THE HIGHLAND COUNCIL

Agenda Item	4.3
Report No	PLC-9-07

CAITHNESS, SUTHERLAND AND EASTER ROSS PLANNING APPLICATIONS COMMITTEE – 28 AUGUST 2007

06/1166/S36RC

Report by Area Planning and Building Standards Manager

SUMMARY

The Committee is invited to consider the following report and recommendation.

This is a consultation by the Scottish Executive under Section 36 of the Electricity Act 1989 for the construction and operation of a hydro electric generating scheme on the River Glass, Evanton.

Name of Applicant: RWE Npower plc

Ward 7: Cromarty Firth

The recommendation is that the Council does not object to the scheme subject to a number of proposed conditions.

1. PROPOSAL

1.1 The Section 36 Application to the Scottish Executive is for the construction and operation of a hydro electric generating scheme (3.5 MW) under the Electricity Act 1989. The proposal is for a run-of-river project meaning that the scheme would only operate when there is sufficient natural water flow in the river.

1.2 The scheme comprises the construction of the following elements:

- An intake weir to collect water from the River Glass;
- A powerhouse which would house a turbine and generator;
- A buried pipe to convey water from the intake to the powerhouse;
- A pipe river crossing;
- A short buried tailrace to return the water to the river;
- A number of temporary access tracks;
- Upgrading of an existing track for permanent access to the powerhouse;
- A buried cable running from the powerhouse to an existing overhead line to provide grid connection.

1.3 The scheme is to be located on the lower catchment of the River Glass, between Redburn and Evanton and adjacent to the Black Rock Gorge. The water would be abstracted from the River Glass by means of a low profile concrete weir and transported via a buried pipeline to a powerhouse approximately 3.5 kilometres downstream. Water would then be discharged through one or more turbines and returned to the river, via a buried tailrace.

1.4 The landscape within which the scheme is to be located comprises largely coniferous plantation and mixed semi-natural woodland. The River Glass flows south-east from Loch Glass running through the Black Rock Gorge which is designated as a Site of Special Scientific Interest before widening out just north of Evanton. The woodland is managed by Novar Estate and is also used heavily for recreational purposes with a series of paths established connecting the village with the gorge and the minor Glenglass Road to the immediate north-east. The River Glass is also popular with anglers.

1.5 The application has been accompanied by an Environmental Statement, copies of which are available for inspection in the Council's Planning & Development Service Area Office at 2 Achany Road, Dingwall.

2. PLANNING HISTORY

2.1 In July 2004, the applicants sent Scottish Ministers a Scoping Report which detailed the preliminary outline proposals for the project and subsequently received a Scoping Opinion from the Scottish Executive in January 2005. This informed the content of the Environmental Impact Assessment which has been submitted as part of the application.

2.2 The submission recognises the two existing renewable energy projects on Novar Estate grounds, those being a 17 megawatt windfarm and 0.9 megawatt hydro electric scheme, both constructed in 1997.

3. PUBLIC PARTICIPATION

3.1 The application was advertised by the applicants in accordance with Section 36 procedures in The Edinburgh Gazette, The Glasgow Herald, The North Star and The Ross-shire Journal in December, 2006. Objections or representations had to be made in writing to the Scottish Executive. The expiry date for the publicity period was 16th February, 2007.

3.2 7 letters from 8 households, with a total of 16 signatories were received. None of the parties making representation has objected to the proposal, however the following is a summary of the concerns raised:

- Reservations regarding the adequacy of the Glenglass public road to accept the construction traffic proposed. There is a need for Glenglass Road to be upgraded with more passing places and verges strengthened. The bridge at Redburn is specifically mentioned and concern is also expressed over the junction at Culcairn Cottage and the

retaining wall adjacent to Assynt Mill. There is a need for the road to be kept open at all times and for lower speed limits to be created.

- Need for the salmon habitat to be protected and a request that water should not be removed from the gorge, by either locating the tailrace in the gorge or confining generation (removing water from the gorge) to a period from late October to June of each year. It is also suggested that as salmon prefer highly oxygenated water as found coming out of the tailrace, the adult fish will probably stop off at the tailrace on the way up river or fall back down the river from the safety of the gorge creating a concentration which will result in the salmon being subject to over-fishing and poaching.
- Concern over the noise of construction traffic particularly on adjacent houses and local tourist related businesses. 18 months of construction will disturb the quiet and tranquil setting as currently exists.

4. CONSULTATIONS

4.1 **TEC Services (Transport):** No objections to the principle of the scheme and when complete is it believed it will have little impact on the interests of the Service. However, there are concerns in relation to construction impact and it is believed that the construction issues and how they affect the Glenglass Public Road have not been adequately addressed at this time. There have been recent public complaints about damage, mess and disruption caused by works traffic on this road and other minor roads around Evanton and it is important that lessons are learned and robust controls are placed on the developer to protect the public road. Suitable pre-start planning conditions should be applied if the application is to be approved. There are no real traffic capacity issues on the road in terms of flows as it is lightly trafficked. However it is a narrow single track road which as well as being in poor structural condition in some locations also does not really offer adequate passing places for HGVs to pass. It is noted that the applicant intended to provide a haul road along the route of the pipeline which would certainly minimise construction traffic impact. Whilst it is noted the proposal is for the majority of movements to be on temporary tracks, this is not demonstrated on the layout plans provided where large sections appear to be serviced from the public road. This road experienced a landslip a couple of years ago and there are signs that the embankment in question is still on the move. There are serious concerns therefore that intensification of loaded HGV movements on this road will have an adverse impact on the condition of the road construction, adjacent verges/embankments and the structures already identified along the route. Concerns over the impact of the proposed road crossings near the powerhouse and it is questioned whether the pipeline can be kept to the river side of the road.

