

ANGUS COUNCIL

DEVELOPMENT STANDARDS COMMITTEE – 27 JANUARY 2015

**PLANNING APPLICATION – LAND AT SLUG OF AUCHRANNIE, WESTER CAMPSIE,
LINRATHEN**

Grid Ref. No: 327986 : 752943

REPORT BY HEAD OF PLANNING AND PLACE

Abstract:

This report deals with planning application No. 12/00874/EIAL for installation of a run-of-river hydro power scheme, to involve a riverbed wash over water intake, a 4.3m diameter tunnel containing a penstock and an underground turbine house and tail race, with access stairs for construction and maintenance and associated works for John Hogg Group on land at Slug of Auchrannie, River Isla, Wester Campsie, Linrathen. This application is recommended for conditional approval.

1. RECOMMENDATION

It is recommended that the application be approved for the reason(s) and subject to the condition(s) given in Section 11 of this report

**2. ALIGNMENT TO THE ANGUS COMMUNITY PLAN/SINGLE OUTCOME AGREEMENT/
CORPORATE PLAN**

This report contributes to the following local outcome(s) contained within the Angus Community Plan and Single Outcome Agreement 2013-2016:

- Our communities are developed in a sustainable manner
- Our natural and built environment is protected and enjoyed

3. INTRODUCTION

3.1 Planning permission is sought for the installation of a run-of-river hydro power scheme, to involve a riverbed wash over water intake, a 4.3m diameter tunnel containing a penstock and an underground turbine house and tail race, with access stairs for construction and maintenance and associated works and a concrete crane pad on land at Slug of Auchrannie, River Isla, Wester Campsie.

3.2 The application site is located approximately 3km downstream of the Reekie Linn waterfall. The site includes a section of the River Isla and its northern bank just west of the Slug of Auchrannie waterfall and extending east some 270m towards a second section of waterfall known as the 'lower-Slug'. The application site is located within an area designated as a Site of Special Scientific Interest and forms part of Airlie Castle Designed Landscape. The River Isla is a tributary of the River Tay and therefore forms part of the River Tay Special Area of Conservation.

3.3 The proposal involves the installation of a 1.4MW run of the river hydro scheme and associated works. The hydro scheme would involve the excavation of the riverbed to form a 2.4m wide, 2.8m deep riverbed weir which would cross the river close to and upstream of the Slug of Auchrannie waterfall. The weir would connect to a chamber on the north bank of the river. The chamber would measure 6m by 8m in plan form, and would be 4.5m high and 2.5m above the adjacent river channel. The chamber would connect to a 4.3m wide tunnel which would be bored through the bedrock in the northern river bank, extending some 210m downstream. The tunnel would contain a penstock (1.8m diameter pipeline) to carry the water to the turbine, electricity cables and a rail system for bogeys to service the proposed hydro scheme. A turbine house would be located at the end of the tunnel, partly underground and partly on the north bank of the river. The turbine house would contain a tailrace and plunge

pool returning the water back to the river. An access staircase and rail system would be installed down the sloping north embankment towards the intake structure, suspended in places due to the undulating slope. The drawings also identify a concrete base/foundation for a tower crane part way down the embankment which would be removed post construction. The construction phase is expected to last approximately 18 months.

3.4 The application is supported by an Environmental Statement (ES) and two subsequent ES Addendums in 2013 and 2014. The application, Environmental Statement and ES Addendums have been subject of statutory advertisement.

3.5 The application has been varied as follows:-

- The application site has been amended to delete areas of land in the field immediately south of Wester Campsie;
- The intake structure for the proposed hydro-scheme has been amended so that the initially proposed traditional 'intake weir' and subsequent proposal for a 'side intake' have been deleted and replaced by a 'river bed weir' to remove the impoundment of water upstream of the proposed weir;
- The proposed concrete crane pad, steps and guide rails leading to the turbine house and tail race have been deleted from the application and all access to the scheme would be taken via single amended and partially suspended stair and access rails. The stair would be contained within the guide rails leading to the proposed dam, tunnel and penstock.

3.6 This application requires to be determined by the Development Standards Committee due to the recommendation of the application for approval whilst being subject to more than five objections.

4. RELEVANT PLANNING HISTORY

4.1 A scoping opinion was issued relating to the project in May 2011 which identified the key issues to be addressed by the Environmental Statement.

4.2 The site was delisted as a National Nature Reserve (NNR) in December 2012.

5. APPLICANT'S CASE

5.1 The applicant has submitted the following documents to support the application:-

- An Environmental Statement (ES) including a Non Technical Summary (NTS);
- an Addendum to the Environmental Statement (May 2013);
- A further Addendum to the Environmental Statement (July 2014);
- Planning statement;
- A Den of Airlie SSSI Enhancement Plan.

5.2 **The Environmental Statement** (ES) contains a description of the proposed development and an assessment of the predicted impacts resulting from it as well as details of proposed mitigation measures to offset those impacts. The ES summary of impacts and their significance is provided in Appendix 3 of this report.

5.3 The **May 2013 Addendum to the Environmental Statement** provides additional environmental information in support of the proposal. It included a revised weir design with side intake and associated flows information; information on potential impacts on groundwater dependent terrestrial ecosystems; information on potential impacts on upland mixed ash woodland/ancient broadleaf woodland including a tree survey of that woodland; an amended construction method statement and details of increased mitigation measures to offset environmental impacts.

5.4 The **July 2014 Environmental Statement Addendum** provides further information in respect of impact on River Jelly Lichen, woodland and the River Tay SAC. It includes site specific mitigation measures and a commitment on a wider scale to a Woodland Management Plan for the Den of Airlie SSSI. A revised Construction Method Statement is included which supersedes the CMS provided in the 2013 Addendum and original ES.

The information submitted includes a **Geological and General Slope Stability Appraisal** which indicates that the risk of large scale bedrock slope failure is not significant as a result of construction or operation of the proposed scheme and construction and operation of the access feature is not a significant risk to the River Isla from soil movement.

The information states that run of the river hydro schemes only draw water from the river during periods where there is sufficient flow to ensure that the hydrology of the river is not affected during drier months. In addition, the scheme only extracts a maximum of 7.4m³/s, while peak river flow can reach 151m³/s.

5.5 A **Planning Supporting Statement** which provides an explanation of how the applicant considers the proposal fits with local and national policy and guidance. This indicates that the proposal attracts support from these policies as it would provide a renewable energy scheme which would not result in significant adverse effects on the natural features contained within the site.

5.6 A further **Planning Statement** to reflect the amended proposal. This indicates that the proposed 1.4MW scheme design and construction methodology have been very carefully considered, resulting in an exemplar hydro power development that makes best use of Scotland's natural resources, contributes towards renewable energy targets, creates local wealth and can be delivered without adverse impact to either the Den of Airlie SSSI or River Tay SAC. It indicates that the water, used only during periods of high flow, is returned to the River Isla some 200m downstream. It identifies environmental, economic and social benefits associated with the proposal including:-

- the generation of 4,300 MWh of renewable electricity per annum thereby saving CO₂ emissions of 2,225 tonnes per year;
- over the expected 50+ year lifespan of the hydro turbine and associated infrastructure this will deliver lifetime CO₂ savings of 111,250 tonnes which is equivalent to taking 15,580 cars off Scotland's roads for one year, or 312 cars off the roads for the lifetime of the project;
- immediate employment and supply chain opportunities estimated at £2.8 million;
- long term employment Operation and Maintenance opportunities estimated at £75,000 per annum for the lifetime of the project;
- economic benefit to the wider local community via local wealth creation and related spending;
- educational value;
- training and skills opportunities;
- air quality; and
- addresses climate change and its associated threats.

5.7 A **Draft Den of Airlie SSSI Enhancement Plan** that was specifically drafted for inclusion in the **Den of Airlie Long Term Forest Plan (LTFP)** has been submitted. This is additional to traditional LTFP content and funding sources and would be enabled by the proposed hydro scheme. This additional enhancement includes a commitment to (1) works to control invasive non natives; (2) control of *Spiraea Douglasii*; (3) River Jelly Lichen Survey, Monitoring and Improvement proposals, (4) Whorled Solomon's seal translocation and habitat enhancement proposals, (5) footpath and drainage maintenance, (6) Adoption of Best Practice Sediment Management Plan.

6. CONSULTATIONS

6.1 Scottish Natural Heritage (SNH) has objected to the proposal unless a number of mitigation and enhancement measures are included in the development. Those mitigation measures include use of an Ecological Clerk of Works (ECoW) to microsite the dam; measures to ensure areas of River Jelly Lichen are kept damp during dam construction; soil capture measures; use of pre cast concrete structures where possible during dam construction; relocation and marking of other rare lichen species including *Gyalecta ulmi* and *Opegrapha paraxanthodes*; and measures to protect tree routes during construction. In addition, an enhanced woodland management plan to achieve a net benefit and wider conservation objectives within Den of Airlie SSSI is required. SNH indicates that it agrees with the findings of the ES that the impact of the proposal on Bryophytes would be minor adverse, low significance and note the ecological surveys and assessments carried out and presented in the ES and are content with their findings and proposals for a Habitat Management and Enhancement Plan. SNH has indicated that the proposal does not require a Wild Land

Assessment as the scheme falls outside of a Wild Land Area. SNH has indicated that it has not provided comments on landscape and visual impacts because those impacts were not considered to be significant.

