting in a significant adverse and long term impact on these qualities of this WLA.

6. The proposed mitigation by partly burying the powerhouse, and tree planting around it, would substantially reduce its visual impact, although its central location in the glen together with the track past it, would tend to draw attention to its siting in any event, and thereby contribute to a reduction in the sense of naturalness.

8.21 The development by itself may not affect a significant proportion of this extensive WLA due to the fact that it is well contained within this part of Glen Gour and Coire nam Muc, and therefore it may not significantly affect the WLA's integrity at a national level. For this reason SNH have not objected. However, given the development would have a significant effect on the attributes of the WLA, and would directly impact a significant area within the SE part of this WLA, it is considered this would have an unacceptable impact on the WLA at a local and regional level. These areas are of value in contributing to the unique identity of the Highlands. The development would therefore be contrary to Policies 57 and 67 of the Highland wide Local Development Plan and paras 200 and 215 of SPP.

Landscape Impact

8.22 The site is entirely within the Ardgour Special Landscape Area. This SLA measures 247km² (2467ha). The area has a sense of detachment, whilst being part of the mainland. In the interior are parallel east-west trending glens notable for their open space and natural routeways through the mountains.

8.23 Key Landscape and visual characteristics include:

- Rough mountainous interior with few roads and sparse settlement
- Deep west-east orientated glens with a strong feeling of enclosure and perspective
- Gentle low lying marshy platforms in stark contrast to the muted colours of the mountains
- Complex rugged landform with a high proportion of exposed rock
- Numerous scattered shielings, abandoned buildings, farmsteads, and the occasional township, and a number of prehistoric settlement remains
- Views to peaks and ridges from the lower ground are complemented by extensive panoramas from higher elevations and summits.

8.24 This landscape is sensitive to the development of any structures, linear features, or significant new land use in the remote interior which would affect the sense of wildness.

8.25 The Landscape Character Type as defined in the Lochaber Landscape Character Assessment is "Rugged massif" (not The Great Glen, as stated in the LVIA). This is characterised by a crinkled skyline, rocky outcrops, an ice scoured terrain, often in remote, unsettled and inaccessible locations which accentuates the wild character of these areas. This is a complicated landscape

type and often a transitional landscape between lower smoother hills and higher, mountainous peaks. It is a glaciated landscape littered with erratics and other glacial debris. Whilst pressures for change are generally low due to the rugged terrain and its inaccessibility, its sensitivity to change is high. Specific guidance in the LCA is mainly aimed at land management; woodland management and grazing regimes. Where upgrading of infrastructure is proposed it should be simply designed and sited within the wooded foothills; urbanising elements should be avoided as far as possible.

8.26 The development would be contained within a glen that drains to the SE, the River Gour flowing into the sea a very short distance beyond the access. The lowland coastal strip and area around the site access is pastoral and settled with infrastructure, however this changes rapidly on the approach into Glen Gour which is a landscape with a high degree of naturalness. The grazing intensity and influence of sheep on the landscape has reduced considerably in recent years. There are no cattle now in Glen Gour.

8.27 There is extensive woodland above Ardgour House and in its immediate grounds, and on the south side of Glen Gour. There is scrubby woodland either side of the existing track leading into Glen Gour, and sparse strips of riparian woodland along the stream corridors. However the south facing slopes of the glen are largely devoid of trees.

8.28 The landscape sensitivity derives from the physical condition of the site, its value, and predicted trends and the nature of the proposals:

- The proposals predominantly lie in a natural landscape which is minimally influenced by past and present land management. Its condition is unlikely to change significantly
- The various designations highlight its value for geomorphological splendour and unspoilt remote character. It is therefore highly valued
- The landscape close to the access is not sensitive to the creation of a new and upgraded section of track
- The rest of the recipient landscape is highly sensitive to the proposed changes.

8.29 The main effects of the development would be from the changes to the topography of Coire nam Muc through the creation of a reservoir and dam, changes to the water regime, the engineering necessary to install the diversion intakes and pipe, the part buried powerhouse, borrow pits, penstock and cables, and the tracks.

8.30 The LVIA concludes that, taking into consideration the proposed restoration and mitigation, the significance of the proposal on the landscape is medium negative. The impact derives principally from the dam and reservoir and in the context of the wide scale extensive landscape it concludes that the significance would be reduced to low negative.

8.31 This conclusion is challenged because it is considered that the landscape impact of the draw down scar has not been adequately considered, nor has the impact on the waterfall. Also, the impact of the track past the powerhouse to the dam is

understated, given the amount of benching required for a 3m wide construction track, and the fact that it would be on the slope opposite, and facing, the drove road. The impact of the intake tower and the spillway crest are also not considered even though these will present as concrete structures in the elevated mouth of the hanging valley. The engineering work necessary to install the pipeline linking the diversion intakes would also result in a pronounced horizontal feature discordant with the flow of the landscape. These features will be permanent**. It is therefore considered the significance of the proposal on the landscape should be medium negative at least.** The developments would detract from the Special Landscape Area in these respects.

Visual Impact

8.32 The 10km ZTV in the submitted LVIA shows that the scheme would theoretically be visible from:

- Sgurr a Chaorainn - +6km to the west - a twin peaked "Corbett" with Beinn na h-Uamha; the LVIA states that at this distance the scale of development would be insignificant, the man made features at Sallachan would be visible in any case, and the new section of track will be concealed by mixed woodland. It is not accepted that the track would be screened by trees – there are none existing and none proposed to be planted along this part of the scheme. Parts of the track from the powerhouse to the dam would be visible, and would detract from the landscape to a greater or lesser extent depending on the quality of its construction and its restoring down to 2m wide with soil spread over the top to encourage vegetation growth
- Beinn na h-Uamha – 4.5km west of the site - as above
- Beinn Bheag – 5km SW of the site – a "Graham" – potential inter-visibility with the powerhouse and entrance areas. The LVIA concludes that because the powerhouse would be partly buried at this distance any visual intrusion would be insignificant. The LVIA fails to mention the track which must also be visible if the powerhouse falls within the zone of visibility. The track would be more conspicuous when viewed from this angle because the view would be direct along most of its length.
- Sgurr MhicEacharna – 4.5km SW of the site – as Beinn Bheag above
- Beinn a'Bheither – the 2 Munros south of Ballachulish - +10km - distant views – the LVIA states that at this distance any impact would be negligible
- parts of Onich – distant views of the site entrance only where there are existing man made features already – not significant

8.33 In addition 7 viewpoints - sensitive visual receptors - were considered:

- Kentallen pier – no significant visual impact due to the distance – 8.5km
- The ruined cottage at Tigh Ghlinneagabhar – wide views across the glen interrupted by a shallow ridge extending to the Torr, and trees. No discernible change;
- The Glen Gour track – the LVIA considers the borrow pit and section of track to powerhouse will be visible; the significance is stated to be low negative; this conclusion is challenged as the main focus of attention

would be Loch nan Gabhar and Torr an Dùn, and this idyllic panorama would have the track introduced as a backdrop to this view. Whilst the Torr itself would screen some of the development, elements would appear with progress along the track. The works to install the diversion penstock would also be visible as a horizontal feature cutting across the steep slope in an elevated situation above the track.

- Property at Sallachan – view of the access and new section of track from upper storey; this is within an area of existing man made features
- 2 properties at Cona Mheal (by Sallachan) – these properties aspects mean they would not view the development
- The old bridge at Sallachan (which is Listed) – access track visible – small negative change as there is an existing track visible for much of this section and there is screening from trees
- Torr an Duin fort – significantly views from here were not assessed due to difficulties of access

8.34 The views from a 1.2km section of the Glen Gour track are considered the most significant. From here the route of the diversion penstock, the power house, borrow pit and upgraded track would be visible intermittently. The LVIA concludes the siting of the proposal, inaccessibility of the area and mitigation measures will result in visual impacts of **low significance**.

8.35 It is considered that the visual impact of parts of the development in views from the Glen Gour track, and from the route between the two Grahams, Sgorr Mhic Eacharna and Beinn Bheag would have at least **medium significance**, given the extremely high quality panoramas from these viewpoints. The fairly straight track leading past Torr Duin and up the south facing slopes to Coire nam Muc in particular would be likely to be prominent.

8.36 Restoration is set out in the CEMP, which would mitigate landscape and visual impacts: turves and the upper and lower layers of vegetated peat to be stripped and stored for reuse from a near as possible to their original location. The pattern of the finish to replicate the existing as far as possible, and ripping to a depth of 400mm-500mm to break up compaction; peg down turf on steep slopes, and sub grade may need benching to reduce the tendency of top peat to slip down slope. It is intended to re-use materials from within the site, however if turf supply is limited, it should be placed in an irregular chequer board pattern with gaps between into which the native heather and other plants can spread. A thin layer of soil will be spread on the running surface of the track to encourage revegetation.

8.37 There are no other hydro schemes within sight of the proposed scheme. Therefore there are no cumulative landscape or visual impacts.

<u>Impact on the water environment</u>

8.38 The reservoir itself would be designed to accommodate a 1 in 10,000 year flood without overtopping. Whilst it would look more like a natural lochan when full, the whole purpose of such a reservoir is to provide a constant, consistent water supply, and therefore the schemes efficiency is maximised by drawing the level down for as long as is necessary to maintain its productivity. This will result in a

water level that is constantly fluctuating, and it is difficult to see how the vegetation around the edges would withstand this degree of constant change.

8.39 The Allt Lice and Allt an Tuim Uidhir are good habitat for migratory salmonids and for trout. The abstraction of water from one and its return to other watercourses presents significant issues for the maintenance of the quality of this habitat. The CAR licence has imposed onerous requirements to maintain good flow standards in the Allt Lice during October and November to minimise impacts on migratory salmon, and the outflow to the Allt an Tuim Uidhir has been split to reduce the additional flow going into that burn and share it with the Allt an Fhaing and a dry channel in order not to overwhelm the Allt an Tuim Uidhir, to the detriment of spawning fish.

8.40 These requirements only became apparent in March 2019, and there is no information on the likely effects of these changes to the morphology of these streams. In particular the dry channel at present disperses into a boggy area. With a constant flow now proposed, the dry channel is likely to be enlarged, possibly migrate, and it is likely that the boggy area will be unable to absorb this extra water, and will change and possibly form a new channel leading into another tributary; it is possible that a pool will form in the boggy area.

8.41 The CAR licence also requires sediment to be artificially transported from the upper end of the reservoir into the Allt Lice to mimic the natural migration of gravels to maintain good fish habitat.

8.42 The development, in particular the track, will incorporate bottomless culverts as required by SEPA to minimise the impact on water crossings

8.43 The impact of the abstraction on the amount of water flowing over the waterfall below the dam is uncertain. Medium level flows particularly are likely to be significantly affected as a result of CAR controls to the hydrology. The construction of the spillway leading overflows back to the Allt Lice into the side of the waterfall would also detract from its natural qualities. This is discussed further in the Wild Land section above.

<u>Protected Species and Moidart and Ardgour Special Protection Area</u>

8.44 The site is entirely within Moidart and Ardgour SPA, designated for its breeding population of golden eagles. These are Annex 1 species, of European importance. The area supports 11 active territories (in 2003) – more than 2.4% of the GB population. The site is close to the core of one breeding pair's territory and adjacent to the core territory of a second breeding pair.