4.11 **Assessment of structures -** The following structures require to be assessed against intensified HGV loading:

- Retaining wall (30 metres long) at grid ref. 259550E, 867155N.
- Retaining wall (20 metres long) at grid ref. 259168E, 867058N.
- Redburn Bridge at grid ref. 256990E, 867150N.

4.12 Highland Council's Structures Section or an independent consultant appointed by them should carry out these assessments and all assessments and any works recommended as a result of their findings should be paid for by the developer. The assessments and any possible structural upgrading work needs to be completed before any construction is allowed to commence on site.

4.13 It is not believed that Redburn Bridge and the access across it has been fully considered. TECS require a demonstration that all relevant delivery vehicles will be able to negotiate the narrow bridge and acute bend at the west wide. It is suggested that perhaps the Redburn Bridge could be avoided by constructing a new access down to the powerhouse.

4.14 **Wear and Tear Agreement** – Section 96 Roads (Scotland) Act 1984 – Concerns especially relating to edge of carriageway failures. An initial road assessment/condition survey should be carried out by the developer, the scope and methodology to be agreed between the developer and Planning with input from TEC Services. This should be over the length of any haul route. It should identify any existing defects and problematic areas on the public road network which will require further investigation. This assessment is considered vital as a means to protect the public road network and to identify defects that are clearly attributable to intensification of heavy loads. Assessment findings need to be agreed with TEC Services and the developer. An initial route assessment followed by a programme of continual monitoring of the public road network would be the likely course of action, carried out throughout the construction period with built-in flexibility to allow the Council to determine the number/intensity of required inspections. It would be expected that the public road would be damaged as a result of the use as a haul road by construction traffic. A Wear & Tear Agreement, in line with Section 96 of the Roads (Scotland) Act 1984, and reflecting the findings of the road assessment/condition survey should be in place for this route.

4.15 **Works Access Junctions** – A visibility splay of 2.5 metres x 90 metres should be provided at all access points. Forward visibility for users of the public road needs to be considered. The developer needs to demonstrate how this will be achieved. The access must be constructed so that no surface water from the access track runs onto the public road. Its design and construction must take account of any adjacent drainage ditches or pipes and cater for their protection and maintenance. Provision of on-site wheel cleaning facilities should be provided to minimise debris being deposited onto the public road.

4.16 **Road alterations** – additional lay-by provision may be needed on the public road. Laybys should be wide enough to allow two HGVs to pass without verge overrun. Frequency should be so that vehicles can always see the next lay-by ahead (the maximum lay-by spacing should be 150m).

4.17 All costs associated with "off site" works should be met by the developer and require a road construction consent application. A bond will need to be lodged in respect of any reinstatement work needed on construction completion.

4.2 **Scottish Water:** This development may involve building over or in such a way obstruct access to an existing public water mains. The developer should contact Scottish Water who will provide advice regarding possible solutions that will require to be implemented by the developer to protect existing apparatus. There are potential build overs at the proposed compound; the river crossing; and at a further point where two strategic trunk mains are crossed.

4.21 There may be contamination issues that will arise with the development site. The developer must ensure that satisfactory precautionary measures are taken to protect public water supplies from any possible contamination.

4.22 Scottish Water currently has an abstraction approximately 500 metres upstream of the proposed abstraction point. Scottish Water has also been in discussion with two other commercial developers in this area that potentially may be seeking to use the River Glass as a source of raw water for process uses.

4.3 **Scottish Environment Protection Agency:** SEPA objects to the application as the development currently proposed will result in deterioration in the ecological status of the River Glass, causing it to fall from high to good status. As such, the proposals are contrary to the environmental objectives outlined in Article 4(1) of the Water Framework Directive. SEPA notes that a Controlled Activities Regulation application has been submitted, however it is still at an early stage of assessment and will be subject to third party consultation, including with other water users. SEPA considers on the basis of information supplied thus far that the activity cannot be modified/mitigated sufficiently to allow the objectives to be met. SEPA must therefore assess the proposal under Article 4(7) of the WFD which allows a derogation from the objectives of the WFD to be applied in certain circumstances. SEPA therefore recommends that the determining authority refrain from determining the application until the CAR application has been determined.

4.31 **Pipeline Location** – SEPA notes that the application proposes to locate the length of pipeline between the weir and powerhouse on the south side of the River Glass. The Environmental Statement states this is due to the need to ensure an adequate wayleave for a Scottish Water pipeline. If the length of proposed pipeline could be located on the north side of the river under an existing access track, it would avoid the environmental impacts from the need to construct on an area of previously undisturbed ground and negate the need for the pipeline to cross the River Glass downstream. On this basis SEPA objects until further details as to the rationale for the current pipeline are submitted.

4.32 **Culverting and Watercourse Crossings** – SEPA objects until further information is submitted relating to any proposed culverting and watercourse crossings. Rather than generalise statements relating to culverting, the scheme should include a systematic table of watercourse crossings or channelling with detailed justification for any elements and design to minimise

impact. The information should set out all other watercourse engineering works including diversions proposed. The size of culverts needs to be large enough to cope with sustained heavy precipitation. Measures to avoid erosion of the hillside associated with discharge from road culverting need to be set out in the information. If the area is used by otters, then this has implications in terms of design of culverts to allow otter and other small mammal movements.