- 6.2 Scottish Environment Protection Agency - has offered no objection to the proposal provided that construction works within the river do not take place within the spawning season from beginning of November to mid-May. SEPA has indicated that the hydro scheme has received a license under the Controlled Activities Regulations (CAR).
- 6.3 The Scottish Wildlife Trust (SWT) has objected to the planning application noting four reasons for their objection including: (i) an objection in principle to development within SSSIs because of the high risk of detrimental effects on biodiversity; (ii) the mitigation measures to protect River Jelly Lichen are unproven and it is inevitable that some habitat would be destroyed during construction; (iii) the ecological survey contains no information on the impact of the scheme on other aquatic invertebrates; and (iv) the scheme pays no attention to the recommendations made by the lichen specialist including use of an Ecological Clerk of Works.
- 6.4 Scottish Government – acknowledged receipt of the ES and addendums and circulated the documents to interested parties within the Scottish Government.
- 6.5 Angus Council - Roads (traffic) - has considered the proposal. In respect of road traffic and pedestrian safety, has noted that the works would involve upgrading of the access track and that access to the site would be taken from the west side of the classified Blackhill-Lintrathen Road through Bow Wood extending some 1.8km in length. The Roads Service has confirmed no objection to the proposal in respect of roads and access issues.
- 6.6 Historic Scotland – has offered no objection to the planning application, indicating that there is sufficient information within the ES to come to a view on the application in respect of scheduled monuments and their setting, category A listed buildings and their setting, inventory designed landscapes and inventory battle fields. HS agrees that the impact of the proposal on Airlie Castle Inventory designed landscape would be negligible resulting in an impact of minor significance.
- 6.7 Angus Council Environmental Health - has offered no objection to the proposal in the context of noise, vibration and private water supplies. A number of conditions are proposed which seek agreement over construction management (amenity impacts); impose noise limits to construction works and from plant during operation of the hydro scheme; impose vibration limits; and require a private water supply management plan.
- 6.8 Aberdeenshire Council Archaeology Service - the application occupies an area in proximity to the previously recorded archaeology site NO25SE0030 (Cropmarks of a possible promontory fort, also a Scheduled Ancient Monument), where there is good potential for previously unrecorded archaeology to survive, it is advised that a watching brief condition should be applied to all ground breaking works.
- 6.9 Health & Safety Executive - has indicated no comment on the environmental statement.
- 6.10 Angus Council - Flood Prevention - has no objections to the application provided the mitigation measures are adhered to.
- 6.11 Transport Scotland - has no comments on the ES or ES addendums submitted.
- 6.12 Tay District Salmon Fisheries Board, Association Of Salmon Fishery Boards, Kirriemuir Landward West Community Council, Visit Scotland Angus & Dundee, BEAR Scotland Ltd, Perth & Kinross Council, Scottish Canoe Association - were all consulted but have not commented on the application.

7. LETTERS OF REPRESENTATION

- 7.1 Ten (10) letters of representation have been received from 4 properties, as well as a petition containing 131 names. All of the submitted letters object to the proposal. The letters of representation will be circulated to Members of the Development Standards Committee and a copy will be available to view in the local library or on the council's Public Access website. The main issue raised relate to:

- impact on River Jelly Lichen;
- amenity impacts resulting from construction activities;
- benefits do not outweigh disbenefits;
- insufficient information to prove geology would be suitable for tunneling;
- insufficient information on how the rail system and staircase would be installed;
- unclear what tree works are proposed/required;
- position of tower cranes;
- there would not be overriding public, social or economic benefits from development within a SSSI and appeal decisions show that governments 2020 electricity target on course to be exceeded by operational, approved and in planning developments.
- impact of construction traffic on local road network;
- allowing development in SSSI would set an unacceptable precedent;
- lack of detail information on construction compounds and methods;
- in the event that planning permission is issued, conditions should be attached restricting the position of the construction compounds (storage compound, site compound and rock storage compound) to locations agreed with Angus Council which should not be close to housing and preventing other areas being used for storage or offloading;
- lack of information to demonstrate impact on wild land;
- lack of information relating to impact on woodland and no tree survey;
- landscape and visual impact including impact on the experiential qualities of the Slug waterfalls;
- Den of Airlie is a National Nature Reserve (**Den of Airlie was delisted as a NNR in December 2012*); and
- Den of Airlie is an unspoiled area and one of the last truly wild areas of Angus and development would undermine that.

These matters are addressed in the planning assessment below.

8. PLANNING CONSIDERATIONS

- 8.1 Sections 25 and 37(2) of the Town and Country Planning (Scotland) Act 1997 require that planning decisions be made in accordance with the development plan unless material considerations indicate otherwise.
- 8.2 Section 59 of the Planning (Listed Buildings and Conservation Areas)(Scotland) Act 1997 requires that in considering whether to grant planning permission for development which affects a listed building or its setting special regard shall be paid to the desirability of preserving the building or its setting.
- 8.3 In this case the development plan comprises: -
- TAYplan (Approved 2012)
 - Angus Local Plan Review (Adopted 2009)
- 8.4 The key development plan policies relevant to consideration of this application are provided in Appendix 2 and have been taken into account in the preparation of this report.
- 8.5 Angus Council is progressing with preparation of a Local Development Plan to provide up to date Development Plan coverage for Angus. When adopted, the Angus Local Development Plan (ALDP) will replace the current adopted Angus Local Plan Review (ALPR). The Draft Proposed Angus Local Development Plan was considered by Angus Council at its meeting on 11 December with a view to it being approved and published as the Proposed ALDP for a statutory period for representations. The Draft Proposed ALDP sets out policies and proposals for the 2016-2026 period consistent with the strategic framework provided by the approved TAYplan SDP (June 2012) and Scottish Planning Policy (SPP) published in June 2014. The Proposed ALDP, as approved by Angus Council, will be subject to a 9 week period for representation commencing in February 2015. Any unresolved representations received during this statutory consultation period are likely to be considered at an Examination by an independent Reporter appointed by Scottish Ministers. The Council must accept the conclusions and recommendations of the Reporter before proceeding to adopt the plan. Only in exceptional circumstances can the Council choose not to do this. The Proposed ALDP represents Angus Council's settled view in relation to the appropriate use of land within the Council area. As such, it will be a material consideration in the determination of planning applications. The Proposed ALDP is, however, at a stage in the statutory process of

preparation where it may be subject to further modification. Limited weight can therefore currently be attached to its contents. This may change following the period of representation when the level and significance of any objection to policies and proposals of the plan will be known.

8.6 In addition to the development plan a number of other publications are also particularly relevant to the consideration of the application. These include: -

- National Planning Framework for Scotland 3 (NPF3);
- Scottish Planning Policy (SPP);
- Scottish Government 'Specific Advice Sheet' on Hydro Schemes;
- The Environmental Statement (ES), ES Addendums and environmental information submitted in respect of this application by the applicant, consultees and third parties;
- Tayside Landscape Character Assessment (1998);
- Tayside Biodiversity Action Plan (2002); and
- Den of Airlie Site of Special Scientific Interest Site Management Statement (November 2010).

8.7 NPF3 (June 2014) states that hydroelectric power has been long relied on as a source of clean energy and estimates that untapped potential could sustain the electricity needs of around a quarter of our homes. It is identified as a key asset in the north of Scotland, where there are many opportunities for new 'run of river' hydroelectric development. The NPF also indicates that a planned approach to development helps to strike the right balance between safeguarding assets which are irreplaceable, and facilitating change in a sustainable way. It indicates that we must work with, not against, our environment to maintain and further strengthen its contribution to society.

8.8 The Scottish Planning Policy (SPP, June 2014) represents a statement of government policy on land use planning. In relation to hydro power, the SPP states that 'development plans should identify areas capable of accommodating renewable electricity projects in addition to wind generation, including hydro-electricity generation related to river or tidal flows or energy storage projects of a range of scales. The SPP indicates that 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.

- 8.9 Development that affects a National Park, National Scenic Area, Site of Special Scientific Interest or a National Nature Reserve should only be permitted where:-
- the objectives of designation and the overall integrity of the area will not be compromised; or
 - any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social, environmental or economic benefits of national importance.
- 8.10 Paragraph 203 of the SPP indicates that 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.
- 8.11 The Scottish Government's Specific Advice Sheet (SAS) on 'Hydro Schemes' identifies typical planning considerations in determining planning applications for hydro developments. It suggests that planning authorities should obtain and have particular regard to SEPA advice and expertise on matters relating to the protection of the water environment.
- 8.12 The Tayside Landscape Character Assessment (1998) indicates that the Den falls within the Mid Highland Glens landscape character type. It describes the physical characteristics of the wider area and notes that where bands of harder rock cross the glen, the valley often narrows to a gorge where the river tumbles over a series of waterfalls. It notes that the deeper gorges contain cool, damp and shady conditions which favour mosses, liverworts, some rare plant and invertebrate species and important stands of native woodlands. The TLCA indicates an urgent need to facilitate the regeneration of native woodlands which have suffered from activities including grazing.
- 8.13 The Tayside Biodiversity Partnership Action Plan (2002) – Rivers and Burns identifies the Den of Airlie SSSI as a river gorge containing a diverse assemblage of species, including River Jelly Lichen (RJL). It suggests that there is an excellent continuity of habitat from a high quality river into broad-leaved, mixed and yew woodland. It indicates that RJL is a UK Priority species with the main threats to it identified as eutrophication leading to algae; increased in river silt loads; water acidification; and reduced water levels caused by water abstraction (including small scale hydro electric schemes).
- 8.14 The SNH Site Management Statement for the Den of Airlie Site of Special Scientific Interest (SSSI) (2010) outlines the reasons the site is designated and provides guidance on how its special natural features should be conserved or enhanced. It indicates that the site is notified for its woodland, bryophytes (mosses and liverworts), invertebrates and whorled solomon's seal and RJL. It indicates that the populations of whorled solomon's seal and RJL are thought to be the largest in Great Britain. It indicates that much of the woodland has been modified, but in the deeper parts of the gorge and on steeper slopes, that woodland is thought to be ancient in origin. It states that the River Isla, up to the point of the Slug of Auchrannie forms part of the River Tay Special Area of Conservation (SAC) which is designated for Atlantic salmon, three species of lamprey, otters and clear water lochs. The statement indicates that monitoring of the Den of Airlie SSSI has resulted in the following classifications relating to feature condition:-
- upland mixed ash woodland in unfavourable condition due to the presence of non-native tree species;
 - whorled solomon's seal in unfavourable condition owing to declining population and reducing evidence of flowering;
 - bryophyte feature is favourable although introduced shrub *Spiraea* is threatening the population of nationally rare species *Homomallium incurvatum*; and
 - river jelly lichen is listed as 'not yet monitored'.

The statement indicates that the natural resources of the Den have been exploited by man for centuries, most notably as a source of wood and timber but also indicates that the Den's grandeur and natural beauty is renowned.

- 8.15 The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 detail the information that should be contained within an Environmental Statement. The Council provided a scoping opinion in respect of this proposal in order to identify the key areas that should be addressed through the environmental impact assessment process. Having regard to responses from statutory consultees, I am satisfied that the submitted Environmental Statement (ES) and subsequent addendums to the ES complies with the requirements of the EIA Regulations in terms of the information included therein.