8.45 The pair would be prone to disturbance at this distance. A Species Protection Plan has been submitted and this sets out mitigation including the following. The timing of construction of the dam, the access track from the powerhouse to the dam, and the upper borrow pit would be restricted to avoid the period from the end January to July, or until a breeding attempt failed. Blasting and the use of helicopters would also be time limited. Work should proceed from the access up to the dam and diversion intakes so the birds would become accustomed to the activity. The work would be overseen by an ECoW.

8.46 A prey availability survey was also undertaken as requested by SNH. This states that the land take of the reservoir accounts for 2% of the three higher use habitat classes predicted to be used by the resident golden eagles. The report concludes "on balance the proposal would meet the requirements of the two aspects of the Appropriate Assessment tests relevant to the reservoir habitat loss:

- Distribution and extent of habitats supporting the species
  No adverse impacts on habitats favoured by golden eagles in terms of foraging, roosting and breeding
- Structure, function and supporting processes of habitats supporting the species
  No adverse impacts on habitats and associated prey populations favoured by golden eagles

Whilst it is likely that the development would temporarily reduce the use of the area by 1 or 2 pairs of golden eagle, there is a low probability of any lasting impact. The impacts on the SPA golden eagle population would be very low in scale and not significant.

8.47 The proposal is likely to have a significant effect on breeding golden eagle. The Council is therefore required to carry out an Appropriate Assessment. The proposal, based on the further information provided by the applicant, and the appraisal carried out to date, will not adversely affect the integrity of the site.

8.48 The species protection plan submitted by the applicant outlines important mitigation to ensure there is no adverse effect on site integrity. Following this closely will be crucial, especially in relation to monitoring nest usage and the timing of works. This must be overseen by an Ecological Clerk of Works who is experienced in raptor ecology.

8.49 A Reptile and amphibian survey was undertaken, and adders, viviparous lizard and frogs were found to be abundant throughout the site. Adders, slow worms and viviparous lizards are all protected under the Wildlife and Countryside Act 1981, as modified by the Nature Conservation (Scotland) Act 2004. Mitigation must be adopted to minimise the risk of damage to these species.

8.50 A Species Protection Plan has been submitted for adder. Further survey work and the siting of refugia are proposed, together with measures to ensure no adders are harmed during construction. This may be secured by condition should permission be forthcoming.

8.51 Other protected species:

- Pine marten – droppings on rocks below the proposed dam location, on a rock outcrop on the existing track through Creag Shallachan, and upslope from the proposed pipe bridge location
- Otter – spraints and a couch in Coire nam Muc; potential otter shelters amongst boulders above the proposed level of the reservoir
- Badger – evidence of digging in the field west of Sallachan and in the marshy flats near Loch nan Gabhar near the existing track

- No evidence of water voles or wildcat

Mitigation, including pre-construction surveys, is proposed in the Mammal survey and CEMP and this may be secured by condition if permission were to be forthcoming. An Ecological Clerk of works would be present to ensure mitigation including pollution control and soil management measures are effective and species protection measures are carried out.

8.52 Bryophytes: Mostly species poor, however 16 restricted oceanic (Atlantic) species and one Scottish endemic. No specially protected, Red List or Nationally Rare species were recorded, but 5 Nationally Scarce mosses were found. The site has a score of 3 points, placing it into category C. With a score <6 points the site is of low to medium bryological importance and the development is unlikely to have a significant national/international impact. However the assemblages may be of local importance, the watercourse may be important for other groups such as invertebrates, the ecological acceptability of a proposal might be reduced if many other watercourses in the local area already have hydro electric schemes – i.e. few unmodified watercourses are left in the area concerned.

8.52 Using the guidelines for the selection of SSSIs the Allt Lice and Choire nam Muc scores 340 – exceeding the 300 point "threshold" suggested for notification. This is largely due to the presence of five Nationally Scarce species, none of which is particularly rare or threatened in the western Scottish Highlands. Of these 5, only 1 has been identified as a key plant of ravines likely to be affected by water abstraction. A second could possibly be affected and a third at the dam site would disappear if the reservoir went ahead. If the proposal goes ahead, mitigation is recommended; large rock exposures and boulders should not be disturbed if possible, and the pipeline corridor and disturbance from access tracks should be minimised as much as possible.

Trees, woodlands and other habitats

8.53 There would be a small number of trees lost as a result of the proposal, comprising scrubby birch adjacent to the track on the shoulder of Craig Shallachan, and two or three alder trees where the track and penstock would cross watercourses.

8.54 It is proposed to provide compensatory planting comprising an area of wet woodland around the powerhouse, involving planting or translocating at least 25 birch saplings and around 100 alder bushes or saplings along appropriate stretches of the banks of the Allt an t-Seana Bhaile and the Allt an Fhaing, downstream of the powerhouse area. This would compensate for some of the areas of GWDTEs affected, and assist in screening the powerhouse. This may be secured by condition were permission to be forthcoming. A section of track close to the dam would be floated to minimise impacts on GWDTEs.

8.55 The area to be inundated by the reservoir is predominantly peat and SNH initially had concerns about the extent of this loss. Further survey work demonstrated the depth of peat was not as significant as initially thought. An area within the inundation zone is identified for the disposal of catotelmic peat, in

order that it remains saturated and therefore its function as a carbon store is not lost.

8.56 The handling of turves and soils would be facilitated by the use of 360° tilt rotating units fitted to each machine which allow turves to be excavated neatly, stored vegetation side up and maintained well enough to re-use when reinstating. The re-instatement works document proposes reinstatement to be worked from the intake back towards the access point, to ensure the re-instated areas are not disturbed by any further construction works. Given the Species Protection Plan for the golden eagles directs that works progress from the access up, to allow the birds to become familiar with the construction activity – this is at least partly contradictory, leading to uncertainty about the sequence of construction works, which would normally involve working and the restoration of short sections at a time to minimise the amount of excavated ground exposed at any time.

Historic Assets

8.57 The Scheduled Monument of Torr an Duin is a stone walled fort of late prehistoric or early medieval date situated on a rocky outcrop that dominates the floor of Glen Gour. It would be approx. 300m from the proposed access track to the powerhouse. The Duin's position is strategic and its occupants would have controlled movement along this glen. Its setting on a rock contributes strongly to its cultural significance.

8.58 The introduction of the track and other relatively small scale infrastructure would not be likely to have a significant impact on the setting of the fort because of the nature of the development and its topographic separation from the fort.

8.59 The contribution that the fort makes to the Landscape and Wild Land attributes is not assessed at all in the LVIA however. Whilst the impact on the setting of the scheduled monument is not considered significant, its contribution to the quality of the landscape and the response of visitors in their experience of the glen is.

8.60 The proposed powerhouse is just north of the remains of a mid 18th century farming settlement, which is possibly on the site of an earlier post medieval settlement. There are the remains of buildings, enclosures and lazy beds. To the NW of the powerhouse site is a longhouse and enclosure dating from the 19th Century.

8.61 Mitigation is required including the fencing of a 10m buffer from features of interest, and for an archaeologist to have a watching brief over this part of the site. This could be secured by condition if permission were to be forthcoming. The impact of compensatory tree planting over this area has not been considered however. Nor has the potential impact of changes to the outflow from the powerhouse, which may significantly affect the morphologies of the Allt an Fhaing, and the dry channel which are in this area of archaeological interest.

8.62 There is some evidence of cultivation in Coire nam Muc, however there is no evidence of buildings in this area, nor in the vicinity of the diversion intakes. No

further archaeological work is necessary in these areas.

Construction and traffic

8.63 Construction traffic would comprise:

- 6no 18T flat bed trucks over 5 weeks (1 per week)
- 12no 20T articulated lorries with pipes etc over 2 weeks (6 per week)
- 12no 25T concrete and materials trucks (1 per week)
- 4no 18T flat bed trucks with plant (2 per week)
- 150 vans and small trucks over 15 weeks (10 per week)
- 100 personnel vehicles over 10 weeks (10 per week)

8.64 Access would be off the private track by Sallachan, which has recently been upgraded to accommodate timber extraction. This track is already used by larger vehicles to access the applicant's premises. An alternative route to the contractor's facility via Clovullin would not be used for this project.

8.65 The proposed construction traffic would not be significant in relation to normal traffic flows on the A861. The junction of the U1389 with the A861 has been used by timber lorries and it is acceptable for the proposed construction traffic.

8.66 The delivery of pipes and concrete will have the most significant traffic impact. These will have escort vehicles where appropriate. Heavy earth moving excavators and other plant will not require to be transported to site on low loaders.

8.67 A Wear and Tear Agreement is sought by Transport Planning. This is likely to be secured under S96 of the Roads (Scotland) Act.

8.68 Post construction traffic will comprise visits to the powerhouse once or twice a week, and visits to the dam once or twice a month.

8.69 Construction would involve blasting at the two borrow pits, and the movement of material within the site. It is not anticipated any material would need to be imported or taken off site. Concrete would be delivered to the laydown area near the powerhouse and helicoptered up the hill to the reservoir site.

8.70 The penstock pipes would be taken by vehicle up the hill in strings and joined in 200m lengths. It would be buried with a minimum of 500mm cover. No pipe vents would be necessary. There would be a pipe bridge across the Allt Tuim an Uidhir immediately upstream of the powerhouse.

8.71 The CMS sets out mitigation and good practice with regard to the management of peat, soils and turves, surface water management, water crossings and drainage, pollution prevention and silt management.

Public Access

8.72 Care will be necessary during construction to ensure the minor public road and private track leading to the entrance to the site remains open and unobstructed to the public and local residents. It is recommended that the applicant notifies

the small number of residents at Sallachan of significant vehicle movements into and out of the site out of courtesy.

8.73 The site itself would not affect any specific routes or core paths, and it does not provide a route to or from any popular hills. Access to the Corbett and Grahams is via the old drove road. The old drove road on the other side of the glen would not be affected, other than the opportunity to park cars on the loop road at Sallachan may be reduced if this area is used by construction vehicles and machinery awaiting entry onto or removal from the site. The proximity of the applicant's own compound should mean this is unlikely to happen. No Access Management Plan to safeguard the interests of walkers and any other outdoor activities is considered necessary.

Amenity and noise

8.74 The access point into the site is approx. 100m from the nearest residential properties at Sallachan. The nearest borrow pit would be approx. 600m from these properties, and the powerhouse 1.3km away.

8.75 The existing private track that serves Sallachan has already been used for timber extraction and the construction machinery will be unlikely to cause any more disturbance than this type of traffic. It would be for a limited period and such disturbance is an inevitable consequence of development and is short lived. It is recommended that if permission were to be granted, that arrangements are put in place to ensure frequent and regular communication between the developer and the occupants at Sallachan to keep them informed of the timing of deliveries, and of measures to minimise noise and disturbance from vehicles, such as not leaving engines idling if they are waiting near the access for any reason.

8.76 The grid connection close to the site entrance would involve joining the power cable from the development, which would be underground from the powerhouse to the site entrance, into the existing overhead line. No additional above ground infrastructure is proposed at this point.

8.77 The borrow pit would be around the corner of the shoulder of Craig Shallachan, nevertheless, again, it is recommended that there is regular communication with local residents to alert them of the timing of blasting.

8.78 The powerhouse is a sufficient distance such that operational noise from the turbine and outfall would not be audible from Sallachan. A condition to ensure operational noise limits are acceptable would not be necessary..

Private water supplies

8.79 The water supply to Sallachan is private. It does not come from any of the affected watercourses. However, the pipe serving the property has been damaged in the past by construction works or vehicles using the track through to Ardgour House and Home farm. It is the responsibility of the developer to ensure any existing services to others along this part of the access are safeguarded during construction. This is a civil matter and not one that need to

be resolved through the planning process.