4.33 **Pollution Prevention and Control** – SEPA welcomes the inclusion of pollution prevention measures in the Environmental Statement and Draft Code of Construction Practice. SEPA requests that a condition is applied requiring the submission to and approval by the determining authority, in consultation with SEPA (and other bodies such as SNH, should this be desired), of a full site specific construction method statement, submission to be a minimum of one month prior to commencement of development. For the avoidance of doubt, the construction method statement should include any borrow pits and associated operations.

4.34 Winter working – It is important to plan the works in order to avoid construction during periods of high rainfall, when the risk of pollution and the risk of failure of pollution prevention measures is greatest. Unless there are overriding reasons identified prior to determination as to why some construction operations are necessary throughout the winter, SEPA requests that the following are also covered by conditions:

- Identification of the wettest periods of the year at the site to be agreed with the determining authority in consultation with SEPA;
- Prevention of construction operations close to sensitive receptors during these periods.

4.35 The previously requested construction method statement should include contingency measures for periods of unexpected bad weather at other times of the year. SEPA would expect that these method statements would establish a daily environmental checklist to monitor and plan construction activities.

4.36 **Borrow pits** – SEPA notes the proposals to utilise an existing consented borrow pit and to utilise remaining materials from construction excavations. However there is reference in the Environmental Statement to other on-site borrow pits. SEPA requests clarification on whether further borrow pits are proposed and if so requests further details of those. The impact of such facility needs to be appraised as part of the overall impact of the scheme.

4.37 **Foul drainage** – The Environmental Statement states that the proposed welfare facilities for workers would be located at the powerhouse and two site compounds. It is SEPA's understanding that these will consist of either chemical toilets or sealed septic tank systems with waste transported away from the site, however SEPA requests clarification as to whether the powerhouse will have permanent welfare facilities.

4.38 **Powerhouse** – SEPA welcomes the proposal for the powerhouse within a building and advises that any transformer areas should be bunded to be in accordance with SEPA's guidelines for Above Ground Oil Storage Tanks.

4.39 **Oil Storage** – It is SEPA's understanding that fuel storage is proposed at the compound adjacent to the proposed powerhouse. SEPA does not object provided the design and installation of the oil storage tank is in accordance with the Water Environment (Oil Storage) (Scotland) Regulation 2006.

4.310 **Natural Conservation** – The River Glass and the Cromarty Firth into which it flows are subject to several designations which are partially dependent on good water supply. SEPA is currently assessing the impacts of the proposal upon the water environment through the CAR application process. Impacts on ecological interests will be determined in full as part of the CAR application process. In addition, from the information submitted in the Environmental Statement, SEPA considers that it is unlikely that the reduced flow through the gorge will have significant impact on the morphology of the water body downstream of the proposed intake.

4.311 **Waste** – SEPA welcomes the Draft Code of Construction Practice and advises that the principles of this document are included in the preparation of the above site specific method statement for construction works. At the time of compiling the method statement the applicant should identify all of the waste streams (such as peat and other materials excavated in relation to infrastructure) associated with the works.

4.4 **Scottish Natural Heritage –** SNH's advice is that the development could have an impact on European Protected Species in the vicinity, specifically otters, bats and wildcats. SNH therefore objects to the proposal as currently submitted until it can be confirmed that appropriate mitigation will be implemented through planning conditions. SNH has no objection in relation to other natural heritage interests but, should the Scottish Executive be minded to approve the proposals, recommendations are made and advice given relating to Black Rock Gorge SSSI, local biodiversity, landscape and access and recreation.

4.41 **European Protected Species** – The Scottish Executive needs to satisfy itself that the proposed development will not impact adversely on any EPS on the development site or that the three licensing tests are likely to be satisfied. SNH would remind the applicant of the need for a licence for both survey and any subsequent activity arising from the development that may impact on EPS.

4.42 **Otter** – The Environmental Statement indicates that signs of otters were found along the River Glass especially on the stretch below the gorge and it also states that no couches or holts were seen. However, SNH has recently been informed of a possible holt at the bottom end of the gorge not far from the location of the tailrace. The development could therefore result in disturbance to otter as a result of the construction works within the site. However, it is not thought that the proposal would have an adverse effect on their status in the

area provided that appropriate mitigation is included as a condition of any consent. That mitigation would include:

- The proposed recommendations in section 7.7 and 7.8 of the Environmental Statement.
- The recommendation at section 7.7 and 7.8 should be amended to include all European Protected Species that may be encountered.
- Should otters be observed, or signs of breeding or resting otter be discovered during construction works, then all works within 100m radius shall cease until a survey by a suitably qualified ecologist determines whether there is a holt.
- If a holt is discovered during construction work, then SNH shall be consulted to agree suitable mitigation. No further work shall occur within 30m of the holt until suitable mitigation has been agreed with SNH in writing.

SNH therefore objects to the proposal as currently submitted but considers that this can be overcome by appropriate planning conditions.

4.43 **Bats** – The Environmental Statement states that bats are known to forage in the area but no roosts were seen during the walk over survey. Much of the current pipeline route supports mature trees which will have to be felled and these could support bat roosts. SNH is satisfied that the proposed mitigation will be adequate to protect any bats that may use the site and access tracks within the application site boundary. The following conditions should be included:

- Implementation of the recommendations in sections 7.7 and 7.8 of the Environmental Statement.
- Pre-construction bat surveys to be undertaken and shall include potential roost site inspections and bat detector surveys during the summer in likely areas of bat foraging habitat where there are predicted impacts i.e. in woodland areas where tree felling may occur.