Environmental and Economic Benefits of the hydro scheme

- 8.16 Policy 6 of TAYplan indicates that one of its aims for the city region is to deliver a low/zero carbon future and contribute to meeting Scottish Government energy and waste targets. The local plan indicates that Angus Council supports the principle of developing sources of renewable energy in appropriate locations.
- 8.17 In this case the supporting information indicates that the proposal involves a hydro scheme with a generating capacity of up to 1.4MW of renewable energy, generating 4,300 MWh of electricity per annum and thereby saving CO₂ emissions of 2,225 tonnes per year. The supporting information indicates that over the expected 50+ year lifespan of the hydro turbine and associated infrastructure this would deliver lifetime CO₂ savings of 111,250 tonnes which is equivalent to taking 15,580 cars off Scotland's roads for one year, or 312 cars off the roads for the lifetime of the project.
- 8.18 The supporting information indicates that the proposal would provide immediate employment and supply chain opportunities estimated at £2.8 million, with long term employment operation and maintenance opportunities estimated at £75,000 per annum. It is suggested that the proposal can be considered as a positive measure contributing toward economic development and rural diversification of the Airlie Estate. The economic development contribution, CO₂ savings and renewable energy generation benefits all represent positive aspects of the proposed development and are material to the assessment.
- 8.19 The supporting information including the Draft Den of Airlie SSSI Enhancement Plan for inclusion in the Den of Airlie Long Term Forest Plan (LTFP) indicates that the Ogilvy family is committed to using revenue from the proposed hydro scheme to further the conservation objectives of the area and the Den of Airlie SSSI in particular. This information suggests that it is proposed to create a plan of works which would result in a net improvement of the SSSI in the next 10 years, after which an updated set of objectives would be required into the subsequent 10 year forest plan. This includes a commitment to an annual prioritisation and reporting of projects agreed with SNH, SEPA, Airlie Estates and Scottish Woodlands. The initial 10 year plan proposed includes:-
- the control of non-native trees and shrubs including rhododendron, Himalayan balsam and sycamore;
 - the control of *Spiraea douglasii* to protect and promote the rare moss *Homoallium incurvatum*;
 - a RJL survey, monitoring and improvement project which would include habitat enhancement measures such as control of overhanging branches and vascular plants on marginal rocks to benefit RJL by reducing overshadowing;
 - a whorles solomon's seal enhancement project including translocation of the species and replanting open coups with native species with the aim of providing a suitable habitat for the plant;
 - maintenance works to footpaths and ditches in the SSSI; and
 - the adoption of a Best Practice Sediment Management Plan for works within the SSSI.
- 8.20 SNH's Site Management Statement for the Den of Airlie SSSI (updated in November 2010) identifies that whorled solomon's seal is in an *unfavourable declining* condition; upland mixed ash woodland is in an *unfavourable recovering* condition; and RJL is not yet monitored. It suggests that the populations of whorled solomon's seal and RJL are thought to be the largest in Great Britain. SNH has undertaken survey work (2011) since the latest update of the Site Management Statement which identifies frequent and abundant populations of RJL upstream

of the Slug of Auchrannie and towards the southern end of the Den of Airlie SSSI. It is understood that there is no evidence of decline in the extent of or number of RJL colonies and the feature condition can be described as *favourable maintained*. The package of environmental enhancement measures proposed for the wider Den of Airlie SSSI represents a long term commitment to improving the ecological conditions for a number of the features for which the Den of Airlie is notified. Those enhancement measures could be particularly valuable for the species identified as being in an *unfavourable* condition including the woodland and whorled solomon's seal. Subject to more specific proposals relating to the improvement works on offer, the proposed enhancements which would be funded by the proposed hydro scheme could result in significant benefits for the Den of Airlie SSSI.

Impact on the Den of Airlie SSSI

- 8.21 The development plan contains a number of policies that seek to protect important species and sites designated for their natural heritage interest and to ensure that proposals that may affect them are carefully assessed. It also indicates that the Local Biodiversity Action Plans will constitute material considerations in determining development proposals. The SPP indicates that planning permission should be refused where the nature or scale of proposed development would have an unacceptable impact on the natural environment. It states that direct or indirect effects on statutorily protected sites will be an important consideration, but designation does not impose an automatic prohibition on development.
- 8.22 The Den of Airlie SSSI is notified for its woodland, bryophytes (mosses and liverworts), invertebrates, whorled solomon's seal and RJL. The SNH Site Management Statement states that the populations of whorled solomon's seal and RJL are thought to be the largest in Great Britain. It indicates that much of the woodland has been modified but is thought to be ancient in origin and the largest area of ancient woodland in Angus.
- 8.23 The supporting information submitted includes a Tree Survey, Extended Phase 1 Habitat Survey, Invasive Species Survey, Bat Survey, Otter Survey, Badger Survey, Amphibian and reptile habitat suitability assessment, Breeding and Nesting Bird Surveys, Squirrel survey, River Jelly Lichen Survey and Bryophyte Assemblage Survey. The ES concludes that there are no major ecological impacts on any of the identified valued ecological receptors at the site. The ES indicates that with appropriate mitigation and enhancement in place, the adverse impact of the scheme will be of low significance in respect of national to international statutory interests. An assessment of the impact of the proposed development on the notified features of the Den of Airlie is provided below.

River Jelly Lichen (RJL)

- 8.24 The Tayside Biodiversity Partnership Action Plan (Rivers and Burns) indicates that the main threats to RJL are (1) eutrophication leading to algae; (2) increased in river silt loads; (3) water acidification; and (4) reduced water levels caused by water abstraction (including small scale hydroelectric schemes).
- 8.25 The supporting information submitted shows that an area extending 411m upstream of the Slug of Auchrannie waterfall contains a frequently occurring and abundant population of RJL. The proposal has been modified since the original submission and now includes a river bed weir/intake structure which would be formed by excavating a section of the river bed and installing an intake weir across and within the river bed. The benefit of a river bed weir is that it does not project above the natural level of the river bed and thus allows water and sediment to pass over it without any impounding effects causing water levels to increase upstream of the weir. The proposal would result in the direct and permanent loss of a small area of RJL around the position of the proposed river bed weir, silting chamber and tunnel entrance (including the area of the temporary coffer dam). The ES suggests that this equates to some 7.5 linear metres of RJL, but indicates that not all of the RJL in this 7.5 linear metres would be impacted upon. While this loss of RJL would be regrettable, in context (using a worst case scenario) the supporting information indicates that this would equate to a 0.63% impact on known populations of RJL in the Den of Airlie SSSI. It is noted that the package of SSSI enhancements which the proposal would fund includes measures to improve RJL populations which could offset this impact.
- 8.26 I note that there are a number of representations which raise concerns regarding impact on RJL including a detailed objection from the British Lichen Society. Since those comments were submitted the proposal has been amended to alter the hydro scheme design to (1)

remove any water impoundment and associated sediment build up which could have impacted on a larger area of RJL upstream; and (2) a number of mitigation and enhancement measures including the use of RJL specialist to work with the ecological clerk of works (ECoW) during coffer dam construction to microsite the dam to minimise impacts on RJL and utilise mitigation measures during construction to ensure that RJL remains damp. SEPA has granted a CAR License for the proposal and is satisfied that it would not result in unacceptable effects on the water environment taking account of the impact of water abstraction from the watercourse and the resultant impacts on RJL. SNH has removed its objection to the proposal provided detailed mitigation and habitat enhancement measures are secured through any planning permission. Taking account of the significant modifications that have been made to the proposal to reduce impacts on RJL, the existence of a CAR License for the proposed activity and the advice of SEPA and SNH on the level of impact on RJL, I am satisfied that the revised proposal would not result in unacceptable impacts on RJL.

Woodland

- 8.27 The SNH Den of Airlie Site Management Statement indicates that much of the woodland within the SSSI has been modified but in the deeper parts of the gorge and on the steeper slopes is thought to be ancient in origin. It the largest area of ancient woodland in Angus and contains valuable ground fauna. The woodland is classed as being in 'unfavourable' condition because of the presence of non-native tree species including beech and sycamore trees.
- 8.28 The proposal is supported by a Construction Method Statement and a Tree Survey which identify the species, age and condition of trees within the site and measures that would be taken during the construction process to minimise the effects of the construction and operation of the hydro scheme on woodland. The proposal has been modified since the tree survey was submitted to reduce the impacts of the proposed development by modifying the proposed stair and rail system such that it is contained into a 2.5m wide extent. The proposal would require the removal of 8 mature trees to allow the stair, rails and intake structure to be constructed. These trees comprise 3 Beech, 3 Oak and 2 Sycamore, most of which are detailed as being mature and healthy. The form of the access rails and stair has been revised so that the access rails and part of the stair structure is suspended above ground level to reduce impacts associated with the fragmentation of the woodland following advice from SNH. The supporting information proposes measures to protect woodland during the construction of the hydro scheme including the use of protective barriers around the root protection area of trees and the use of temporary surfaces with protective membranes when working close to trees. A condition is proposed that prevents removal of other trees within the application site without prior approval of the planning authority. The proposal includes woodland enhancement measures including a wider scale Woodland Management Plan for the Den of Airlie SSSI which would include replanting of woodland and the removal of non-native species which contribute to its currently 'unfavourable' condition.
- 8.29 The loss of trees to accommodate the proposed development and the fragmentation impacts on the woodland caused by the introduction of a the stair and access rails would cause some negative impact on one of the main features for which the Den of Airlie SSSI is notified. It is however noted that the site management statement promotes the removal of non-native sycamore and beech trees which represents 5 of the 8 trees that are directly affected and require to be removed to accommodate the proposed development. The fragmentation effects caused by the stair and rail system (2.5m wide) would be partly mitigated by suspension of the rails and part of the stairway to access the riverside area. The direct impact of the loss of woodland would be offset by the package of enhancement measures on offer for the wider Den of Airlie SSSI and as such I am satisfied that the impacts on woodland would not be unacceptable when taken with the enhancement measures proposed and would improve the currently *unfavourable* condition of the woodland.
- 8.30 Other notified features within the Den of Airlie are bryophytes (mosses and liverworts), invertebrates and whorled solomon's seal. In terms of bryophytes, the ES indicates that the flora in the small area affected by the proposed hydro scheme is typical of many of the incised rivers in this area, particularly of the stretch of the River Isla from Reekie Linn to the Den of Airlie; there is an abundance of robust common species both in the riparian zone and in the rocky woodland above. It states that there are no nationally rare or scarce species in the area surveyed and the bryophyte flora, though abundant, has a low sensitivity in conservation terms. The significance of the medium amount of change due to the proposed hydro scheme on the low bryophyte interest on the site is classed as minor in the ES and SNH has indicated

that it agrees with that conclusion. The Whorled Solomon's seal enhancement project which would be funded by the hydro scheme could assist in improving the *unfavourable declining* condition of that feature.

- 8.31 Taking account of the environmental information submitted and the advice of SNH and SEPA, I am satisfied that the proposal would not compromise, destroy or adversely affect the conservation objectives and/or particular interests for which the site was notified, subject to appropriate mitigation. SNH has indicated that the enhanced woodland management plan will achieve a net benefit to the wider conservation objectives of the Den of Airlie SSSI and this would also be complemented by other associated enhancement works. In these circumstances I am satisfied that the proposal does not give rise to significant issues in terms of development plan policy relevant to safeguarding the SSSI.