Other material considerations

8.80 The quality of some of the submitted documents falls short of that expected for proposed EIA development. In particular the visual information supporting the LVIA is lacking in the number of viewpoints illustrated, and the quality of the pictures makes it difficult to properly assess this information.

8.81 The CAR licence was applied for from SEPA in late 2018, well after the submission of this planning application in 2017. This resulted in changes to the development within the last month, and there is no proper assessment of their significance, given the documents supporting the planning application were submitted before these changes were made.

Non-material considerations

8.82 The issue of community benefit is not a material planning consideration.

8.83 The submission of a significant amount of additional information and revised plans at the end of February 2019, made it challenging to properly consider the revised proposals in order to deliver a decision by the end of March 2019, as sought by the applicant to meet the government's deadline for the Feed in Tariff.

9. CONCLUSION

9.1 The development would introduce a significant man made feature into the Moidart-Ardgour Wild Land Area, which is of high naturalness, and little affected by contemporary land uses. The reservoir would fluctuate in level and as a result it would cover between 5.6ha and 14.4ha, and the margin around its edge would be likely to appear as an unnatural draw down scar between 70m – 240m wide.

9.2 The dam, intake chamber and spillway would also introduce significant man made features by virtue of the linear character of the dam crest, the utilitarian design and concrete used for the intake chamber, and the concrete elements at the crest of the spillway.

9.3 The permanent track, in particular from the edge of the Wild Land Area on the shoulder of Creag Shallachan to the powerhouse and up to the dam would introduce a uniform, constructed track onto a slope which would detract from the sense of sanctuary in Glen Gour. This side of the glen forms a backdrop to the scheduled fort at Torr Duin in views from the drove road, and contributes to the inspiring qualities of the glen. The track would also reduce the sense of remoteness and solitude in the wider glen, and the sense of sanctuary in Coire nam Muc in particular.

9.4 The flows to the Allt Lice, Allt an Tuim Uidhir and the Allt an Fhaing would also be significantly altered, to the detriment of the waterfall below the proposed dam, which is an arresting feature. Also the flows in the Allt an Tuim Uidhir and the Allt an Fhaing would change as a result of the revised outfall plans, and the impact on the morphology of these streams and the effects on the landscape

below the powerhouse are not known.

9.5 At 650kW the proposal would make a positive contribution to national targets for renewable energy. However, it is considered that this contribution would not outweigh the significant adverse impact the proposal would have on the qualities of the Wild Land Area. The scheme would provide work for a local business, and provide income to a local estate. However these positive contributions that the project would bring to the local economy do not override the unacceptable impacts of the proposed development on the WLA.

9.6 Whilst the features of hydro electric schemes generally sit in the landscape rather than introduce tall vertical structures that are seen in more distant views, as would be the case with wind farms, the features of this scheme are locally significant in scale, they are permanent and irreversible, and in this instance the mitigation proposed would not sufficiently reduce the impacts to an acceptable level. The proposed development would thereby have a significant local and regional impact on this part of the Wild Land Area, contrary to Policies 57 and 67 of the Highland wide Local Development Plan and paras 200 and 215 of SPP.

9.7 All relevant matters have been taken into account when appraising this application. It is considered that the proposal does not accord with the principles and policies contained within the Development Plan and is unacceptable in terms of 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 **REFUSED** for the following reasons:

1. The development would have a significant impact on Wild Land Area 13 Moidart – Ardgour by virtue of introducing man made features into an area where these are currently not apparent and eroding the area's remoteness and sense of seclusion. The features of this scheme are locally significant in scale, they are permanent and irreversible, and in this instance the mitigation proposed would not sufficiently reduce the impacts to an acceptable level. The proposed development would therefore have a significant local and regional impact on this part of the Wild Land Area, contrary to policies 57 and 67 of the Highland wide Local Development Plan and paras 200 and 215 of Scottish Planning Policy.

Signature: David Mudie

Designation: Area Planning Manager – South/Major Developments

Author: Lucy Prins

Background Papers: Documents referred to in report and in case file.

Relevant Plans:

Plan & Drawing no.	description	date submitted
Plan 1 2254-1 Rev.B	Location Plan	20 Feb 2019
Plan 2 2254-2 Rev.B	Site Plan	10 April 2019
Plan 3 2254-3 Rev.C	Powerhouse Plan	13 Mar 2019
Plan 4 2254-4 Rev.C	Dam Site Plan	20 Feb 2019
Plan 5 2254-5 Rev.A	Grid Connection Plan	21 August 2018
Plan 6 2254-6 Rev.B	Reservoir Site Plan	20 Feb 2019
Plan 7 2254-9	General Penstock Plan	21 August 2018
Plan 8 2254-12 Rev.A	Track Plan	20 Feb 2019
Plan 9 2254-15	Minor Intakes Plan	20 Feb 2019
Plan 10 2254-21	Diversion outfall plan	20 Feb 2019
Plan 11 2254-22	Site Section Plan Diversion outfall plan	20 Feb 2019
Plan 12 2254-23	Access Layout Plan – site access plan	17 Jan 2019
Plan 13 2254-114 Rev A	Operation of dam	10 April 2019
Plan 14 2254-115	Section Plan – Borrow Area Sections	20 Feb 2019
Plan 15 2254-116	Section Plan – Borrow Area Sections after completion	20 Feb 2019
Plan 16 2254-200 Rev.C	- Powerhouse Elevations	20 Feb 2019
Plan 17 2254-205 Rev A	Section Plan – Track sections	10 April 2019
Plan 18 2254-205	Visual information Powerhouse isometric	20 Feb 2019

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 entirely within the Moidart and Ardgour Special Protection Area (SPA). This SPA is classified for its golden eagles.

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 which the 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 Coire nam Muc scheme could affect two golden eagle ranges. Both ranges have nests within 1km of the proposals. However, provided the mitigation measures in the Coire nam Muc Golden Eagle Mitigation and Species 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 Moidart and Ardgour SPA.

reservoir area showing
max and min inundation areas

intake Dam NM 9624 6513

outfall

proposed buried penstock
leaves access track

proposed buried pipeline
under access track

intake 5

intake 4

intake 3

intake 2

intake 1

ALL SURROUNDING LANDS OWNED BY
ARDGOUR ESTATE

powerhouse &
grid connection
NM 9706 6385

access track

borrow pit
for road material

0 500 1000 1500 2000
Metres

Coire nam Muc
Allt Coire nam Muc
Dearg Choire nam Muc
Druim na Sgriodain
Lochain Druim na Sgriodain
Lochan a' Choire Dhuibh
Sgurr na h-Eanchainne
Coire Dubh Beag
Carn a' Choire Dhuibh
Allt na Diollaid
Coire Dubh
Waterfalls
Tom Odhar
Monadh Leathann
Shalachain Ard
Sallachan Ard
Stob an Ribein
Creagan Stob an Ribein
An t-Socach
Meall Breac
Lag na Beinne
Coire nan Each
Allt Lag na Beinne
Allt an Tuim Dhuibh
Allt an t-Seana Bhaile
Allt nam Breac
Dig nam Bailleag
Fords
Tigh Ghlinnegabhar
Ford
Fort
Torr an Duin
Tigh na Baintighearna
Coille na Cuile
Tom Shallachain
Glac an Fheidh
Creag Shallachain
Tom Fhiunnd
Pit (dis)
Allt Garbhsgeir
Allt a' Choire Dhuibh

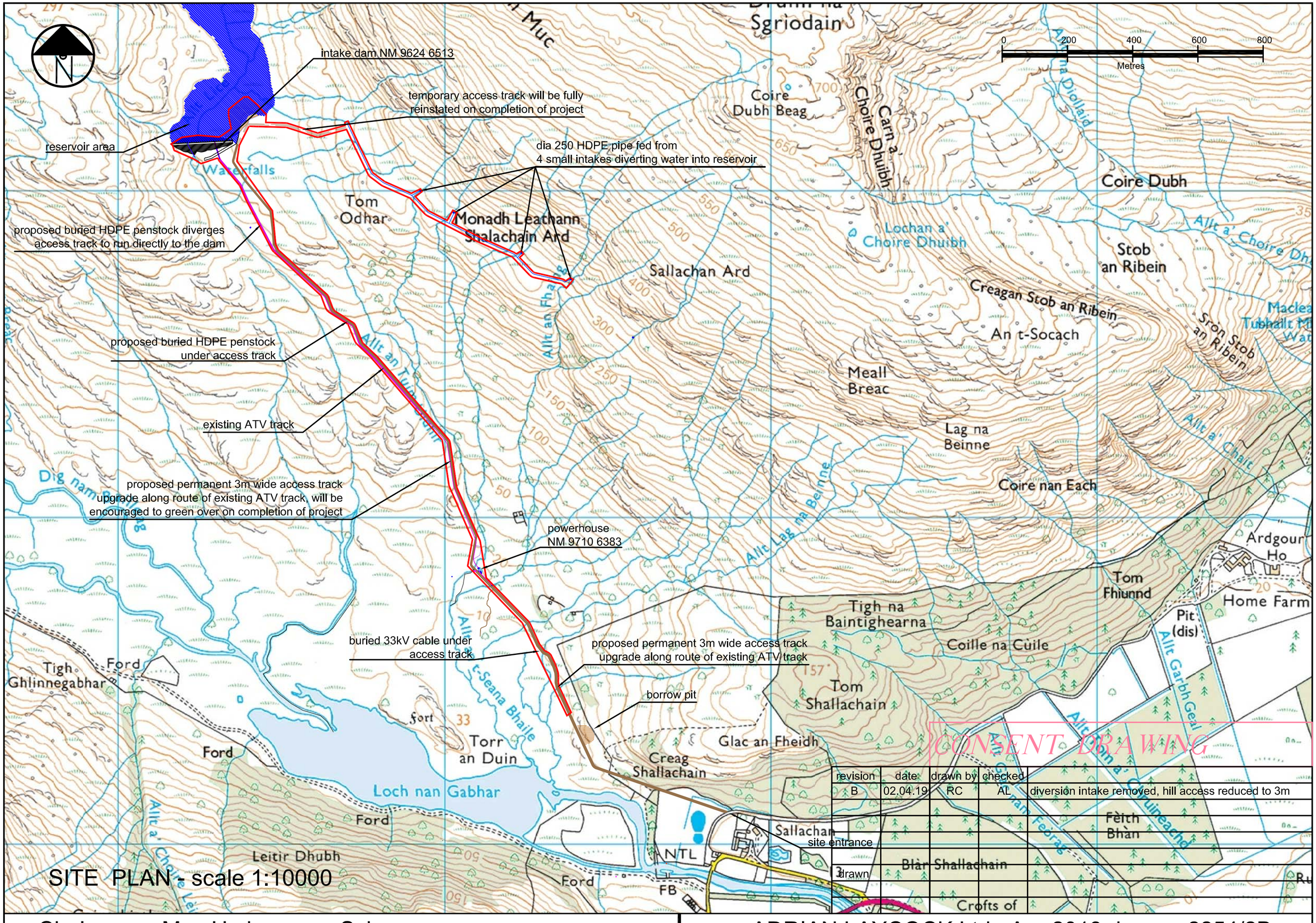
CONSENT DRAWING

revision	date	drawn by	checked	
A	09.07.18	AAH	AL	Powerhouse location updated
B	09.07.18	AL	AL	Diversion intake and track amended
drawn				