4.44 SNH therefore objects to the proposal as currently submitted but considers that this can be overcome by appropriate planning conditions.

4.45 **Wildcat** – Wildcat spoor and prints were seen during the survey and therefore should the proposal proceed and the wildcat or signs of wildcat be encountered, then a precautionary approach must be taken. This should take the form of appropriate mitigation measures to protect individual animals and their resting places from disturbance during the development. The following conditions should be included:

- A pre-construction wildcat survey around the site including a 500m buffer around all proposed works shall be undertaken by a suitably experienced ecologist.
- Should signs of cat or wildcat be observed then a more detailed survey for cat dens in a 100m buffer zone shall be undertaken by a suitably experienced ecologist.

- If a cat den is confirmed within the 100m buffer zone all activity relating to the proposal shall cease within 100m of the den and SNH shall be consulted to agree suitable mitigation.
- A suitably experienced ecologist will be available to respond to possible sightings or signs of wildcat and other protected mammals.
- Should wildcat or signs of wildcat be observed during construction works then works within a 100m radius of that place shall be suspended until mitigation is agreed with SNH.

4.46 SNH therefore objects to the proposal as currently submitted but considers that this can be overcome by appropriate planning conditions.

4.47 **National Interests** –

Red squirrel – SNH recommends that the proposed mitigation in Section 7.8 of the Environmental Statement is implemented by way of the following conditions:

- A pre-construction survey for red squirrel in the wooded section of the site and access route shall be undertaken by a suitably experienced ecologist to determine whether there are any drays that would be affected by tree felling.
- Where a dray is found the tree will be left intact with canopy connectivity to facilitate the movement of squirrel, while appropriate mitigation is agreed in writing with SNH.

4.48 **Black Rock Gorge SSSI** - The only direct impact of the proposal on the SSSI is due to the construction of the powerhouse and tailrace. All other works lie outside the SSSI. The reduced flows through the gorge clearly have the potential to impact upon the woodland habitat through changes in humidity, for example. SNH is pleased to note that this issue has bee considered in the Environmental Statement. It is agreed with the conclusion that the reduced water flow through the gorge will not directly affect the designated woodland habitat and in any event the lower plant interests in the gorge are not themselves a designated feature.

4.49 The construction of the powerhouse, tailrace and access track will have a direct impact on the SSSI. SNH recognises that this area is relatively open in terms of woodland with many non-native tree species growing close by. A small area of woodland would be lost and it is important to ensure that the footprint for construction is kept to an absolute minimum and microsited to ensure minimum loss of native trees and maximum felling of non-native species within the SSSI. SNH recommends that the mitigation proposed in section 7.8 of the Environmental Statement is implemented by way of the following conditions:

- A detailed method statement is drawn up for all works within the SSSI
- The Landscape Protection Plan is drawn up to SNH satisfaction.

4.410 **Local Biodiversity** – It is noted the presence of marshy grassland on the

south side of the river where the pipe is likely to be laid. The presence of juniper and frog orchid closeby suggests that the natural heritage value of the marshy grassland may have been underestimated. SNH recommends that the area is subject to further detailed survey in order to clarify the importance of the area for local biodiversity The survey should be undertaken during the summer months and should also be used to inform the exact line of the pipe which is going to cross the area. The draft code of landscape reinstatement is helpful in understanding the principles behind reinstatement of disturbed areas. However, at this stage it is unclear how the pipeline corridor will be fully reinstated. SNH advice is that the areas should be allowed to develop naturally into woodland or scrub. It is noted that the pipe will be buried but advise that this may be difficult since the diameter is 1.5 m. Bedrock may be close to the surface in some places and if this is the case it is unclear what will happen. Section 9.5.7. indicates that blasting may be required but there appears to be little consideration of such impacts on wildlife especially aquatic species such as salmon. SNH recommends that blasting below the gorge should be timed to avoid the most sensitive times of year for the salmon population in the river. It is understood from the Conon District Salmon Fishery Board that this is likely to be between July and October.

4.411 SNH supports the need for fish screening at both the intake and tailrace. SNH recommends that any fish screens are installed in accordance with the Salmon (Fish Passes and Screens)(Scotland) Regulations 1994 and that they are 10mm wide. SNH also recommends that the advice of The Scottish Executive Fisheries Committee is obtained in order to be clear on potential impacts on stocks of fish and the local fishery. SNH is of the view that the Environmental Statement has underestimated the importance of the salmon population in this river. If the tailrace has to be in the location proposed, then SNH recommends that hydro generation is avoided when fish will be running up stream prior to spawning. It is understood from the Conon District Salmon Fishery Board that this is likely to be between July and October. The proposal will involve a lot of construction work both in and close to the river and there is therefore the opportunity for significant run-off from ground disturbance and potential pollution events. SNH recommends that all relevant SEPA guidelines must be strictly adhered to in order to safeguard water quality in both the River Glass and downstream Cromarty Firth.