The River Tay SAC

- 8.32 The site sits within and adjacent to the River Tay SAC which is designated for its populations of Atlantic Salmon, lamprey, otters, clear water lochs and freshwater pearl mussels. SNH advice on the River Tay SAC indicates that salmon and lamprey require high water quality and indicates that increased sediment levels in the river or the release of contaminants can adversely affect these species; a reduction in water quality can impact on otters by reducing the availability of food in the watercourse; and freshwater pearl mussels can be affected in the same way as salmon and lamprey.
- 8.33 The proposed hydro scheme involves development within the river and within the riparian zone of the river which has the potential to impact on the SAC, particularly through sediment or chemical release into the watercourse. Under the Habitat Regulations, the competent authority can only agree to development proposals which are unconnected with the nature conservation management of the site after having ascertained that they will not affect the integrity of the site and an Appropriate Assessment is required and has been undertaken in consultation with SNH.
- 8.34 The ES indicates that this scheme can be developed in such a way as to pose no significant threat to the integrity of the qualifying features. SEPA has granted a CAR License for water abstraction and for the in river engineering operations proposed subject to a number of detailed conditions to mitigate against adverse impacts on the water environment including the SAC. I note the content of the advice provided by SEPA and SNH and I am satisfied that the proposal could be delivered without adversely impacting on the River Tay SAC subject to the mitigation proposed in the ES and the additional controls proposed in the conditions requested by SNH. In this case the proposal does not give rise to unacceptable impacts upon the integrity of the SAC and advice provided by SNH indicates that the development would provide a net benefit and wider conservation objectives within the Den of Airlie SSSI. In these circumstances I am satisfied that the proposal does not give rise to significant issues in terms of development plan policy relevant to safeguarding the SAC.
- 8.35 In respect of other ecological impacts associated with the proposal, SNH has indicated that it is content with the findings of the surveys and assessment carried out provided the mitigation measures proposed (at 10.11 of the ES) including the development of a Habitat Management and Enhancement Plan are provided.

Cultural Heritage

- 8.36 The development plan contains a number of policies that seek to safeguard cultural heritage interests. These include TAYplan Policy 3 and policies ER16, ER18, ER19 and ER20 of the ALPR. Policy ER34 requires proposals for renewable energy development to have no unacceptable detrimental effect on any sites designated for cultural heritage, historic or archaeological reasons.
- 8.37 The ES contains an assessment of impacts on cultural heritage noting that the site falls within a Designed Landscape (Airlie Castle GDL). Airlie Castle is situated in a defensive position on a promontory to the south-east of the confluence of the Melgam Water and the River Isla. The designed landscape extends east to the edge of the agricultural land and south to the lodge whilst the policy woodlands extend along either side of the gorge of the River Isla to Bridge of Craigisla in the north and Bridge of Dillavaired in the south. The proposed works would take place towards the western extremity of the designed landscape (approximately 1.5km north west of the castle itself) within the wooded river gorge. The proposed works would result in

the introduction of a stairway and rail system on the north bank of the river. It would introduce a river bed intake structure across the river channel adjacent to and above the first drop of the Slug of Auchrannie waterfalls, a sediment basin and stilling chamber and 4.3m wide tunnel entrance. The proposal also include a turbine house and tailrace 210m downstream and in the side of the gorge. The applicant's ES attributes a minor significance to the level of impact on Airlie Castle GDL and proposes a programme of archaeological monitoring during ground breaking as mitigation. Historic Scotland has indicated that it agrees with the findings of the ES that no significant impacts on the GDL are likely. The Archaeology Service has requested a watching brief condition during ground breaking works due to the proximity of the site to Auchrannie Enclosure Scheduled Monument (450m east of the intake above the southern river bank) but I do not consider the proposal to have any adverse impacts on the setting of that monument or any other significant effects on cultural heritage features in the area.

Landscape and Visual Impact

- 8.38 The development plan contains a number of policies that seek to ensure that the landscape and visual impact associated with proposals is not unacceptable. Policy 3 of TAYplan seeks to safeguard landscapes. Policy 6 of TAYplan indicates that in determining proposals for energy development consideration should be given to landscape sensitivity. Local Plan Policy ER5 (Conservation of Landscape Character) requires development proposals to take account of the guidance provided by the Tayside Landscape Character Assessment (TLCA), prepared for Scottish Natural Heritage (SNH) in 1999, and indicates that, where appropriate, sites selected should be capable of absorbing the proposed development to ensure that it fits into the landscape. Policy ER34 of the Local Plan indicates that proposals for renewable energy development will be assessed on the basis of *no unacceptable adverse landscape and visual impacts having regard to landscape character, setting within the immediate and wider landscape, and sensitive viewpoints*.
- 8.39 The application site incorporates an area of river gorge which displays wild characteristics and limited evidence of land management. It is characterised by a deep ravine carved through the surrounding rock. The banks on either side are formed by sheer exposed cliffs or steeply sloping banks containing mature woodland and exposed rock faces with smaller ravines carved from streams feeding the river from the side of the main gorge. The area below the Slug waterfall is particularly inaccessible because of the barrier formed by the cliffs and the waterfall. There is a pathway and bridges above the gorge on the north side of the river which is accessed by the public but little by way of other intervention until the top of the gorge where the woodland meets managed farmland. The top of the Slug waterfall is more accessible than the gorge below it but accessibility requires a scramble down the side of the steeply sloped wooded river bank.
- 8.40 The ES indicates that the most evident element of the proposal would be the construction crane which would rise above the trees and would be a large moving element in local views for a short term period during construction. It suggests that following construction and mitigation planting, it is anticipated that the proposal would settle into the environment very effectively. It suggests that the weir structure would not adversely affect landscape character and the steps and access rails would be effectively integrated into the woodland. It indicates that the remote location and limited size of the turbine house and tailrace minimises its impact. In terms of visual amenity, the ES suggests that the proposal would be visually obscured from publically accessible areas and suggests that the wooded nature of the river banks would mitigate impacts.
- 8.41 The proposal would introduce a river bed weir which would align with the surface of the existing riverbed and would usually be submerged under the surface flow of the river which significantly reduces its impact in comparison to the impoundment style of weir originally proposed. The intake chamber would also be partly below the level of the riverbed but would also project approximately 2.5m above the river bed extending around 8m x 6m into the riverbank. A 4.3m wide tunnel would be formed into the face of the gorge and once operational would be sealed by a doorway. Rising from the intake structure to the top of the gorge would be a rail and stair system which would be 2.5m wide. The turbine house and tailrace sited adjacent to the lower slug waterfall would be finished in appropriate materials and would sit reasonably discreetly in the gorge walls. While the hydro scheme would introduce a new land use into an area which appears as reasonably wild and unmanaged, the design of the scheme and associated mitigation measures would significantly reduce the impacts on visual amenity. The river above the waterfall would continue to flow over the top of rocks and into the gorge and the experiential qualities of the waterfall in spite in respect of

water noise and spray would remain. The proposed hydro scheme would not abstract water in periods of low water flow and would abstract a maximum of 7.4m³/s, while peak river flow can reach 151m³/s in periods of spate.

- 8.42 While the intake structure and tunnel entrance would be visible from the locations on woodland path above the gorge, I consider that the structures could be sited reasonably sympathetically and would benefit from the woodland screening contained on the side of the gorge. Similarly, I do not consider the introduction of the stair and rail system would result in unacceptable effects. As noted in SNH's Site Management Statement for Den of Airlie SSSI, it is not uncommon to find fisherman's paths and associated infrastructure (e.g. bridges) to allow the narrow dens in the Isla and Melgund to be navigated. With the additional planting proposed the stair and rail system could be reasonably discreetly absorbed into the landscape subject to further detail relating to external material finishes. Representation has been received noting the wild land characteristics of the site and raising concerns regarding the landscape and visual impact assessment submitted. SNH has indicated that a wild land assessment would not be required as the scheme falls outwith a Wild Land Area. Given the small scale of the visible infrastructure in the revised proposal, I do not consider that the proposal has significant adverse landscape and visual impacts and this conclusion is supported by SNH.

Other development plan considerations

- 8.43 The applicant has indicated that the grid connection for the development would be taken to the existing overhead 11kV transmission line approximately 200m to the west of the proposed access stair via a new overhead line. The grid connection would require consent from Scottish Government and would be controlled through that process. At this stage I do not anticipate any unacceptable environmental impacts from that connection.
- 8.44 I have no reason to consider that the access for construction and maintenance traffic cannot be achieved without compromising road safety or causing unacceptable and significant environmental or landscape change. The applicant provided a route study and the Roads Service has offered no objection to the proposal subject to agreement being reached regarding traffic management. The plans submitted indicate that the existing farm tracks through Bow Wood from the public road to the east would be improved to facilitate use by construction traffic. The construction traffic should thereafter utilise a route north of Wester Campsie farm steading to reduce amenity impacts that would be associated with the use of that area by construction traffic. The existing access tracks do not form part of the planning application site and the applicant has indicated that improvement works would be undertaken utilising permitted development rights. A section of new access track would be required between the site and Wester Campsie as well as areas to be utilised as construction compounds. Conditions are proposed requiring further details of track improvements and a Traffic Management Plan to ensure agreement is reached with the Roads Authority over the detail of accessing the site and any mitigation required to allow that to happen safely and without damage to the surrounding area. Similarly a condition is proposed requiring approval for the location of construction compounds.
- 8.45 Turning to impacts on residential amenity, the development of a hydro scheme has the potential to impact on residential amenity during construction and operation and the works involve construction and tunnelling activities. The ES states that the expected noise levels associated with the construction (noise thresholds of plant and machinery as well as tunnelling activities) and operation (the operating noise level of the generator and turbine) of the proposed hydro scheme were assessed to identify potential impacts but no significant impacts are anticipated to affect the nearest receptors given the separation distance and the location of much of the activities within a deep ravine next to a waterfall. The ES suggests that temporary impacts during the construction phase will be minimised through adherence to the Code of Construction Practice & Method Statement mitigation measures are proposed to mitigate the construction impacts.
- 8.46 The Environmental Health Service has reviewed the supporting information in the context of impacts on amenity including noise and vibration and potential impacts on private water supplies. In respect of noise, Environmental Health has raised some concerns regarding the approach taken in the information submitted but is satisfied that the ravine would provide sufficient natural attenuation of turbine noise in order that appropriate noise limits set for residential properties will be complied with. In respect of construction noise, Environmental Health is also satisfied that this could be adequately controlled by planning conditions setting

noise limits and requiring the submission of a construction management plan identifying sensitive receptors, hours of operation, complaint investigation procedures and noise, vibration and dust monitoring in order to protect amenity. Environmental Health has also proposed controls to address potential impacts associated with vibration and impact on private water supplies. It is noted that the representations received raise concern regarding location of construction compounds shown on the plans submitted. Subject to the controls proposed by Environmental Health and agreement being reached regarding the specific position of construction compounds (which should be sited to minimise impacts of construction traffic and activities on Wester Campsie), I am satisfied that the development could be constructed and operated without unacceptable impacts on amenity.