Choire nam Muc Hydropower Scheme

LOCATION PLAN - scale 1:5000

ADRIAN LAYCOCK Ltd Nov 2018 dwg no 2254/1B



SITE PLAN - scale 1:10000

revision	date	drawn by	checked	
B	02.04.19	RC	AL	diversion intake removed, hill access reduced to 3m

Choire nam Muc Hydropower Scheme

ADRIAN LAYCOCK Ltd Apr 2019 dwg no 2254/2B

0 10 20 30 40
Metres

1100

1000

proposed buried HDPE
560mm dia penstock

temporary laydown area
for material storage

pipe bridge

powerhouse NM 9711 6384

screened outfall

transformer

buried 33kV cable

access track

wet woodland creation area

screened outfall and
control structure diverting
water to blocked channel

blocked channel

POWERHOUSE SITE PLAN - scale 1:500

CONSENT DRAWING

Choire nam Muc Hydropower Scheme

ADRIAN LAYCOCK Ltd mar 2019 dwg no 2254/3C

borrow area

#4 soil investigation pit

3 section through borrow area see drawing 2254/115

temporary stockpile of turf & topsoil from damsite stripping

catotelmic peat to be removed from damsite

permanent deposition of catatelmic peat

soakaway for construction drainage

ditch for construction drainage

0 50 100 Metres

material for dam embankment sourced within inundation area

drainage disperses over grass

catotelmic peat deposition

settlement pond

sedimentation pond for main embankment

intake chamber

screened intake

catotelmic peat to be removed

cofferdam

diversion/scour pipe

interceptor ditch

temporary access track

embankment

spillway as rock-cut channel

access track

temporary spoil of stripped turf and topsoil

proposed buried HDPE penstock dia 560

#3 #4 #5 #6 #7

210m

200m

100

DAM SITE PLAN - scale 1:1000

CONSENT DRAWING

Choire nam Muc Hydropower Scheme

ADRIAN LAYCOCK Ltd dec 2018 dwg no 2254/4C

33kV cable connected
to transformer

33kV cable buried along
route of access track

0 100 200 300 400
Metres

Allt Lag na Bein

Tigh na
Baintighearna

Coille

157

Tom
Shallachain

Allt an t-Seana Bhaile

Fort

33

Torr
an Duin

Glac an Fheidh

Creag
Shallachain

Fort william 715 303 33kV circuit

Loch nan Gabhar

Ford

33kV buried cable connected
to Fort william 715 303 33kV circuit

Sallachan

NTL

13

Blàr Shallacha

Ford

FB

Croft
Salla

Cona

GRID CONNECTION PLAN - scale 1:5000

CONSENT DRAWING

Choire nam Muc Hydropower Scheme	ADRIAN LAYCOCK Ltd Aug 2018 dwg no 2254/5

N

0 100 200 300 400
Metres

max reservoir area 14.4 ha

lowest drawdown
area 5.6 ha

borrow pit for dam
located to avoid
deeper peat

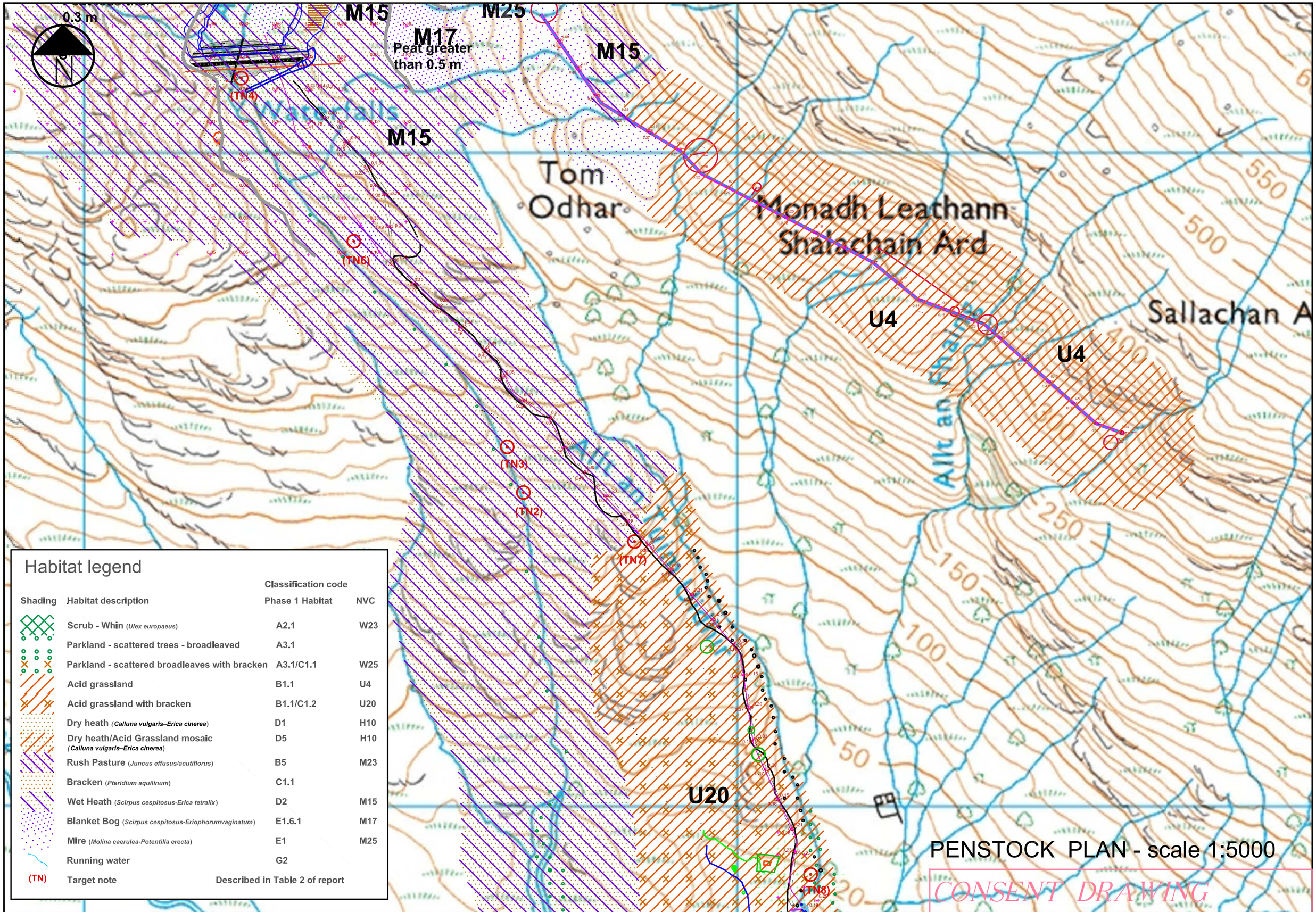
Dam centre NM 96250 65140

RESERVOIR SITE PLAN - scale 1:5000

CONSENT DRAWING

Choire nam Muc Hydropower Scheme

ADRIAN LAYCOCK Ltd dec 2018 dwg no 2254/6B



Habitat legend

Shading	Habitat description	Classification code Phase 1 Habitat	NVC
	Scrub - Whin (*Ulex europaeus*)	A2.1	W23
	Parkland - scattered trees - broadleaved	A3.1	
	Parkland - scattered broadleaves with bracken	A3.1/C1.1	W25
	Acid grassland	B1.1	U4
	Acid grassland with bracken	B1.1/C1.2	U20
	Dry heath (*Calluna vulgaris–Erica cinerea*)	D1	H10
	Dry heath/Acid Grassland mosaic (*Calluna vulgaris–Erica cinerea*)	D5	H10
	Rush Pasture (*Juncus effusus/acutiflorus*)	B5	M23
	Bracken (*Pteridium aquilinum*)	C1.1	
	Wet Heath (*Scirpus cespitosus-Erica tetralix*)	D2	M15
	Blanket Bog (*Scirpus cespitosus-Eriophorumvaginatum*)	E1.6.1	M17
	Mire (*Molina caerulea-Potentilla erecta*)	E1	M25
	Running water	G2	
(TN)	Target note	Described in Table 2 of report	