4.412 **Landscape** – Landscape character in most of the area is closed river valley with more open areas locally. It is noted that the pipe was originally to be located solely on the north side of the river, however in the current scheme the pipe will need to cross the river and it is not specified if it will go under or over. If the pipe is to be buried in a trench across the bed of the river, there will be a short term impact on the fresh water interests in the river. If a pipe bridge is built then there will be a permanent impact on the landscape character of the area. Therefore SNH advice is that the pipe trench method appears to provide the least damaging option provided that best practice techniques are used.

4.413 **Access and Recreation** – Access in this part of Glen Glass is concentrated

on the gorge itself and Evanton Wood. Given the importance of the paths in the area for quiet recreation, it is strongly recommended that an assessment is made of the impact of operational noise on key path receptors and appropriate mitigation adopted. The turbine house and tailrace lie closest to Evanton wood and therefore have the potential for the greatest impacts on access and recreation. It is recommended that the opportunity is taken to inform the public about the development and the steps that are being taken to minimise disruption. SNH are also aware that the river is popular with canoeists and the proposal may affect the water flows in the river and hence the opportunity for informal canoeing. It is recommended that contact is made with the local canoe club in order to seek their views.

4.5 **TEC Services (Environmental Health):** Having analysed the findings of the Environmental Impact Assessment, it is not considered that there is likely to be significant noise impact from the operational phase of the scheme. It is recommended that the impact of construction noise should be controlled by conditions limiting the hours of work. The suggested hours of work are:

0700 – 1900 Monday to Friday;
0700 – 1300 Sat;
No Sunday Working.

No work should be outwith these times other than by prior arrangement with the Planning Authority.

4.6 **Planning & Development Service (Access Officer):** In general the application has recognised the needs of non-motorised access in the area. The majority of the works will not interfere with the majority of the access enjoyed. However there are two areas where access could be affected during the construction phase which are addressed as follows:

- The track to the powerhouse and the powerhouse area – whilst such tracks are the most frequently used, nonetheless access is taken and the public should be cautioned by signs whilst work is proceeding and if possible an alternative route should be created. The paths here should be reinstated upon completion to a condition no worse or better than currently found.
- The track between Assynt Mill and the gorge bridges – the Assynt Mill track is used very frequently by visitors to the most spectacular part of the gorge. Here the pipeline will cross the track and disruption should be minimised. Cautionary signs must be provided, and the trench dug should be bridged and the track reinstated upon completion to a condition no worse or better than currently found.

4.7 **Planning & Development Service (Archaeology Unit):** The Environmental Statement presents an evaluation of the potential impacts on Cultural Heritage within the application area. The methodology used is considered to have provided an acceptable assessment of the cultural heritage within the scheme area. It is unlikely that the application will adversely impact on significant archaeological remains. The recommendations made in Section 12.19 are considered to be adequate to mitigate the identified impacts. The recommendations are as follows:

Site 17 (Mains of Assynt field dykes) will be reinstated on completion of construction.

4.8 **Kiltearn Community Council:** The Community Council advise that as long as the assurances given in the Environmental Statement with regard to environmental and visual impact, particularly with regard to the powerhouse and outfall part of the project are strictly followed and monitored, the Community Council are generally comfortable with it. They do however endorse the worries of the local angling club with regard to the potential damage to an already fragile population of migratory salmon and seatrout and feel that this has been underplayed in the statement. The Community Council also endorse the concerns of residents in the Glenglass Area that during the construction period the ability of the road in the affected area to cope with the extra traffic and wear and tear has also been understated.

4.9 **Association of Salmon Fishery Boards:** The Board would like to record their concerns that such development will have considerable construction implications and very often these can be conducted without proper regard or understanding of the potential impacts on watercourses, water quality and migratory and other fish species. Such impacts could include:

- obstruction to upstream and downstream migration both during and after construction;
- disturbance of spawning beds during construction – timing of works is critical;
- increases in silt and sediment loads resulting from construction works;
- point source pollution incidents during construction;
- drainage issues.

4.10 **Conon & District Salmon Fishery Board:** The Environmental Impact Assessment for the scheme was comprehensive but has not taken account of the fragility of the migratory fish populations of the Allt Graad. There are only four kilometres of habitat available to salmon and sea trout in the river which restricts the size of the population. Unlike a similar size tributary of a larger river where genetically similar fish may be able to re-colonise, the Allt Graad is isolated from other river systems. This will result in a more genetically distinct population adapted to living in this river with less chance of re-colonisation.

4.101 The fish populations of the Allt Graad are already subject to a number of anthropogenic pressures. The flow regime is modified by upstream abstraction. There is a legal rod and line fishery in the river. There is also a

significant illegal fishery which has had serious impacts on the stock in recent years. There have been a number of incidents of deliberate poisoning of the river by poachers using cymag.

4.102 At present adult salmon enter the river from early July until mid October in high flow conditions. The fish tend to pass upstream quickly into the relative safety of the deep pools within the Black Rock Gorge. The original proposal was that the flow from the hydro development would be returned into the gorge, however because of engineering difficulties the current proposal is to discharge 300m below the gorge. There is a risk that when generation is taking place, migratory fish will be attracted to this flow and delayed from entering the gorge which will make them vulnerable to increased fishing pressure. There is also a risk that fish lying in the gorge will drop downstream during periods of generation.

4.103 These concerns were discussed at a meeting with NPower. Their initial opinion was that engineering a discharge into the gorge would be difficult but that restriction in the generation regime during the period of July to October was an option that could be explored.