- 8.47 The ES indicates that the scheme is expected to be in operation for a minimum of 50 years and with maintenance this timeframe may be extended and as such the point of decommissioning is uncertain. It states that decommissioning would most likely be an almost complete reversal of the construction activities, although it is unlikely that all of the concrete structures would be entirely removed leading to a permanent change in the appearance and composition of some exposed surfaces within the immediate vicinity of the river. A condition is proposed seeking a scheme for the decommissioning of the proposed development along with a bond to secure such restoration.

Conclusion

- 8.48 I have had regard to the environmental information provided in relation to the application, the amendments made to reduce the ecological impact of the proposal and the package of environmental enhancements on offer which propose benefits for the wider Den of Airlie SSSI and not just the area affected by the proposed development. The applicant has suggested that the proposed development would represent an exemplar hydro power development which would not adversely impact on the SSSI or River Tay SAC. I have taken account of the objections and petition submitted from third parties. Consultees have advised that potential adverse ecological impacts can be mitigated and that amenity impacts arising from matters such as noise and vibration can be controlled by condition. It is noted that SEPA has granted a CAR License and is satisfied that the hydro scheme could operate without unacceptable effects on the water environment including impacts on River Jelly Lichen.
- 8.49 Development plan policy provides in principle support for renewable energy developments on appropriate sites. The development plan also acknowledges the importance and sensitivity of SAC's and SSSI's and indicates that development within them should only be allowed exceptionally where it can be adequately demonstrated that the overall integrity of the site would not be compromised. The SPP indicates that direct or indirect effects on statutorily protected sites will be an important consideration, but designation does not impose an automatic prohibition on development. Any negative impacts need to be balanced against the benefits of renewable energy generation and the package of environmental enhancements the scheme would fund for the wider SSSI. The proposal would introduce development in a protected watercourse and a river gorge location which currently displays characteristics and qualities of wild land. It would have some negative effect on those qualities. However, the content of the environmental information submitted and the advice of SNH and SEPA indicates that the environmental impacts have been minimised by the revised weir and intake structure. The proposal would not, when considered as a whole with the enhancement measures, adversely affect the SAC or undermine the overall integrity of the SSSI and could enhance it in the longer term. On balance, I am persuaded that the proposal could result in a net enhancement to the Den of Airlie SSSI with the long term package of management and enhancement measures on offer and the positive aspects would outweigh the negative impacts of constructing the development in this sensitive location.
- 8.50 I accept that the development would contribute towards meeting government energy targets and government guidance confirms that schemes should be supported where the technology can operate efficiently and environmental and cumulative impacts can be satisfactorily addressed. In this case the technology would appear to have potential to operate efficiently and available evidence suggests that environmental impacts can be satisfactorily addressed.
- 8.51 On balance, I find that the proposal accords with the development plan subject to appropriate planning conditions. There are no material considerations that justify refusal of the application.

9. HUMAN RIGHTS IMPLICATIONS

The recommendation in this report for grant of planning permission, subject to conditions, has potential implications for neighbours in terms of alleged interference with privacy, home or family life (Article 8) and peaceful enjoyment of their possessions (First Protocol, Article 1). For the reasons referred to elsewhere in this report justifying this recommendation in planning terms, it is considered that any actual or apprehended infringement of such Convention Rights, is justified. The conditions constitute a justified and proportional control of the use of the property in accordance with the general interest and have regard to the necessary balance of the applicant's freedom to enjoy his property against the public interest and the freedom of others to enjoy neighbouring property/home life/privacy without undue interference.

10. EQUALITIES IMPLICATIONS

The issues contained in this report fall within an approved category that has been confirmed as exempt from an equalities perspective.

11. CONCLUSION

It is recommended that application be approved for the following reasons and subject to the following planning conditions:

Reasons for Approval:

1. The environmental impacts of the proposals as reported in the Environmental Statement and subsequent Addendums and as identified by consultees are considered to be acceptable.
2. The proposal is compatible with the development plan.
3. The proposal would contribute towards the generation of renewable energy and to the wider enhancement of the Den of Airlie SSSI.
4. There are no material planning considerations that justify refusal of the application.

Conditions:

1. That the development shall be undertaken in accordance with the Slug of Auchrannie Hydropower Scheme Environmental Statement dated September 2012 and the mitigation measures identified therein as modified by the Addendum to the Environmental Statement dated May 2013 and by the Further Addendum to the Environmental Statement dated July 2014 unless expressly modified by conditions of this planning permission.

Reason: In order to ensure that the development is undertaken in a manner that mitigates adverse impact on the environment.

2. That prior to the commencement of any works in connection with the planning permission hereby approved, section 10.11 of Volume I of the Environmental Statement dated 18 September 2012 shall be revised to reflect the amended scheme and updated to incorporate the mitigation measures identified by the Addendum to the Environmental Statement dated May 2013 and by the Further Addendum to the Environmental Statement dated July 2014 and shall be submitted to and approved in writing by the Planning Authority in consultation with Scottish Natural Heritage. Specifically, the mitigation measures shall include: -
 - (i) A project plan setting out the key dates that works are to be undertaken and making specific provision that no 'in river' construction activities shall take place during the spawning season from 1 November to 15 May inclusive;
 - (ii) Arrangements for an Ecological Clerk of Works (ECoW) to be engaged for the duration of the construction activities in accordance with the Construction Method Statement and for a River Jelly Lichen (RJL) specialist to be engaged during the construction of the coffer dam. A schedule that identifies the key

- stages during which the ECoW and RJL specialist will be in attendance on site and a programme for regular monitoring visits shall be provided. The ECoW and RJL specialist shall be on site and shall help microsite the coffer dam to minimise effects on River Jelly Lichen;
- (iii) Construction of the coffer dam shall be in general accordance with Drawing No. 1457-SK-RB02 dated 24 April 2014 and contained in the Further Addendum to the Environmental Statement dated July 2014 (subject to detailed micrositing) and the temporary footprint shall be no more than 7.5m across the width of the riverbed as indicated on that drawing;
 - (iv) Details of a scheme to ensure that, for the duration of the coffer dam installation (which shall be for a maximum period of 8-weeks unless otherwise approved in writing by the planning authority), the RJL within the resultant 'dry' area shall be kept damp using bog mats and pumped water;
 - (v) Details of soil capture measures that shall be installed and used to avoid impacts of small soil and rock slips;
 - (vi) Details of a scheme to ensure that pre-cast concrete structures shall be used during construction where possible;
 - (vii) Details of all tree works required in association with the development, including precise details of any trees to be felled, lopped or topped, and details of temporary measures to protect tree roots during construction as outlined in the Amended Construction Method Statement from the Further Addendum to the Environmental Statement, The John Hogg Group, July 2014. This shall include a plan that identifies the zone of protection surrounding trees.

The development shall be undertaken in accordance with the construction phase and operational phase mitigation measures approved therein.

Reason: In order to ensure that the development is undertaken in a manner that mitigates adverse impact on the environment.

3. That prior to the commencement of any works in connection with the planning permission hereby approved, a Den of Airlie SSSI Enhancement Plan for inclusion in the Den of Airlie Long Term Forest Plan (LTFP) shall be submitted to and approved in writing by the Planning Authority. This should include (1) works to control invasive non-native flora, including *Spiraea Douglasii*; (2) a scheme for the survey, monitoring and habitat improvement for River Jelly Lichen; (3) a scheme for the translocation and habitat enhancement for whorled solomon's seal; (4) a scheme for the relocation and marking of other rare lichen species (including *Gyalecta ulmi* and *Opegrapha paraxanthodes*) in close proximity to the site as identified in John Douglas's 2012 report (Table 3, Figure 2 and Plate 7 therein) in accordance with a valid license under the Wildlife and Countryside Act (1981); (5) details of long-term footpath and drainage maintenance, (6) a Sediment Management Plan following Best Practice; and (7) incorporating the details provided in Appendix 14 of the Further Addendum to the Environmental Statement dated July 2014. The Enhancement Plan shall also provide an annual work programme and a 5-year review both to be approved by Angus Council in consultation with SNH; and an annual report of enhancement activities which have taken place in the preceding year. The approved Enhancement Plan shall be implemented upon commencement of the development hereby approved and shall remain in force for the duration of the operational life of the development.

Reason: In order to ensure that the enhancement measures proposed are sufficient to offset the adverse impacts of the proposed development on Den of Airlie SSSI.

4. That prior to the commencement of any works in connection with the planning permission hereby approved, the following shall be submitted to and approved in writing by the Planning Authority and development shall be undertaken in accordance with the approved details thereafter:-
 - (i) the precise location and details of any installation, pipework or cable required to connect the development to the national grid;
 - (ii) precise details of any construction compounds, temporary storage areas, portable cabins, lighting, fencing and associated structures to be used during the construction period and a scheme for their subsequent removal. Within 3 months of the commissioning of the hydro scheme, all such temporary

- structures, together with soil and materials stockpiles shall be removed from the site and the ground fully reinstated in accordance with the approved details. The loading and unloading of vehicles shall only take place at locations agreed in writing with the planning authority;
- (iii) precise details of how the intake tunnel entrance would be finished including materials to be used and any associated measures to minimise its visual impact;
 - (iv) precise details of the finishing materials for the proposed turbine house. The external walls of the turbine house shall be finished in natural stone;
 - (v) precise details of the access stair and rail system showing the areas where the stair would be suspended and/or other means to prevent fragmentation of the woodland as well as details of materials to be used in their construction;
 - (vi) a construction management and amenity protection scheme. The construction management and amenity protection scheme shall focus on noise, vibration and dust and shall include full details of the following: (a) Details of sensitive receptors; (b) Hours of construction operations; (c) Mitigation measures; (d) Complaint investigation procedures; (e) Noise, vibration and dust monitoring measures;
 - (vii) a Private water supply management plan. The aforementioned management plan shall include full details of the following:
 - a. Details of all private water supplies that maybe affected
 - b. Mitigation measures
 - c. Complaint investigation procedures
 - d. Water quality monitoring
 - e. Emergency supply arrangements
 - (viii) the name, contact details and qualifications of the Ecological Clerk of Works (ECoW) and River Jelly Lichen specialist that are to be engaged in association with the project.