PENSTOCK PLAN - scale 1:5000

CONSENT DRAWING

Choire nam Muc Hydropower Scheme

ADRIAN LAYCOCK Ltd jun 2018 dwg no 2254/9

0 500 1000 1500 2000

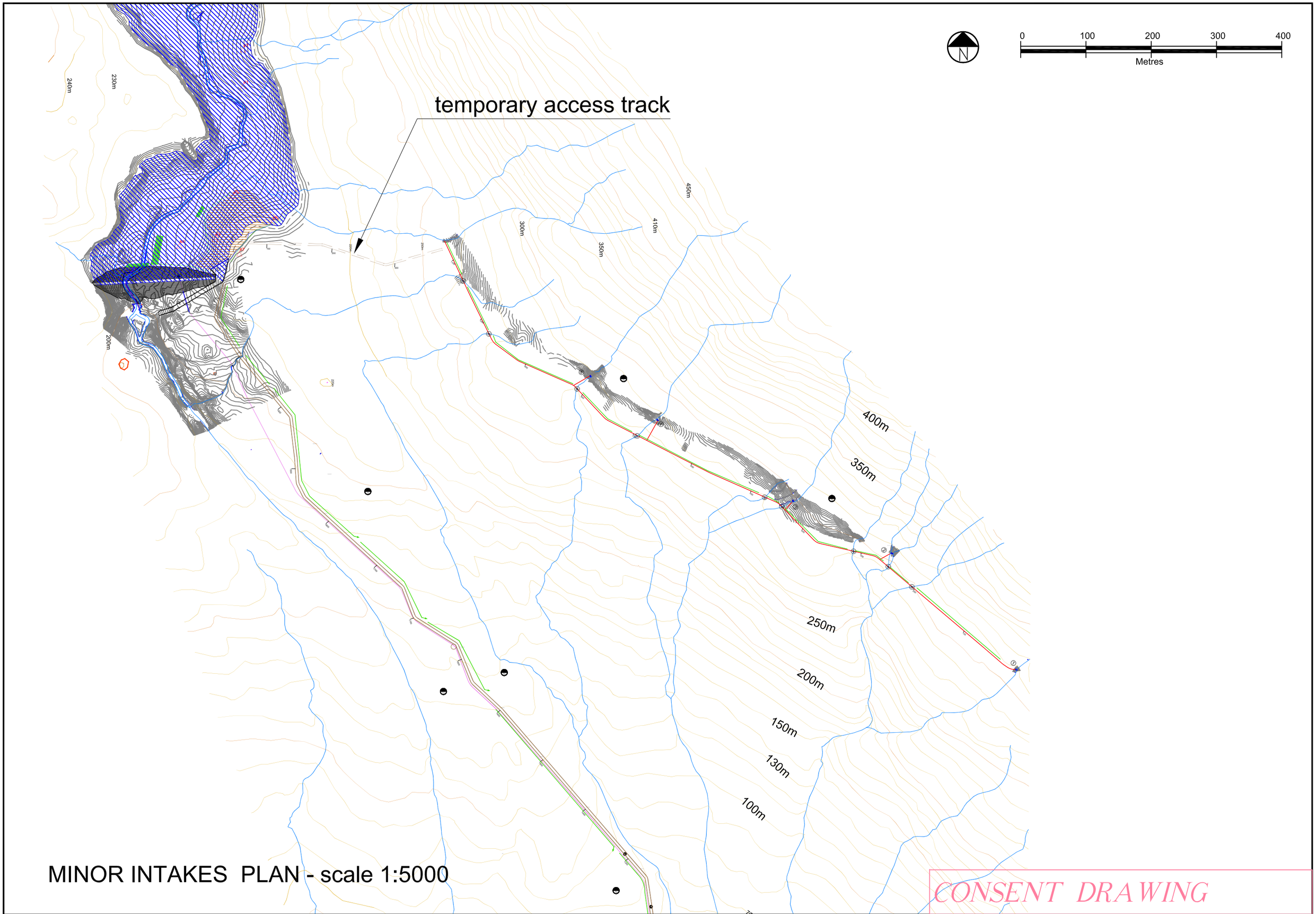
Metres

TRACK PLAN - scale 1:10000

CONSENT DRAWING

Choire nam Muc Hydropower Scheme

ADRIAN LAYCOCK Ltd Jan 2019 dwg no 2254/12A



MINOR INTAKES PLAN - scale 1:5000

CONSENT DRAWING

Choire nam Muc Hydropower Scheme

ADRIAN LAYCOCK Ltd nov 2018 dwg no 2254/15

N

257.0

256.5

256.31

256.40

255.75

255.70

255.08

255.26

254.81

254.71

255.5

256.0

256.5

254.20

254.28

253.61

254.01

253.17

253.41

253.41

254.04

253.5

254.0

254.5

254.5

255.0

257.0

257.5

258.0

258.5

259.0

outfall grid ref:
NM 9670 6520

250 diameter
buried pipeline

DIVERSION OUTFALL PLAN - scale 1:100

0 5 10
Metres

CONSENT DRAWING

Choire nam Muc Hydropower Scheme

ADRIAN LAYCOCK Ltd dec 2018 dwg no 2254/21

minor intake 2

culvert 11 - 900 dia

culvert 10 - 400 dia

minor intake 1

culvert 12 - 400 dia

turf interceptor ditch

dia 250 pipeline

minor intake 3

minor intake 4

minor intake 5

culvert 14 - 400 dia

turf interceptor ditch

culvert 13 - 600 dia

culvert 16 - 600 dia

culvert 15 - 600 dia

dia 250 pipeline

outfall

250m

culvert 17 - 400 dia

culvert 16-600 dia

culvert 18 -400 dia

turf interceptor ditch

dia 250 pipeline

DIVERSION OUTFALL PLANS - scale 1:1000

0 20 40 60 80 Metres

CONSENT DRAWING

Choire nam Muc Hydropower Scheme

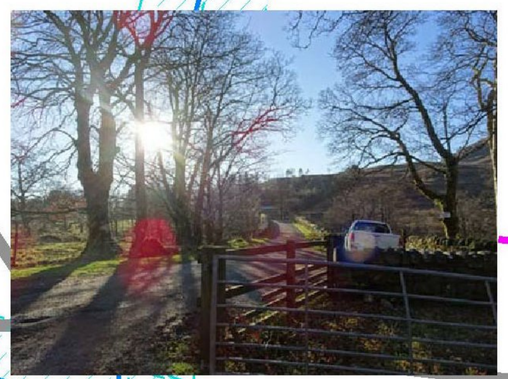
ADRIAN LAYCOCK Ltd dec 2018 dwg no 2254/22

0 50 100 150 200

Metres

drainage disperses over grass

Sallachan



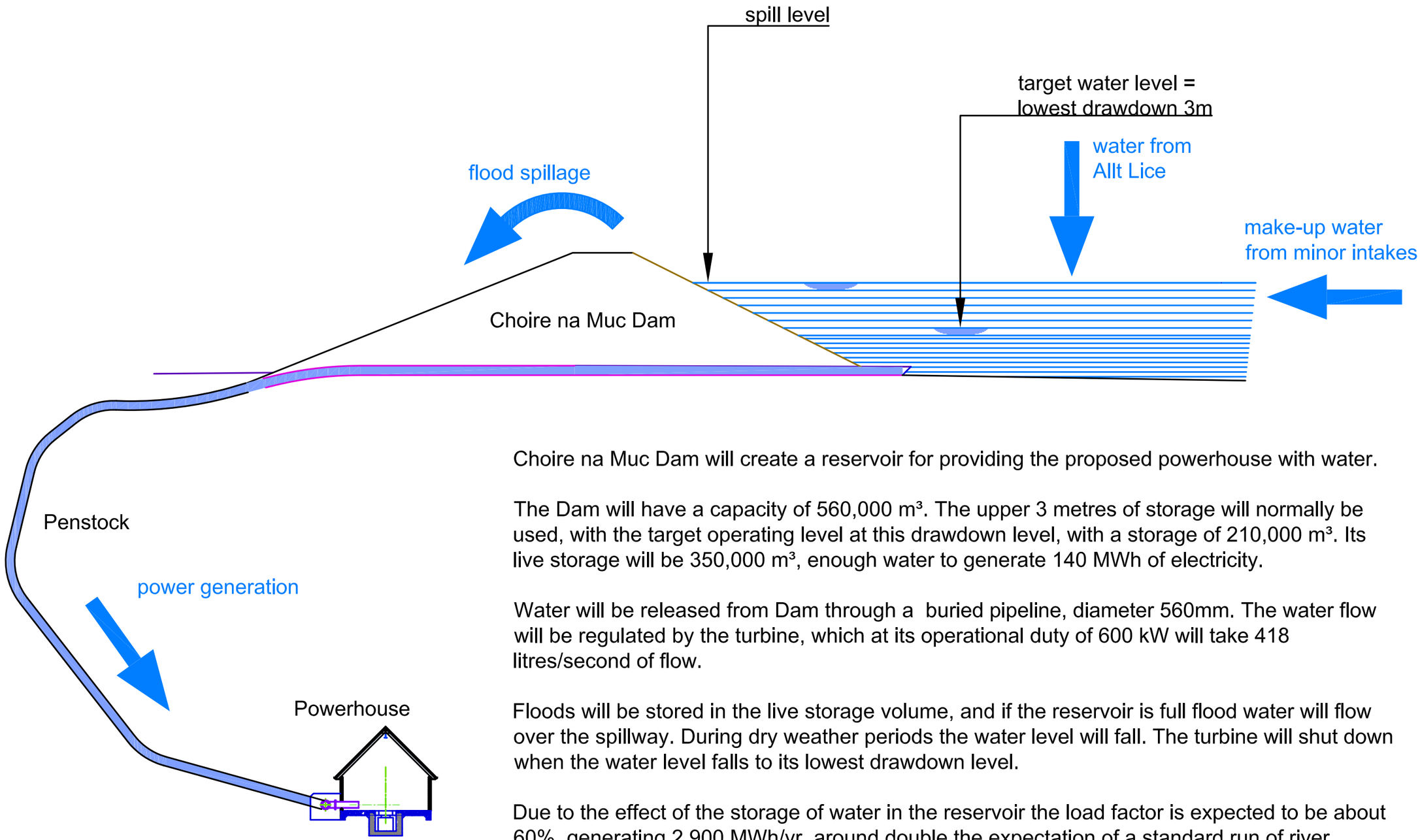
access to private estate road
upgraded in 2014
to facilitate timber abstraction

SITE ACCESS PLAN - scale 1:1000

CONSENT DRAWING

Choire nam Muc Hydropower Scheme

ADRIAN LAYCOCK Ltd dec 2018 dwg no 2254/23



Choire na Muc Dam will create a reservoir for providing the proposed powerhouse with water.

The Dam will have a capacity of 560,000 m³. The upper 3 metres of storage will normally be used, with the target operating level at this drawdown level, with a storage of 210,000 m³. Its live storage will be 350,000 m³, enough water to generate 140 MWh of electricity.

Water will be released from Dam through a buried pipeline, diameter 560mm. The water flow will be regulated by the turbine, which at its operational duty of 600 kW will take 418 litres/second of flow.

Floods will be stored in the live storage volume, and if the reservoir is full flood water will flow over the spillway. During dry weather periods the water level will fall. The turbine will shut down when the water level falls to its lowest drawdown level.

Due to the effect of the storage of water in the reservoir the load factor is expected to be about 60%, generating 2,900 MWh/yr, around double the expectation of a standard run of river scheme with no storage. This annual energy output would in effect offset 1,300 tonnes of carbon dioxide that would otherwise be released if generated using standard fossil fuel based generating plant.

CONSENT DRAWING

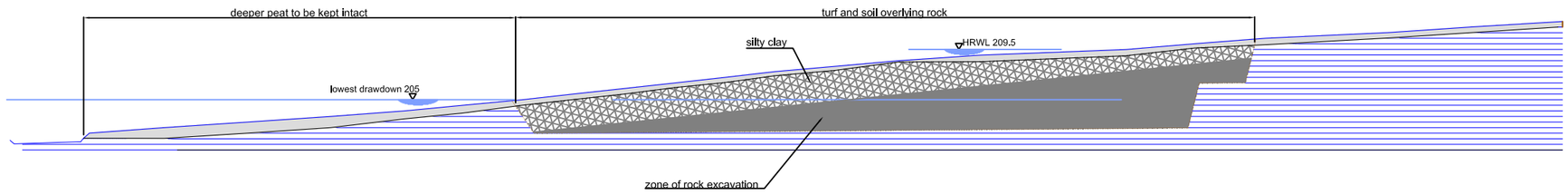
revision	date	drawn by	checked	

Operation of Dam

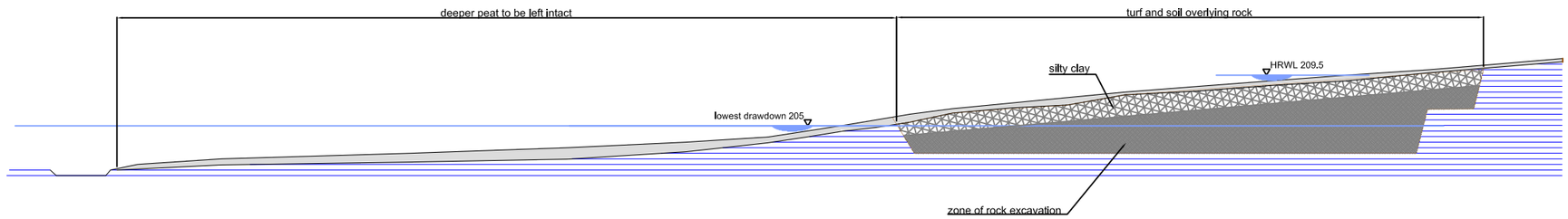
Shaun Corrigan - Coire na Muc Hydro Scheme