5. POLICY

5.1 The following policies are relevant to the assessment of the proposal:

The Highland Structure Plan:

- Policy G1: Conformity with Strategy
- Policy G2: Design for Sustainability
- Policy G3: Impact Assessments
- Policy G4: Community Benefit and Commitment
- Policy G5: Integration of Environmental & Community Interests
- Policy E1: Distributed Renewable Energy Developments
- Policy E4: Hydro Energy Developments
- Recommendation E5: Abstraction Controls
- Policy N1: Nature Conservation
- Policy L4: Landscape Character

5.2 **Ross & Cromarty East Local Plan:**

- GSP 1: Design and Sustainable Construction
- GSP14: Habitats and species
- Landward Area – Environment 71 (Black Rock Gorge)
- Background Policies 2 and 3 apply to the application site.

5.3 The proposal also requires to be assessed against the following relevant Scottish Planning Policies (SPP) and National Planning Policy Guidelines (NPPG) :

- SPP: The Planning System
- SPP15: Planning for Rural Development
- NPPG6: Renewable Energy Development

6. PLANNING APPRAISAL

6.1 **Determining issues –** Whilst not being asked to determine the application, the basic principle of the Council's consideration of the matter should accord with Section 25 of the Town and Country Planning (Scotland) Act 1997. This requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise.

6.2 The proposal requires to be assessed against the appropriate policies of the Development Plan, supplementary guidance, and National Planning Policy and Guidelines as referred to in the Policy section. In particular, the proposal requires detailed assessment of the following fundamental issues:

- whether the principle of development is appropriate in terms of policy
- whether the layout of development is appropriate
- the impact on the amenity of the area and residents
- other material issues raised by the objectors

6.3 The proposed development is a small 'run-of-river' hydro electric scheme which has a projected capacity of 3.5MW generating around 10GWh of electricity each year, sufficient to supply the domestic needs of over 2,000 households. It is located on the River Glass, which runs from Loch Glass into the Cromarty Firth, on Novar Estate, north of Evanton.

6.4 Being greater than 1MW in capacity, the applicants are required to seek consent for the proposal from Scottish Ministers under Section 36 of the Electricity Act 1989. Scottish Ministers must consult with the Planning Authority and others and in the event that the Council was to object to the proposal a Public Local Inquiry would be held. Planning permission is deemed to be granted in the event that Scottish Ministers approve the application.

6.5 The scheme involves an intake of water from the River Glass via an intake weir stretching across the river near Redburn bridge and its transportation by underground pipeline over a distance of approximately 3.5km to a small powerhouse downstream, south of Ballavoulin. Water is then discharged through a turbine and returned to the river via a short buried tailrace, which incorporates a screen preventing access from fish and other wildlife. The issues to be addressed concern principally policy; the hydrological and ecological effects on the River Glass; the physical and visual impact of the structures associated with the scheme; and the impacts of construction.

6.6 **Policy**

The clear thrust of national, strategic and local policy is to support hydro energy developments, provided their impacts are not significantly detrimental. Council policy also requires that there is satisfactory provision for the discharge and monitoring of an appropriate compensation flow. The proposed scheme is in broad conformity with relevant policies. The Environmental Assessment accepts that there will be adverse environmental impacts during construction, operation and maintenance of the proposal but asserts that these

do not threaten the principles of sustainability, that impacts would be localised and that they would not materially impact on the landscape quality, biodiversity interests of the area and its wider setting to a significant degree. Accordingly, the principle of the proposal generally complies with national, regional and local planning policy but the details need to be assessed to establish the extent of any adverse impacts and balance these relative to the advantages of the development.

6.7 **Hydrology and Ecology:** The proposal will, by its nature, impact on the hydrology of the River Glass. The applicants have proposed a compensation flow in the river and they are of the opinion that the hydrological and ecological integrity of the river will not be compromised and that any changes associated with the abstraction will be minor in nature. The Black Rock Gorge SSSI lies within the area of the proposed scheme. This designated area includes the gorge and the woodland habitat to both sides. The reach of the River Glass that will be directly affected by the proposal runs through the Black Rock Gorge SSSI. This designated site includes riparian plant communities (those existing in close proximity to the river's edge) and species whose interest relates to the higher moisture levels present in the valley bottom and particularly above the gorge. The River Glass is fast flowing and commonly subject to spate events. The majority of any habitat loss and/or physical disturbance to this environment would occur during the construction of the scheme. The building of the intake, the tailrace and the pipe river crossing would all result in some aquatic habitat loss and some further habitat damage. The main likely operational impact on the aquatic environment of the River Glass would be related to changes in the existing flow regime between the intake and the tailrace. Such impact would be long term and occur throughout the operating life of the scheme. Whenever the scheme is operating, a proportion of the water which would normally flow through this reach of the River Glass would be taken out and transported via pipeline to be released back into the river at the tailrace.

6.71 It is submitted by the applicants that at times when there is little water in the river the turbines would be turned off and would not operate. Under these circumstances, no abstraction of water from the river to the pipeline would occur and the natural river flow would pass downstream unchanged in quantity and quality. The turbines would generate different amounts of electricity depending on the volume of water flowing down the river. When the turbines are running and water is abstracted from the river to the pipeline, sufficient water, known as a reserve flow, would always be allowed to continue onwards downstream. This should ensure that fish and other species that rely on the water in the river are not negatively affected. The design of the weir at the intake would allow flotsam together with silt and fine sand particles to continue downstream. However, coarser sand and gravel would deposit immediately upstream of the weir. These deposits would be extracted as and when required and deposited immediately downstream of the weir so that they can continue their downstream movement when washed down by the river flow. Water abstracted by the scheme would be returned to the river via a buried culvert or stone channel located by the powerhouse and known as a tailrace. It is submitted that with a suitable design to protect the river banks, the tailrace

flow should not cause erosion to the riverbank and the water would be returned unchanged in quantity or quality.