Reason: (i) in order to ensure any environmental impacts associated with ancillary development are appropriately mitigated; (ii) in order to ensure that any impacts associated with the siting of construction compounds are fully considered; (iii) in order to ensure that the visual impacts associated with the tunnel are minimised; (iv) in order to ensure that the proposed turbine house walls are finished in materials which are compatible with the geology of the gorge in the interests of minimising landscape impact; (v) in order to ensure that impacts associated with fragmentation of the woodland caused by the proposed stair and rail system is minimised; (vi) in order to ensure that the amenity impacts associated with the construction of the scheme are mitigated; (vii) in order to ensure that the proposal does not adversely impact on private water supplies; (viii) in order to ensure that appropriately qualified persons are engaged in the construction process and to ensure that the planning authority has relevant contact details.

- 5. That from the date of this planning permission and for the duration of construction activities, no trees within the planning application site boundary, other than any approved for felling or other tree works under condition 2 above, shall be felled, lopped or topped unless otherwise approved in writing by the planning authority.

Reason: In order to ensure that the development does not give rise to unacceptable impacts on natural heritage and to ensure appropriate mitigation.

- 6. That unless otherwise approved in writing by the Planning Authority no heavy goods vehicles or plant associated with the construction of the development, shall enter or leave the site on any Sunday or Public Holiday (as defined by Angus Council) nor on any other day except between the following times: -

Mondays to Fridays: 7.00am to 7.00pm
Saturdays: 7.00am to 1.00pm

Reason: In the interests of residential amenity.

- 7. That the developer shall secure the implementation of an archaeological watching brief, to be carried out by an archaeology organisation acceptable to the Planning Authority, during any ground break and development work, new access tracks and associated infrastructure. The retained archaeological organisation shall be afforded

access at all reasonable times and allowed to record and recover items of interest and finds. Terms of reference for the watching brief will be supplied by Aberdeenshire Council Archaeology Service or such other organisation as may be specified by the Planning Authority.

Reason: In order to record items of archaeological interest and finds.

8. That prior to the commencement of any works in connection with this permission a Traffic Management Plan shall be submitted to and approved in writing by the Planning Authority. Thereafter the development shall be undertaken in accordance with the details contained in the approved Traffic Management Plan.

The Traffic Management Plan shall include :-

- the type and volume of vehicles to be utilised in the delivery to the site of materials and turbine components associated with the construction and erection of the hydro scheme;
- full details of any improvements works proposed to the existing track between the site and the public road including any improvements to drainage;
- details of any new temporary access tracks as well as details for their removal and associated land reinstatement following completion of the development;
- the precise route for delivery of materials and components associated with the construction of the hydro scheme. For clarification, construction traffic and associated material deliveries shall utilise the route shown on the submitted plans through Bow Wood from the east and to the north of Wester Campsie farm court (and not through Waster Campsie) unless otherwise approved in writing by the Planning Authority).

Reason: In order to ensure that full consideration is given to the traffic impacts associated with construction works and the associated amenity impacts of vehicular movements associated with those works.

9. That before the start of the development, the developer(s) shall provide to the Planning Authority details of a decommissioning and restoration scheme for the development. This shall include a bond or other financial provision which it proposes to put in place to cover all decommissioning and site restoration costs. No work shall commence on the site until the developer(s) has provided documentary evidence that the proposed bond or other financial provision is in place and written confirmation has been given by the Planning Authority that the proposed bond or other financial provision is satisfactory. The developer(s) shall ensure that the approved bond or other financial provision is maintained throughout the duration of this permission.

Reason: To ensure that there is an acceptable decommissioning and restoration scheme and that there are sufficient funds available throughout the life of the development to carry out the full restoration of the site.

10. Noise associated with construction or demolition works including the movement of materials, plant and equipment shall not exceed the noise limits shown in table C below unless otherwise first approved in writing by the Planning Authority. At all other times noise associated with construction or demolition operations shall be inaudible at any sensitive receptor. For the avoidance of doubt sensitive receptors includes all residential properties, hospitals, schools and office buildings or any other similar premises.

Table C: Noise limits

Day	Time	Average Period (t)	Noise limit
Monday-Friday	0700-1900	12 hour	70 dBA Leq t
Saturday	0700-1300	6 hour	70 dBA Leq t

Reason: In order to protect the amenity of noise sensitive receptors.

11. Noise from any fixed plant associated with the development shall not give rise to a noise level assessed with windows open within any dwelling or noise sensitive building in excess of that equivalent to NR curve 30 between 0700 and 2200 and NR curve 20 at all other times.

Reason: In order to protect the amenity of noise sensitive receptors.

12. That vibration levels, associated with construction, operation or maintenance activities associated with the development shall not exceed 1mms^{-1} PPV at existing residential properties unless otherwise first approved in writing by the Planning Authority. The above vibration limit relates to maximum PPV ground borne vibration occurring in any one of three mutually perpendicular axes. Vibration is to be measured on the foundation or on an external façade no more than 1m above ground level or on solid ground as near the façade as possible.

Reason: In order to protect the amenity of vibration sensitive receptors.

NOTE: No background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973, (other than any containing confidential or exempt information) were relied on to any material extent in preparing the above Report.

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Date: 15 January 2015

List of Appendices: Appendix 1 –Relevant Development Plan Policies
 Appendix 2 & 2a – Site Plan
 Appendix 3 – Environmental Statement – Summary of Impacts

APPENDIX 1 – RELEVANT DEVELOPMENT PLAN POLICIES

TAYPLAN (2012)

DEVELOPMENT PLAN POLICIES AGAINST WHICH THE PROPOSAL HAS BEEN ASSESSED

TAYplan

Policy 3: Managing TAYplan's Assets

Understanding and respecting the regional distinctiveness and scenic value of the TAYplan area through:-

- ensuring development likely to have a significant effect on a designated or proposed Natura 2000 sites (either alone or in combination with other sites or projects), will be subject to an appropriate assessment. Appropriate mitigation requires to be identified where necessary to ensure there will be no adverse effect on the integrity of Natura 2000 sites in accordance with Scottish Planning Policy;
- safeguarding habitats, sensitive green spaces, forestry, watercourses, wetlands, floodplains (in-line with the water framework directive), carbon sinks, species and wildlife corridors, geo-diversity, landscapes, parks, townscapes, archaeology, historic buildings and monuments and allow development where it does not adversely impact upon or preferably enhances these assets; and,
- identifying and safeguarding parts of the undeveloped coastline along the River Tay Estuary and in Angus and North Fife, that are unsuitable for development and set out policies for their management; identifying areas at risk from flooding and sea level rise and develop policies to manage retreat and realignment, as appropriate.

Policy 6: Energy and Waste/Resource Management Infrastructure

Local Development Plans should identify areas that are suitable for different forms of renewable heat and electricity infrastructure and for waste/resource management infrastructure or criteria to support this; including, where appropriate, land for process industries (e.g. the co-location/proximity of surplus heat producers with heat users).

Local Development Plans and development proposals should ensure that all areas of search, allocated sites, routes and decisions on development proposals for energy and waste/resource management infrastructure have been justified, at a minimum, on the basis of these considerations:-

- The specific land take requirements associated with the infrastructure technology and associated statutory safety exclusion zones where appropriate;
- Waste/resource management proposals are justified against the Scottish Government's Zero Waste Plan and support the delivery of the waste/resource management hierarchy;
- Proximity of resources (e.g. woodland, wind or waste material); and to users/customers, grid connections and distribution networks for the heat, power or physical materials and waste products, where appropriate;
- Anticipated effects of construction and operation on air quality, emissions, noise, odour, surface and ground water pollution, drainage, waste disposal, radar installations and flight paths, and, of nuisance impacts on of-site properties;
- Sensitivity of landscapes (informed by landscape character assessments and other work), the water environment, biodiversity, geo-diversity, habitats, tourism, recreational access and listed/scheduled buildings and structures;
- Impacts of associated new grid connections and distribution or access infrastructure;
- Cumulative impacts of the scale and massing of multiple developments, including existing infrastructure;
- Impacts upon neighbouring planning authorities (both within and outwith TAYplan); and,

- Consistency with the National Planning Framework and its Action Programme.

Angus Local Plan Review

Policy S1: Development Boundaries

- Within development boundaries proposals for new development on sites not allocated on Proposals Maps will generally be supported where they are in accordance with the relevant policies of the Local Plan.
- Development proposals on sites outwith development boundaries (i.e. in the countryside) will generally be supported where they are of a scale and nature appropriate to the location and where they are in accordance with the relevant policies of the Local Plan.
- Development proposals on sites contiguous with a development boundary will only be acceptable where there is a proven public interest and social, economic or environmental considerations confirm there is an overriding need for the development which cannot be met within the development boundary.

Policy S3: Design Quality

A high quality of design is encouraged in all development proposals. In considering proposals the following factors will be taken into account:

- site location and how the development fits with the local landscape character and pattern of development;
- proposed site layout and the scale, massing, height, proportions and density of the development including consideration of the relationship with the existing character of the surrounding area and neighbouring buildings;
- use of materials, textures and colours that are sensitive to the surrounding area; and
- the incorporation of key views into and out of the development.

Innovative and experimental designs will be encouraged in appropriate locations.

Policy S4: Environmental Protection

Where development proposals raise issues under environmental protection regimes, developers will require to demonstrate that any environmental protection matter relating to the site or the development has been fully evaluated. This will be considered alongside planning matters to ensure the proposal would not unacceptably affect the amenity of the neighbourhood.

Policy S6: Development Principles

Proposals for development should where appropriate have regard to the relevant principles set out in Schedule 1 which includes reference to amenity considerations; roads and parking; landscaping, open space and biodiversity; drainage and flood risk, and supporting information.

Schedule 1 : Development Principles

Amenity

- The amenity of proposed and existing properties should not be affected by unreasonable restriction of sunlight, daylight or privacy; by smells or fumes; noise levels and vibration; emissions including smoke, soot, ash, dust, grit, or any other environmental pollution; or disturbance by vehicular or pedestrian traffic.
- Proposals should not result in unacceptable visual impact.
- Proposals close to working farms should not interfere with farming operations, and will be expected to accept the nature of the existing local environment. New houses should not be sited within 400m of an existing or proposed intensive livestock building. (Policy ER31).