ADRIAN LAYCOCK Ltd apr 2019 dwg no 2254/114A

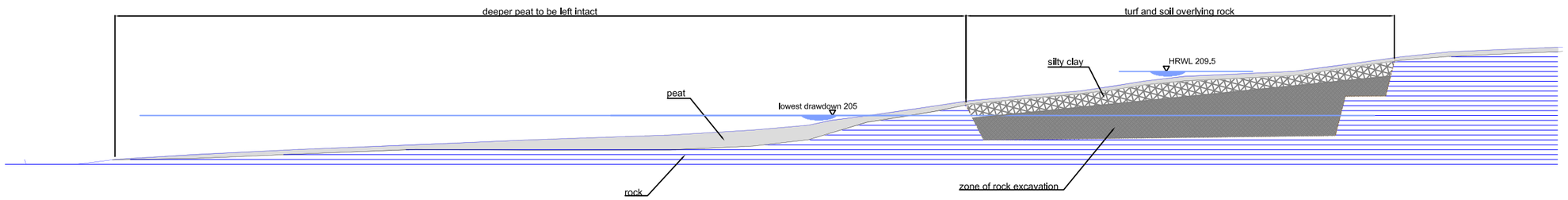
NOTES:
1. All dimensions in mm
2. All levels in maod
3. For locations of sections see drawing 2254/4B



section 1



section 2



section 3

Borrow area sections

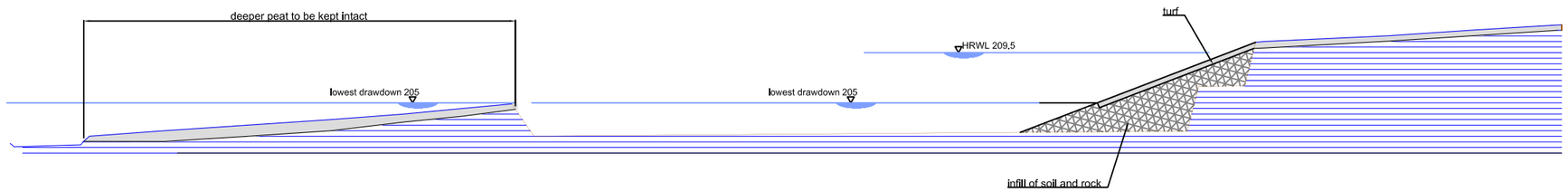
scale 1:500

CONSENT DRAWING

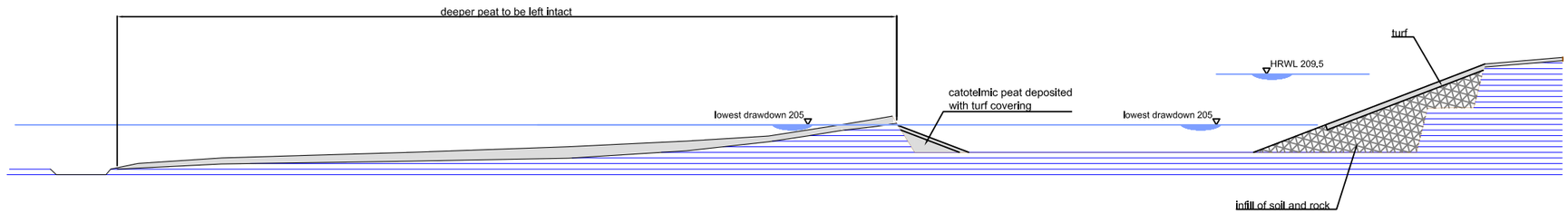
Shaun Corrigan - Choire nam Muc Hydro Scheme

ADRIAN LAYCOCK Ltd dec 2018 dwg no 2254/115

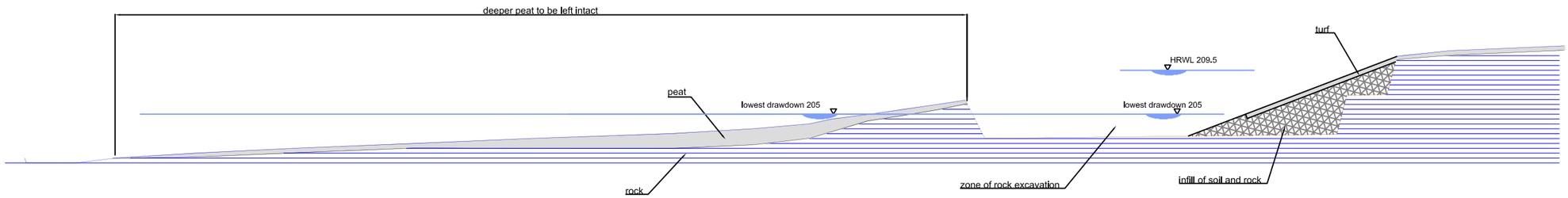
NOTES:
1. All dimensions in mm
2. All levels in maod
3. For locations of sections see drawing 2254/4B



section 1



section 2



section 3

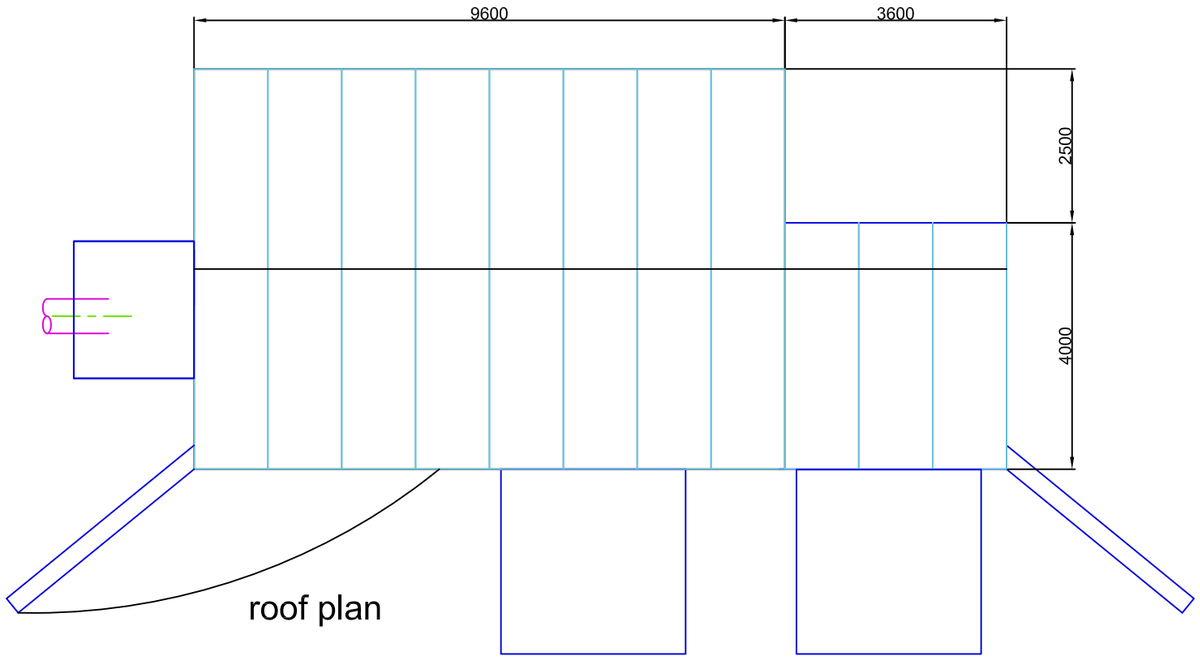
Borrow area sections - after completion

scale 1:500

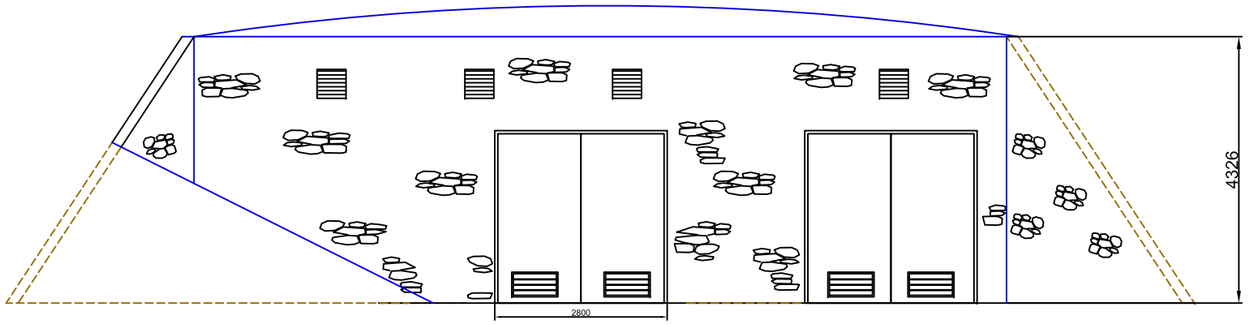
CONSENT DRAWING

Shaun Corrigan - Choire nam Muc Hydro Scheme

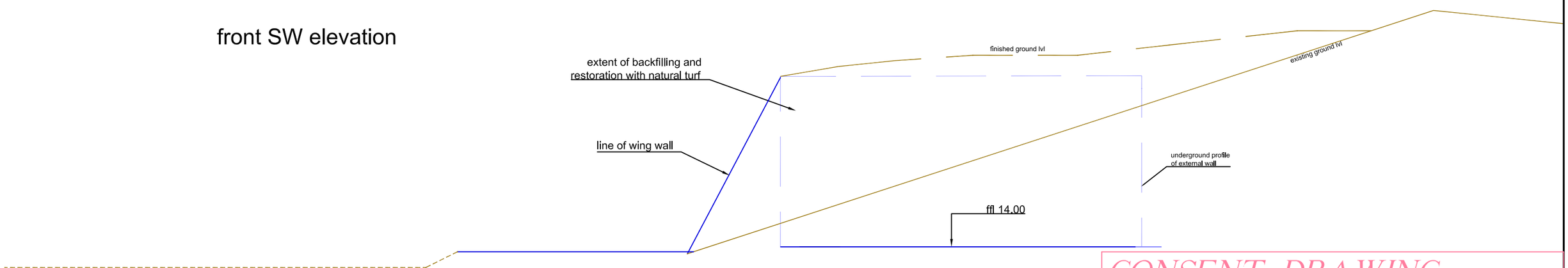
ADRIAN LAYCOCK Ltd dec 2018 dwg no 2254/116



roof plan



front SW elevation



side SE elevation

NOTES:
1. All dimensions in mm
2. All levels in maod
3. All concrete C35 fibre reinforced except where shown
4. Formation infill material to be cement-bound granular material as agreed with the Engineer.
5. 50mm C10 blinding to all slabs and bases
6. 25mm chamfer to all exposed arisses
7. All construction joints to be agreed with the Engineer prior to concreting.

CONSENT DRAWING

revision	date	drawn by	checked	
A	23.5.17	AL	AL	changed to underground powerhouse
B	08.02.18	AL	AL	modified powerhouse
C	08.01.19	AL	AL	modified details

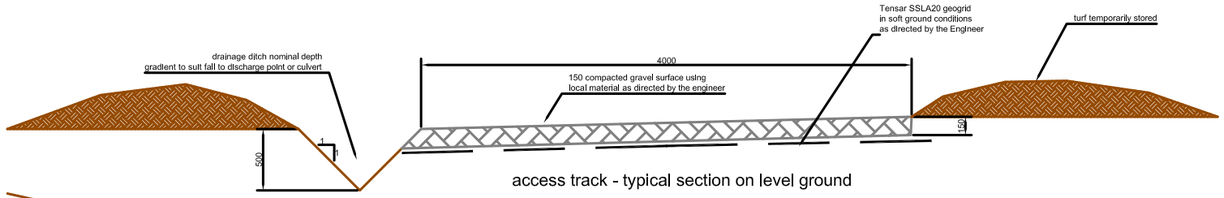
powerhouse elevations

scale 1:100

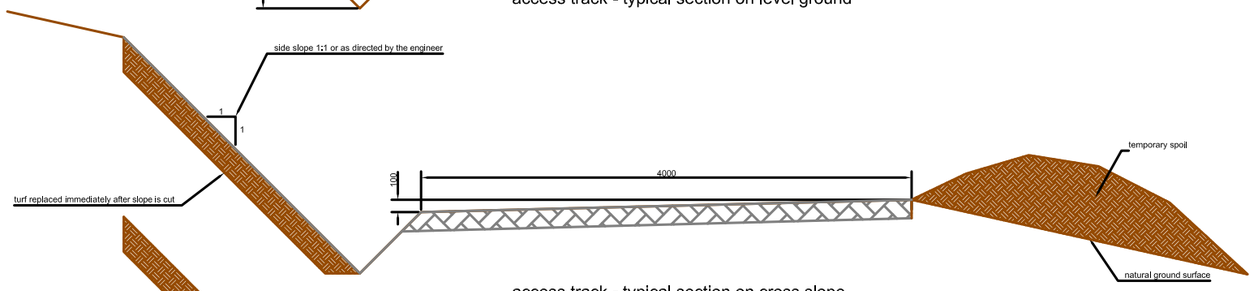
Shaun Corrigan - Coire na Muc Hydro Scheme