6.72 The Scottish Environment Protection Agency and Scottish Natural Heritage have considered these impacts in the context of the Environmental Impact Assessment of the proposed. Both have made comments direct to Scottish Ministers as statutory consultees.

6.73 SNH do not object to the application, on the basis that appropriate conditions are attached to reduce its impact. These include action with regard to European Protected Species (otters, wildcat, bats) and specific conditions relating to red squirrels.

6.74 SEPA have issued notice of their objection and have stated that the objection will be removed if the proposal can be demonstrated to meet the environmental objectives of the Water Framework Directive through the determination of the separate water licence application under the Controlled Activities Regulations (CAR) determination process. Further discussion has been held between the applicants and SEPA and it would appear that the majority of the issues can be resolved to SEPA's satisfaction with appropriately worded planning or water licence conditions. The principal outstanding issue appears to be the fishing interests of the river which the applicants believe the current mitigation measures as detailed in the Environmental Statement would address. The applicants confirm that they are working with SEPA to resolve this matter as part of the CAR Water Licence determination process.

6.75 In summary, no significant impacts are predicted to occur, subject to good practice and detailed control and management of the development both during construction and operation. In assessing the hydrological and fishing impacts of the development, SEPA are obliged to protect water quality and control pollution. This aspect will be determined by the Scottish Ministers, in consultation with SEPA in respect of determining the Controlled Activities Regulations licence. It is therefore not considered appropriate of the Planning Authority to suggest any conditions in this regard.

6.8 **Physical and Visual Impact** – The visual impact assessment undertaken for the proposed scheme describes and evaluates the potential change in views within the existing landscape during the construction phase and once the scheme is in operation. It also assesses the extent to which these affect residents, visitors and users of the landscape (receptors). The majority of these receptors are located along the Glen Glass Road and in the main the principal element affecting these views are of construction traffic, together with direct views of the pipeline as it is constructed near the road corridor, over a short section. Outwith this, there would be very few direct views of the construction itself. The steep sided nature of the river valley, woodland cover and alignment of/distance from the public road make the scheme visually well contained from most likely public viewpoints. In the longer term, during the operation of the scheme, all the temporary negative impacts would be reduced to neutral with the exception of a small section of footpath which passes

directly in front of the powerhouse site. Views of the powerhouse itself would be limited to a small section of this popular footpath which is used by anglers and walkers. Mitigation includes the sympathetic design of the powerhouse and surrounding area and the introduction of appropriate new tree and shrub planting which would further assist in reducing the visual impact.

6.81 Operational noise from the scheme is likely to be low and the potential impact on domestic properties should be negligible. The Council's Area Environmental Health Manager confirms that this is the case and that the impact of construction noise should be controlled by conditions limiting the hours of work. The detailed design and construction of the scheme and the powerhouse in particular should be undertaken to ensure that this suppresses any distinct noise or tone characteristic.

6.9 **Construction** – The most evident and damaging impact of this scheme may be during the construction phase. The scheme would be constructed on a design and build basis. By its nature this type of contract allows contractors a certain degree of flexibility to satisfy a specified set of design criteria. Against that, it means that some elements of the scheme will not be finalised until a contractor has been appointed. In such circumstances it is essential that further submissions are made prior to operations commencing in order to secure the necessary level of controls. Thus, a construction method statement, including road and traffic impacts, and an environmental management plan, would be advisable.

6.91 Those parties making representation, together with Kiltearn Community Council, have specifically raised the issue of the cumulative effect on the local road network of construction traffic associated with the scheme together with the existing wind and hydro energy scheme and established forestry operations, citing the fact that the local road network is single track and badly aligned. The construction phase associated with the proposed development is expected to last for approximately 18 months, although much of the main civil engineering works are expected to be complete within 9-12 months. During this time, increase in traffic would occur from the use of HGVs to deliver construction materials and small vehicles transporting personnel to site. TECS (Transport) do not object to the application but ask that a number of suspensive planning conditions are applied, specifically with regard to the preparation of a Wear & Tear Agreement and assessment of specified retaining walls and the Redburn Bridge against intensified HGV loading.

6.92 The applicants advise that once a main contractor has been appointed, a Construction Method Statement detailing the final means of construction access would be consulted on and agreed with Highland Council. Accordingly, if it were decided by the appointed Contractor to use the existing public road as the main haul route, as opposed to constructing a temporary haul road, the applicants would agree to all the conditions recommended by TECS (Transport). The applicants have confirmed that in order to minimise effects on the village of Evanton, the access track used during the construction of Novar Windfarm would be utilised, accessed from the B817 to the north of the village. This would enable heavy construction traffic to by-pass the village

before joining the Glen Glass road to the west of Assynt Water Treatment Works to continue to the construction sites.

7. CONCLUSION

7.1 Although the Planning Authority is not being asked to determine the present application, it is important that Committee considers the application in accordance with the provisions of approved policy. In this regard, this modest scheme, set in a relatively self-enclosed location and having limited hydrological, ecological or other long term impacts, is in accordance with the emphasis in government policy to encourage sustainable renewable energy schemes. It is also supported by the general policies on hydro energy developments in the Structure Plan. It is therefore recommended that the Council does not object to the proposed hydro scheme, subject to consideration of the following conditions.