Roads/Parking/Access

- Access arrangements, road layouts and parking should be in accordance with Angus Council's Roads Standards, and use innovative solutions where possible, including 'Home Zones'. Provision for cycle parking/storage for flatted development will also be required.
- Access to housing in rural areas should not go through a farm court.
- Where access is proposed by unmade/private track it will be required to be made-up to standards set out in Angus Council Advice Note 17 : Miscellaneous Planning Policies. If the track exceeds 200m in length,

- conditions may be imposed regarding widening or the provision of passing places where necessary.
- (g) Development should not result in the loss of public access rights. (Policy SC36)

Landscaping / Open Space / Biodiversity

- (h) Development proposals should have regard to the Landscape Character of the local area as set out in the Tayside Landscape Character Assessment (SNH 1998). (Policy ER5)
- (i) Appropriate landscaping and boundary treatment should be an integral element in the design and layout of proposals and should include the retention and enhancement of existing physical features (e.g. hedgerows, walls, trees etc) and link to the existing green space network of the local area.
- (j) Development should maintain or enhance habitats of importance set out in the Tayside Local Biodiversity Action Plan and should not involve loss of trees or other important landscape features or valuable habitats and species.
- (k) The planting of native hedgerows and tree species is encouraged.
- (l) Open space provision in developments and the maintenance of it should be in accordance with Policy SC33.

Drainage and Flood Risk

- (m) Development sites located within areas served by public sewerage systems should be connected to that system. (Policy ER22)
- (n) Surface water will not be permitted to drain to the public sewer. An appropriate system of disposal will be necessary which meets the requirements of the Scottish Environment Protection Agency (SEPA) and Angus Council and should have regard to good practice advice set out in the Sustainable Urban Drainage Systems Design Manual for Scotland and Northern Ireland 2000.
- (o) Proposals will be required to consider the potential flood risk at the location. (Policy ER28)
- (p) Outwith areas served by public sewerage systems, where a septic tank, bio-disc or similar system is proposed to treat foul effluent and /or drainage is to a controlled water or soakaway, the consent of SEPA and Angus Council will be required. (Policy ER23).
- (q) Proposals should incorporate appropriate waste recycling, segregation and collection facilities (Policy ER38)
- (r) Development should minimise waste by design and during construction.

Supporting Information

- (s) Where appropriate, planning applications should be accompanied by the necessary supporting information. Early discussion with Planning and Transport is advised to determine the level of supporting information which will be required and depending on the proposal this might include any of the following: Air Quality Assessment; Archaeological Assessment; Contaminated Land Assessment; Design Statement; Drainage Impact Assessment; Environmental Statement; Flood Risk Assessment; Landscape Assessment and/or Landscaping Scheme; Noise Impact Assessment; Retail Impact Assessment; Transport Assessment.

Policy ER1: Natura 2000 and Ramsar Sites

Development likely to have a significant effect on a designated, candidate or proposed Natura 2000 site (Special Protection Areas and Special Areas of Conservation), or Ramsar site and not connected with or necessary to the conservation management of the site must undergo an appropriate assessment as required by Regulation 48 of the Conservation (Natural Habitats etc.) Regulations 1994. Development will only be permitted exceptionally and where the assessment indicates that:

- (a) it will not adversely affect the integrity of the site; or
- (b) there are no alternative solutions; and
- (c) there are imperative reasons of overriding public interest, including those of a social or economic nature.

Where proposals affect a priority habitat and/or priority species as defined by the Habitats Directive (92/43/EEC), the only overriding public interest must relate to human health, public safety or beneficial consequences of primary importance to the environment. Other allowable exceptions are subject to the views of the European Commission.

Policy ER2: National Nature Reserves and Sites of Special Scientific Interest

Developments affecting National Nature Reserves and Sites of Special Scientific Interest will only be permitted exceptionally where it can be adequately demonstrated that either:

- (a) the proposed development will not compromise, destroy or adversely affect the conservation objectives and/or particular interest for which the site was notified; or
- (b) there is an overriding and proven public interest where social or economic considerations outweigh the need to safeguard the ecological, geological or geomorphological interest of the site and the need for the development cannot be met in other less damaging locations or by reasonable alternative means.

Policy ER3: Regional and Local Designations

Development which would adversely affect sites containing habitats, species, and/or geological or geomorphological features of local or regional importance, whether designated or otherwise, will only be permitted where:

- (a) ecological appraisals have demonstrated to the satisfaction of the Council that the overall integrity of the site and the features of natural heritage value will not be compromised; or
- (b) the economic and social benefits arising from the proposal significantly outweigh the natural heritage value of the site.

Policy ER4: Wider Natural Heritage and Biodiversity

The Council will not normally grant planning permission for development that would have a significant adverse impact on species or habitats protected under British or European Law, identified as a priority in UK or Local Biodiversity Action Plans or on other valuable habitats or species.

Development proposals that affect such species or habitats will be required to include evidence that an assessment of nature conservation interest has been taken into account. Where development is permitted, the retention and enhancement of natural heritage and biodiversity will be secured through appropriate planning conditions or the use of Section 75 Agreements as necessary.

Policy ER5: Conservation of Landscape Character

Development proposals should take account of the guidance provided by the Tayside Landscape Character Assessment and where appropriate will be considered against the following criteria:

- (a) sites selected should be capable of absorbing the proposed development to ensure that it fits into the landscape;
- (b) where required, landscape mitigation measures should be in character with, or enhance, the existing landscape setting;
- (c) new buildings/structures should respect the pattern, scale, siting, form, design, colour and density of existing development;
- (d) priority should be given to locating new development in towns, villages or building groups in preference to isolated development.

Policy ER6 : Trees, Woodlands and Hedgerows

Trees, woodlands and hedgerows which have a landscape, amenity and/or nature conservation value will be protected from development. Development that would result in the loss of or damage to ancient or semi-natural woodlands will not be permitted. Tree Preservation Orders will be promoted to protect groups of trees or individual significant trees of importance to the amenity of a surrounding area where such trees and woodland are under threat. Management Agreements will be introduced, where appropriate, to ensure the establishment of new and replacement planting. Tree planting initiatives such as Community Woodland proposals and other amenity planting will continue to be supported and encouraged.

Policy ER7 : Trees on Development Sites

Planning applications for development proposals affecting sites where existing trees and hedges occur and are considered by Angus Council to be of particular importance will normally be required to:

- (a) provide a full tree survey in order to identify the condition of those trees on site;
- (b) where possible retain, protect and incorporate existing trees, hedges, and treelines within the design and layout;
- (c) include appropriate new woodland and or tree planting within the development proposals to create diversity and additional screening, including preserving existing treelines, planting hedgerow trees or gapping up/ enhancing existing treelines.

In addition developers may be required to provide an Arboricultural Methods Statement, a Performance Bond and/or enter into Section 75 Agreements.

Policy ER11: Noise Pollution

Development which adversely affects health, the natural or built environment or general amenity as a result of an unacceptable increase in noise levels will not be permitted unless there is an overriding need which cannot be accommodated elsewhere.

Proposals for development generating unacceptable noise levels will not generally be permitted adjacent to existing or proposed noise-sensitive land uses. Proposals for new noise-sensitive development which would be subject to unacceptable levels of noise from an existing noise source or from a proposed use will not be permitted.

Policy ER16: Development Affecting the Setting of a Listed Building

Development proposals will only be permitted where they do not adversely affect the setting of a listed building. New development should avoid building in front of important elevations, felling mature trees and breaching boundary walls.

Policy ER18: Archaeological Sites of National Importance

Priority will be given to preserving Scheduled Ancient Monuments in situ. Developments affecting Scheduled Ancient Monuments and other nationally significant archaeological sites and historic landscapes and their settings will only be permitted where it can be adequately demonstrated that either:

- (a) the proposed development will not result in damage to the scheduled monument or site of national archaeological interest or the integrity of its setting; or
- (b) there is overriding and proven public interest to be gained from the proposed development that outweighs the national significance attached to the preservation of the monument or archaeological importance of the site. In the case of Scheduled Ancient Monuments, the development must be in the national interest in order to outweigh the national importance attached to their preservation; and
- (c) the need for the development cannot reasonably be met in other less archaeologically damaging locations or by reasonable alternative means; and
- (d) the proposal has been sited and designed to minimise damage to the archaeological remains.

Where development is considered acceptable and preservation of the site in its original location is not possible, the excavation and recording of the site will be required in advance of development, at the developer's expense.

Policy ER19: Archaeological Sites of Local Importance

Where development proposals affect unscheduled sites of known or suspected archaeological interest, Angus Council will require the prospective developer to arrange for an archaeological evaluation to determine the importance of the site, its sensitivity to development and the most appropriate means for preserving or recording any archaeological information. The evaluation will be taken into account when determining whether planning permission should be granted with or without conditions or refused.

Where development is generally acceptable and preservation of archaeological features in situ is not feasible Angus Council will require through appropriate conditions attached to planning consents or through a Section 75 Agreement, that provision is made at the developer's expense for the excavation and recording of threatened features prior to development commencing.

Policy ER20: Historic Gardens and Designed Landscapes

Sites included in the "Inventory of Gardens and Designed Landscapes in Scotland", and any others that may be identified during the plan period, will be protected from development that adversely affects their character, amenity value and historic importance. Development proposals will only be permitted where it can be demonstrated that:

- (a) the proposal will not significantly damage the essential characteristics of the garden and designed landscape or its setting; or
- (b) there is a proven public interest, in allowing the development, which cannot be met in other less damaging locations or by reasonable alternative means.