ADRIAN LAYCOCK Ltd jan 2019 dwg no 2254/200C

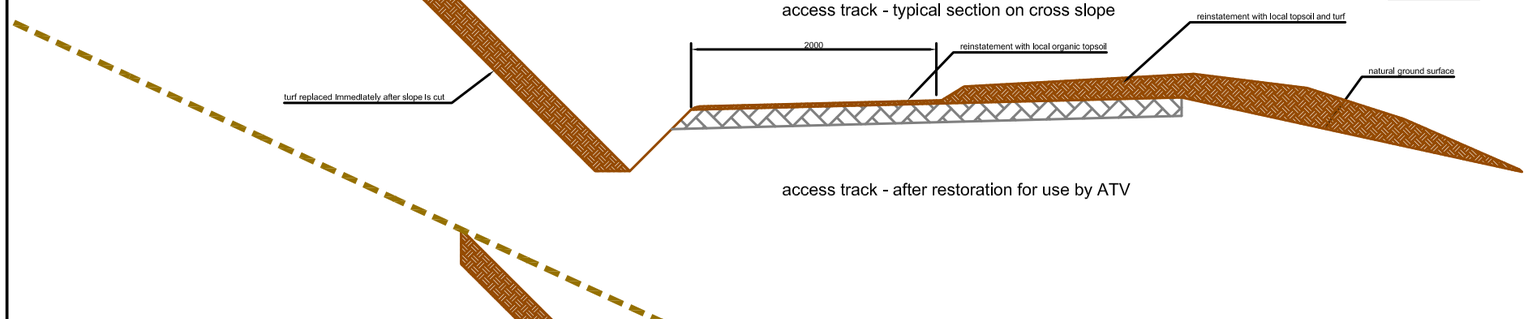
NOTES:
1. All dimensions in mm
2. All levels in maod
3. All concrete C35 fibre reinforced except where shown
4. Formation infill material to be cement-bound granular material as agreed with the Engineer.
5. 50mm C10 blinding to all slabs and bases
6. 25mm chamfer to all exposed arisses
7. All construction joints to be agreed with the Engineer prior to concreting.



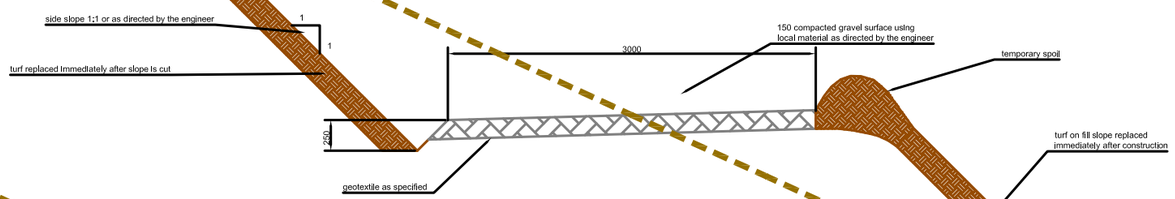
access track - typical section on level ground



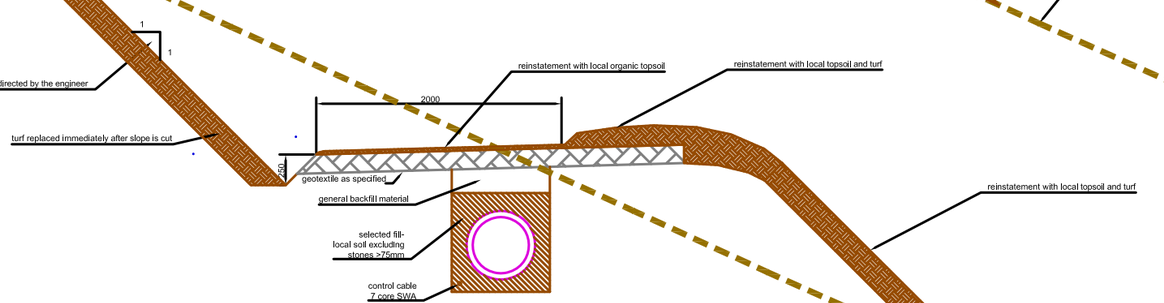
access track - typical section on cross slope



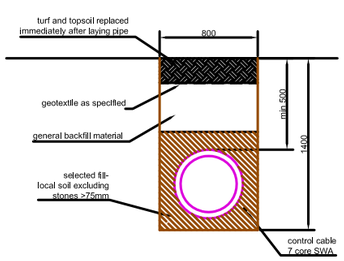
access track - after restoration for use by ATV



access track - section on steep cross slope during construction



access track - after restoration for use by ATV



typical pipe trench cross sections

track sections

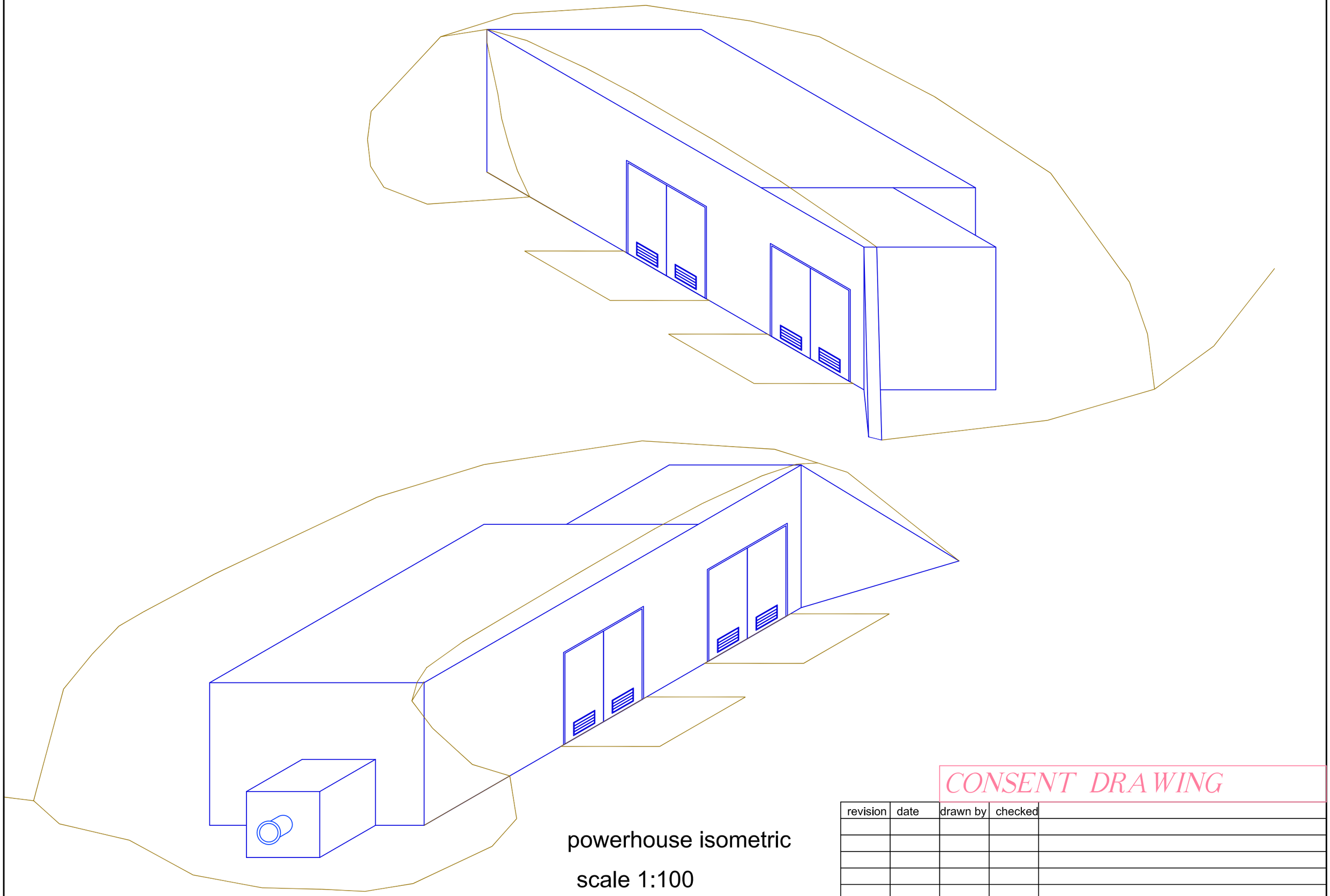
scale 1:50

CONSENT DRAWING

revision	date	drawn by	checked	
A	05.04.19	AAH	AAH	details of reinstatement changed