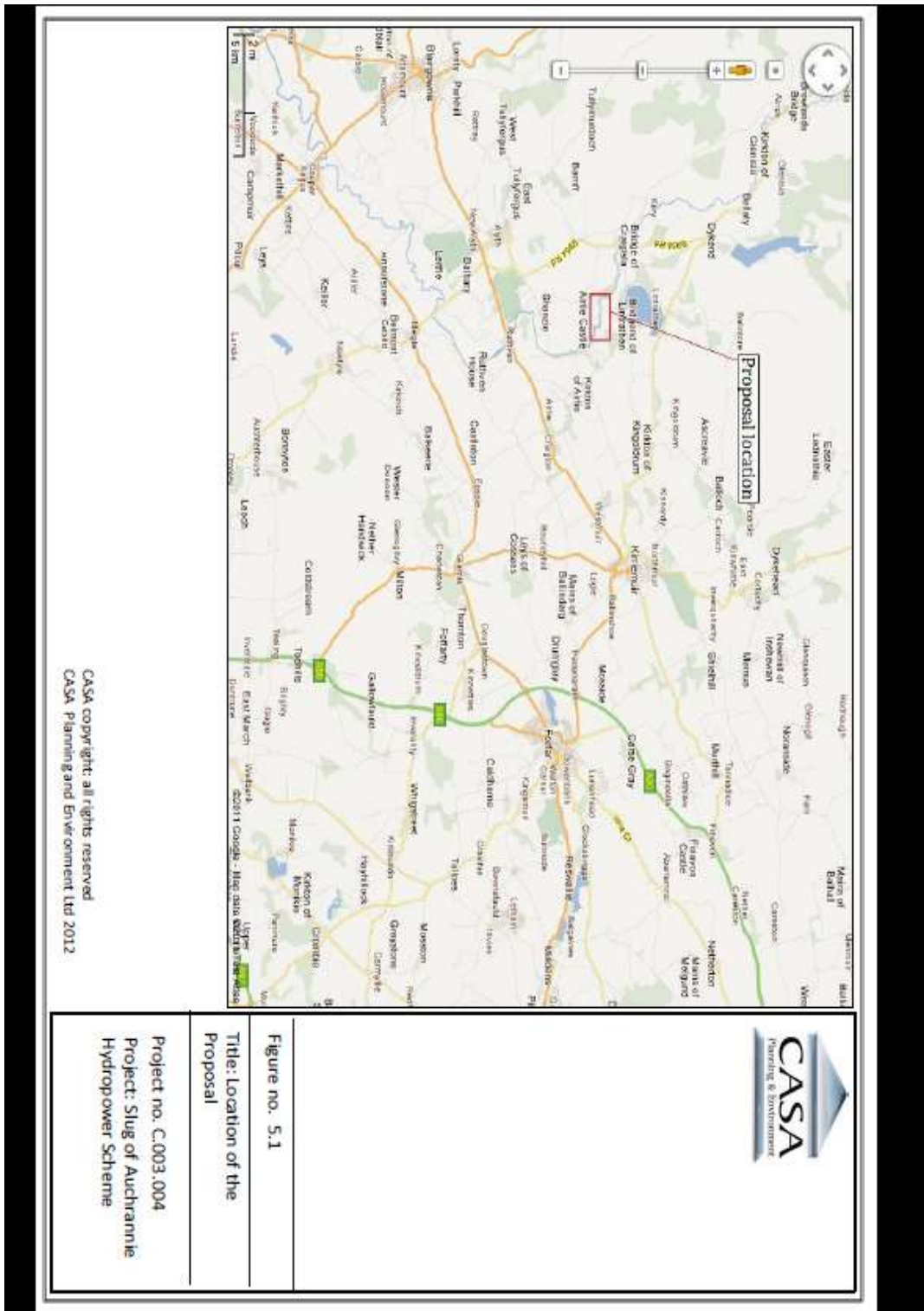
Protection will also be given to non-inventory historic gardens, surviving features of designed landscapes, and parks of regional or local importance, including their setting.

Policy ER34: Renewable Energy Developments

Proposals for all forms of renewable energy developments will be supported in principle and will be assessed against the following criteria:

- (a) the siting and appearance of apparatus have been chosen to minimise the impact on amenity, while respecting operational efficiency;
- (b) there will be no unacceptable adverse landscape and visual impacts having regard to landscape character, setting within the immediate and wider landscape, and sensitive viewpoints;
- (c) the development will have no unacceptable detrimental effect on any sites designated for natural heritage, scientific, historic or archaeological reasons;
- (d) no unacceptable environmental effects of transmission lines, within and beyond the site; and
- (e) access for construction and maintenance traffic can be achieved without compromising road safety or causing unacceptable permanent change to the environment and landscape, and
- (f) that there will be no unacceptable impacts on the quantity or quality of groundwater or surface water resources during construction, operation and decommissioning of the energy plant.

APPENDIX 2 - SITE PLAN

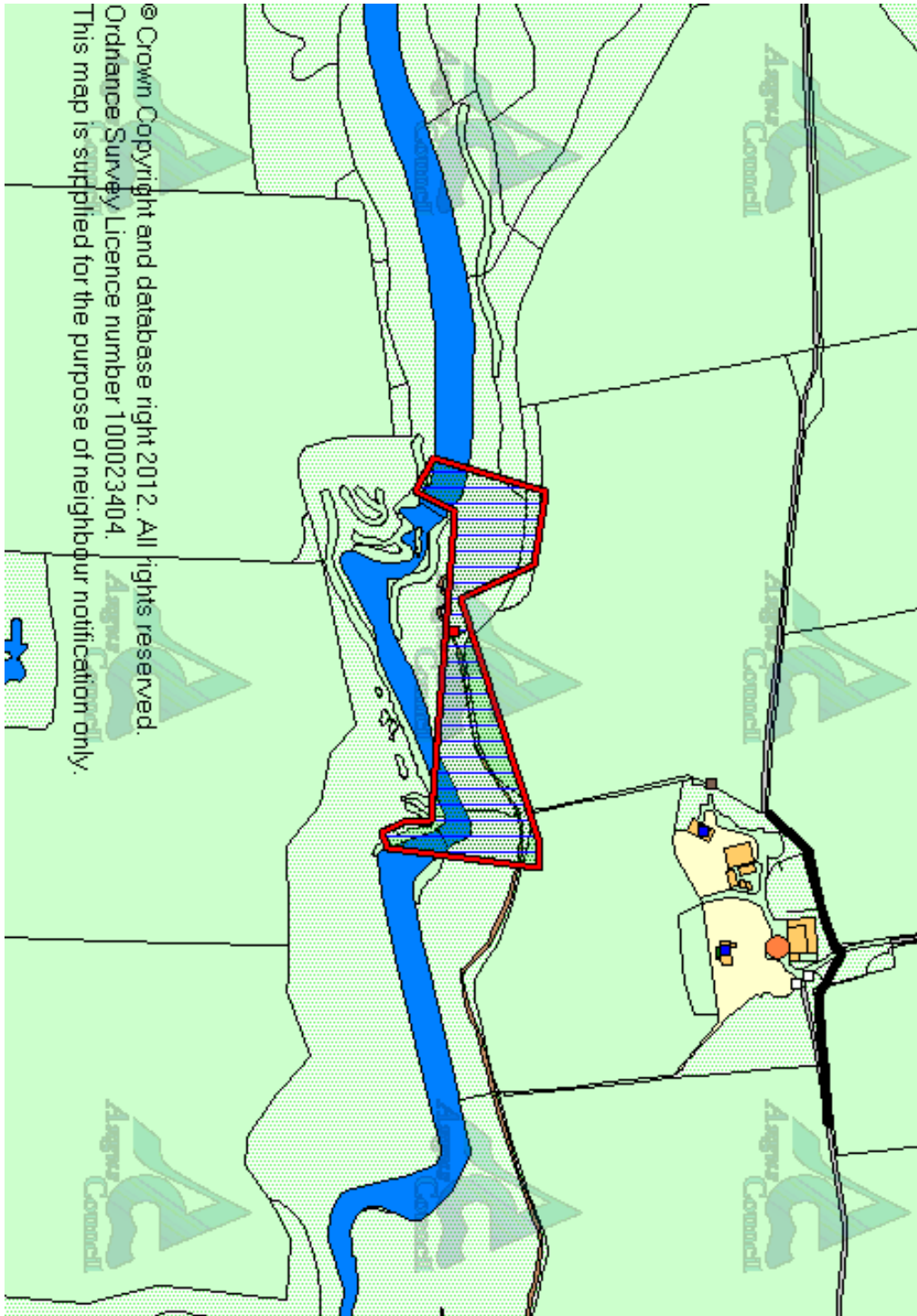


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<p>Figure no. 5.1</p> <p>Title: Location of the Proposal</p>	<p>Project no. C.003.004</p> <p>Project: Slug of Auchranne</p> <p>Hydropower Scheme</p>
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APPENDIX 2a – SITE PLAN



APPENDIX 3 – ENVIRONMENTAL STATEMENT – SUMMARY OF IMPACTS (Table 21-1 of ES Written Statement, September 2012)

Theme	Potential Impacts	Significance
Climate Change and Air Quality	Minor and moderate positive impacts are predicted in relation to equivalent air pollutant and greenhouse gas reduction respectively, associated with the technology.	Moderate/Major Beneficial
Cultural Heritage	No effects are predicted for this theme as the site is in an inaccessible location out of view. Mitigation of indirect effects relating to the construction of temporary access tracks and any clearing of sites include maintaining an archaeological watching brief (see Appendix I).	Negligible
Ecology	Some localised construction impacts on ravine habitat (Calcareous scree, woodland, bryophytes) with potential temporary sedimentation of River Jelly Lichen at weir intake site. A minor/moderate operational impact on River Jelly Lichen populations within the direct vicinity of the intake weir and minor impact on populations upstream due to potential sedimentation.	Minor/Moderate Adverse
Hydrology	A minor adverse impact is predicted as the scheme only draws water from the river during periods where there is sufficient flow, with excess flow continuing over the intake weir. There is also a minor adverse impact associated with potential fluvial sedimentation; however, a number of mitigation measures have been adopted into the weir design and position to ensure sedimentation is minimised.	Minor
Landscape Character and Visual	Some minor adverse temporary impacts deriving from the construction and operation of the proposal and long-term impacts in respect of scheme infrastructure. The scheme will be visually obscured from publicly accessible areas and the River Isla banks are heavily wooded with the proposal set being within a deep ravine.	Minor
Noise & Vibration	Some minor adverse temporary effects are predicted for this theme in respect of construction traffic travelling to and from the site. A Code of Construction Practice & Method Statement should ensure that such effects are minimised through the setting of appropriate delivery times and operating procedures for plant and materials (Appendix I).	Minor
Planning	The scheme will have an overall positive effect in terms of contributing toward Climate Change policy targets and rural diversification.	Positive
Socio-Economic Factors	Minor positive impact associated with local economic development and rural diversification.	Minor Positive
Soils and Geology	Some Minor to Negligible adverse impacts are predicted for soils due to construction works and the nature of the location (steep sloping banks), but with appropriate mitigation impacts are assumed to be minimised.	Negligible

Theme	Potential Impacts	Significance
Transport and Access	There are no residual impacts predicted for this theme. However, temporary access routes and turning areas for construction traffic at the site will have to be suitably reinstated where appropriate. In addition, a rarely used access (not public) footpath travels along the north edge of the ravine, and attention will have to be given to offering walkers an alternative or diversion route around any temporary works areas that may block the path with appropriate signage being placed where required.	Negligible
Cumulative Impacts	Three Type-1 cumulative impacts are predicted in relation to the scheme in respect of Landscape & Ecology, Air Quality & Noise and Ecology and Hydrology. These impacts and associated mitigation have been considered in the finalisation of the Schedule of Environmental Commitments (Chapter 20) and the Code of Construction Practice and Method Statement (Appendix I).	Negligible