Shaun Corrigan - Coire na Muc Hydro Scheme

ADRIAN LAYCOCK Ltd Apr 2019 dwg no 2254/205A



powerhouse isometric

scale 1:100

CONSENT DRAWING

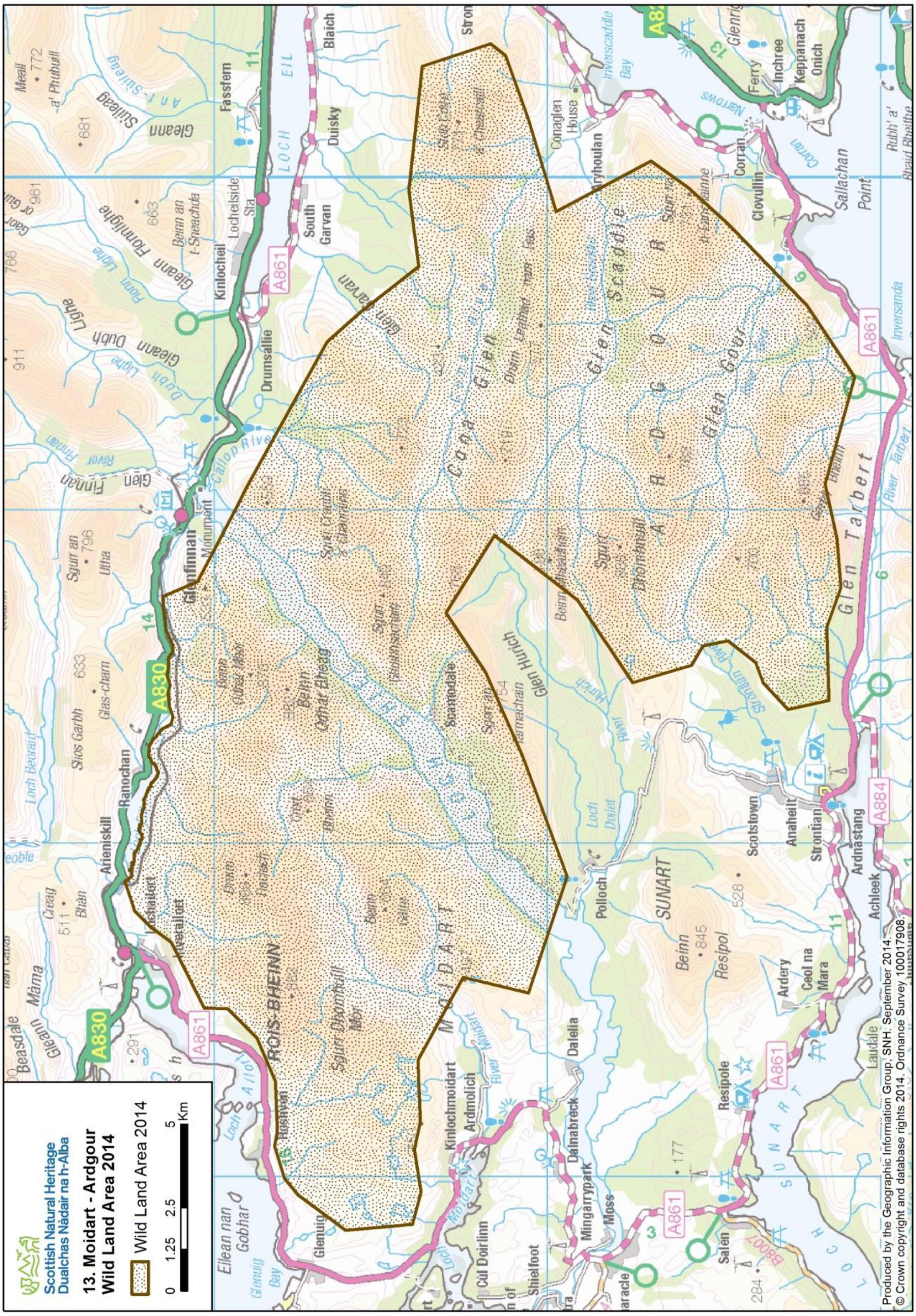
revision	date	drawn by	checked	

Shaun Corrigan - Coire na Muc Hydro Scheme

ADRIAN LAYCOCK Ltd Aug 2018 dwg no 2254/205

13

Moidart - Ardgour
Wild Land Area



Context

This WLA extends 374 km^2 across Lochaber, between Loch Linnhe in the south east and the intricate coast between Loch Moidart and Loch Ailort in the north west. A major road to nearby Fort William flanks its northern edge, but it is otherwise distant from large population centres.

The area includes a complex range of very rocky and rugged mountains – these appearing in some places to be extremely rough in their form and predominance of exposed rock. There are also some simpler and more massive hills in the east, as well as areas of elevated cnocan towards the coast. These landforms reflect the geology of the area, formed of hard metamorphic rocks that were carved during glaciation to create striking features, such as pyramidal peaks, corries, U-shaped glens and piles of moraine, as well as the remarkable fjord of Loch Shiel which is 17km long and cuts through the mountains. The distinctive forms of the mountains are highlighted against the open space and horizontal emphasis of adjacent sea, interior lochs and glen floors.

The WLA is largely uninhabited, although there are a few isolated cottages within some of the glens. The land is used mainly for deer stalking, fishing, forestry and tourism. Many people view the area from outside its edges, including along the A830 'Road to the Isles', the West Highland railway line, the A861 Moidart coast road, the A82, and whilst crossing Loch Linnhe on the Corran Ferry. From these places, views into the interior are, however, limited by the screening effect of the outward-facing slopes.

Within the WLA itself, the long, penetrating U-shaped glens attract hillwalkers and mountain bikers, with a number of through-routes, such as between Sallachan and Strontian, and along Loch Shiel. The high mountains and rocky ridges with 13 Corbetts attract hillwalkers, and boat trips along Loch Shiel are also popular in season[i].

The WLA is covered almost entirely by designations that reflect its landscape and scenic qualities, including the Morar, Moidart and Ardnamurchan National Scenic Area (NSA), the Loch Shiel NSA, The Moidart, Morar and Glen Shiel Special Landscape Area (SLA) and the Ardgour SLA[iiiii].

The sea lies to the north west and south east of the WLA, forming the backdrop to views and increasing exposure within the area. However it doesn't have a strong influence on the wild land qualities due to an intervening band of infrastructure and settlement around the coast. Similarly the Kinlochhourne - Knoydart – Morar WLA (18) to the north east is separated by the A830 main road, the railway and series of large conifer plantations between Glenfinnan and Loch Eil, whilst the Rannoch – Nevis - Mamores - Alder WLA (14) to the south east is separated by human elements and activity around Loch Linnhe.

Key attributes and qualities of the wild land area

- **A complex range of irregular, high, steep, rugged and rocky mountains with a strong sense of naturalness**

Landform has a strong influence within this WLA, with a complex range of mountains that are irregular in form, very *rugged* and have a high proportion of exposed rock, giving them a 'raw' image that conveys a *sense of naturalness*. Some of the mountains have steep, sweeping slopes that rise up to the rocky peaks and ridges, whilst others are broader and bulkier in form; however the rocky slopes for all these are difficult and *physically challenging* to ascend, with a perceived *high risk*.



The mountains are not as high as others within the west Highlands; however, this is not clearly evident within the hills themselves, as they seem high and *arresting* in their vertical scale and steep slopes. Their overall profile is most clear where viewed against the open space and contrasting horizontal element of adjacent sea, lochs or wide glen floors.

Many of the physical features indicate geological processes, for example with deep corries, U-shaped glens, piles of moraine and exposed rock revealing convoluted banding that contribute to a strong *sense of naturalness*. Rivers and waterfalls also indicate the ongoing dynamic nature of the landscape, for example with water-sculpted river banks and deeply gouged gullies down the steepest mountain sides.

From the mountain tops, there are stunning panoramic views of a complex array of ridges and peaks continuing far into the distance – the jumbled nature of which seems *awe-inspiring* in its irregularity and scale. These extend into a backcloth of more distant mountains, including within Knoydart (WLA 18), Nevis and the Mamores (WLA 14). From these tops, the steep drops on some or all sides create *arresting* views of the landscape below, which contributes to a strong *sense of risk,* also influenced by exposure.

These elevated vantage points, particularly those around the WLA margins, reveal *human artefacts* and *evidence of contemporary land use*. Although surrounding roads, the railway, settlements and isolated cottages outside the WLA tend to appear fairly discrete, tucked in within the base slopes and/or partially screened by woodland, there are a number of extensive forest plantations around the margins (both within and outside the WLA) that are more prominent and imposing, particularly where extending part-way up mountain slopes.

In addition to the highest and most rugged mountains, there are some simpler, broader and more massive hills in the east, as well as some elevated cnocan in the far west. Located within the WLA margins, these areas often form the backcloth to views looking into the WLA from outside, for example across Loch Eil and Loch Moidart. In reverse, this also means that these areas tend to be influenced more strongly by views to human elements outside the area.

Within parts of this WLA, native woodland fits tightly below crags and along burns and waterfalls within the rugged mountain slopes, increasing shelter and contributing to the *sense of naturalness,* especially where extensive.

- **Deep, long glens that penetrate the remote interior and contain a strong sense of seclusion and sanctuary**

The mountains are penetrated by a series of deep, curved and branching glens. The towering side slopes of these are *arresting* in their vertical form and enclosure, with their aspect and steepness sometimes highlighted by strong contrasts of shadow. These glens are *awe inspiring* in their large scale and simple glaciated forms, for example with U-shaped glens, hanging valleys and elevated corries. Combined with moraine, dynamic rivers and waterfalls, these features contribute to a strong *sense of naturalness*.



Lochs and watercourses have a strong influence within the glens, contributing to the *sense of naturalness*, but also creating barriers that limit access and increase *remoteness*, especially during times of spate. As well as a central meandering river, some glens contain tributaries that run down steep grooves in the side slopes, the steepness of these highlighted by waterfalls.

Within the glen floors, there is often evidence of past settlement, and some of the grazing is still used seasonally for stock. Some of the old cottages are also maintained as shelters, including for those that visit the glens to fish. These appear as *human artefacts* and indicate human activity, but their effects are limited where small or concentrated, isolated, low-lying, and discrete in siting and design.

The glens within this WLA tend to be very long and penetrate far into the mountains, resulting in a strong increase in *remoteness* from the margins. At the head of the glens and within the corries, the shielding side slopes create a sense of shelter and a strong *sense of sanctuary*. Nonetheless, the long and open form of some glens can also provide direct views out of the interior into the distance, often emphasised by the framing of side slopes. These views sometimes reveal human elements in the far distance that highlight the limited *extent* of the area.

Native woodland occurs within some of the glens, often concentrated along the rivers, tributary burns, or within the shelter of rugged slopes, and this contributes to the *sense of naturalness*. In some places, the presence of deer fences indicate human intervention in grazing regimes, which may diminish the *sense of naturalness,* as well as the fence appearing as an *artefact*.

The main access routes within this WLA run through the glens, with these sometimes linked by a bealach in-between. Some of the routes comprise discrete paths that wind around and over the landform and are low-key, maintaining the *sense of remoteness*. In contrast, vehicular tracks have been built through some glens which are prominent from the mountains above as *human artefacts* and diminish the sense of *remoteness* and *sanctuary*. Whatever the route taken, access into the upper

reaches of the glens on foot or bike takes a long time and is *physically challenging* – mainly due to their very long length and *rugged* surface.

Conifer plantations have a strong influence within certain glens. Some are located outside the WLA, but their effects extend inside, for example Glen Moidart and Ariundle, whilst others are located within the WLA, such as Callop, along Loch Shiel, and within Glen Aladale. These plantations indicate *contemporary land use*, mask the underlying *rugged* landform, and/ or diminish the *sense of naturalness* and *perceived awe* of adjacent mountains.
With some, there is ongoing forestry activity as part of a cycle of felling which, when evident, affects the *sense of sanctuary*.

- **The spectacular linear trench of Loch Shiel that cuts through the mountains, appearing awe inspiring in its form**

This WLA is crossed by a long, straight glen occupied by Loch Shiel. The sheer scale and simple form of this appears *awe-inspiring,* whilst the loch's simple colour, texture and openness emphasises the *arresting* nature of the steep, rugged slopes adjacent.

This glen tends to be viewed and experienced separately from the rest of the WLA, due to its strong contrast in character in relation to its surroundings. Its distinctive geological form is most clearly revealed from either end, and this contributes to the *sense of naturalness*.

Loch Shiel offers a route that cuts straight through the WLA from north east to south west. Many people experience this in summer by taking one of a number of boat trips that run along the loch between Glenfinnan and Acharacle, whilst others canoe, and some walk or cycle along the track on the south side (and some combine these in different directions). From the loch, there are stunning views along its length and to the steep mountain side slopes, but limited views beyond.

Both the northern and southern slopes of Loch Shiel contribute to the distinctiveness of the landform feature, but there is a strong difference in wild land experience between the different sides. The northern slopes are *remote,* with no overland access route, and possess a strong *sense of naturalness,* rocky *rugged* slopes and some large areas of native woodland.

Conversely, on the south side, there is a relatively wide constructed track[iv] along the entire length of the loch, as well as a number of other *human artefacts*, conifer plantations (described above) and fish farm cages; these have cumulative effects and diminish the *sense of sanctuary*.

Endnotes and select references

[i] More information available at http://www.highlandcruises.co.uk/timetable.htm. Season end of March – beginning of October 2015.

[ii] SNH (2010) *The special qualities of the National Scenic Areas*. SNH Commissioned Report No 374.

[iii] The Highland Council (2011) *Assessment of Highland Special Landscape Areas*. Inverness, The Highland Council

[iv] Although privately owned, this was not gated to vehicles at either the north or south end during site assessment trips for this study

Site assessment carried out June, July and September 2014