RECOMMENDATION

That the Council advises the Scottish Ministers that it does not object to the proposed hydro scheme on the River Glass by RWE Npower plc, subject to consideration of the following conditions:

Development in Accordance with Notified Scheme:

1. The development shall be undertaken in accordance with the Application and Environmental Statement, except insofar as amended by the terms of this consent or which have subsequently been agreed in writing by the Planning Authority in consultation with other relevant authorities. The development shall be undertaken in its entirety, in one continuous phase, with no partial implementation. Construction activities shall be completed within an eighteen month period from the commencement of development unless otherwise agreed in writing by the Planning Authority. All reinstatement shall be undertaken within three months of completion of all construction work, and in accordance with condition 2 below, other than may be allowed expressly by the conditions of this permission or as otherwise agreed in writing by the Planning Authority.

Construction Method Statement, Landscaping & Restoration:

2. At least one month prior to the commencement of any development on the site, a site-specific construction method statement shall be submitted to and require the approval in writing of the Planning Authority in consultation with other relevant authorities. This method statement shall detail the following matters in particular:

(a) a detailed construction programme and timetable including restoration;
(b) a code of construction practice incorporating Scottish Environment Protection Agency's Pollution Prevention Guidelines;
(c) pollution prevention measures including contingency plans;

(d) waste management and waste minimisation;
(e) a method statement covering landscape/habitat restoration and reinstatement and proposals for ongoing maintenance and management of the site.

Traffic Management

3. At least one month prior to the commencement of work, details of all access arrangements (both permanent and temporary) shall be agreed with the Planning Authority in consultation with the Roads Authority. This shall detail the following matters in particular:

(a) An assessment of construction traffic generation and management insofar as public roads are affected. This shall include details of upgrading work to any existing access points, details of any new access points and provision of extended passing places in consultation with the Roads Authority;

(b) An assessment of the following structures against intensified HGV loading: U2087M000R38; U2087M000R38; U2087M010

NOTE : The Council as Roads and Transport Authority will expect the developers to enter into a 'wear and tear' agreement for the duration of the construction phase in order to ensure the protection and any necessary reinstatement of the public road network arising from construction operations.

Design:

4. Prior to the commencement of any development on site, the final detailed design, insofar as it relates to siting and visual appearance, of the intake weir, pipe river crossing and tailrace, shall be submitted to and require the approval in writing of the Planning Authority.

Note: The design of the whole structure should be kept as simple as possible, with the form of the weirs relating to the plane of the impounded water, and finished in a uniform texture and colour that relates to the adjacent exposed rock outcrops.

5. Prior to the commencement of any development on site, the detailed design and siting of the powerhouse shall be submitted to and require the approval in writing of the Planning Authority. The existing trees in the vicinity of the proposed powerhouse shall be retained insofar as is possible and there shall be no lopping, topping or felling of these trees without the prior written approval of the Planning Authority.

6. Prior to the commencement of any development on site, the detailed route of any additional permanent access tracks shall be pegged out and agreed on site by the Planning Authority.

7. The pipeline and access track shall follow a route that avoids/minimises the requirement to remove any indigenous trees.

8. Prior to the commencement of any development on site, details of the location and extent of all temporary works, accesses, and storage areas/compounds shall be submitted to and require the approval in writing of the Planning Authority.

Archaeology:

9. Within three months of completion of the all construction works, the Mains of Assynt field dykes (Site no 17) shall be fully reinstated in their original style to the satisfaction of the Planning Authority Archaeology Unit.

Noise Control:

10. Prior to the commencement of any development on site, the developer shall undertake a background noise survey in the area which shall be submitted to and require the approval in writing of the Planning Authority in consultation with the Environmental Health Authority. The developer shall ensure that the design of the powerhouse will offer acoustic attenuation such that noise emitted will not exceed Noise Rating Curve 25 inside the nearest noise sensitive properties. Thereafter, the developer shall ensure that, in operation, the noise emitted from the powerhouse shall not exceed Noise Rating Curve 35 at the façade of the nearest noise sensitive properties.

11. During the construction phase, the normal working hours within the site shall be between 0700 and 1900 hours Monday to Friday and between 0700 and 1300 hours on Saturday, with no work being carried out on Sundays or public holidays, unless with the prior written approval of the Planning Authority in consultation with the Environmental Health Authority.

Nature Conservation:

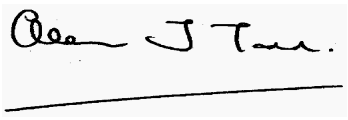
12. At least three months prior to the commencement of any development on site, pre-construction surveys shall be carried out by a suitably qualified ecologist to determine the presence of all European Protected Species (Otter, Wildcat, Bat) and also Red Squirrel and determine any mitigation measures required to the satisfaction of the Planning Authority in consultation with Scottish Natural Heritage. For the avoidance of doubt the recommendations in section 7.7 and 7.8 of the Environmental Statement shall be implemented in respect of all European Protected Species. If protected species are observed, or signs of breeding or resting are encountered during construction works then all works within a 100m radius shall cease until investigation by a suitably qualified ecologist determines their presence. Appropriate mitigation measures to prevent their disturbance shall be submitted to and require the approval in writing of the Planning Authority in consultation with Scottish Natural Heritage prior to any work recommencing.

Access:

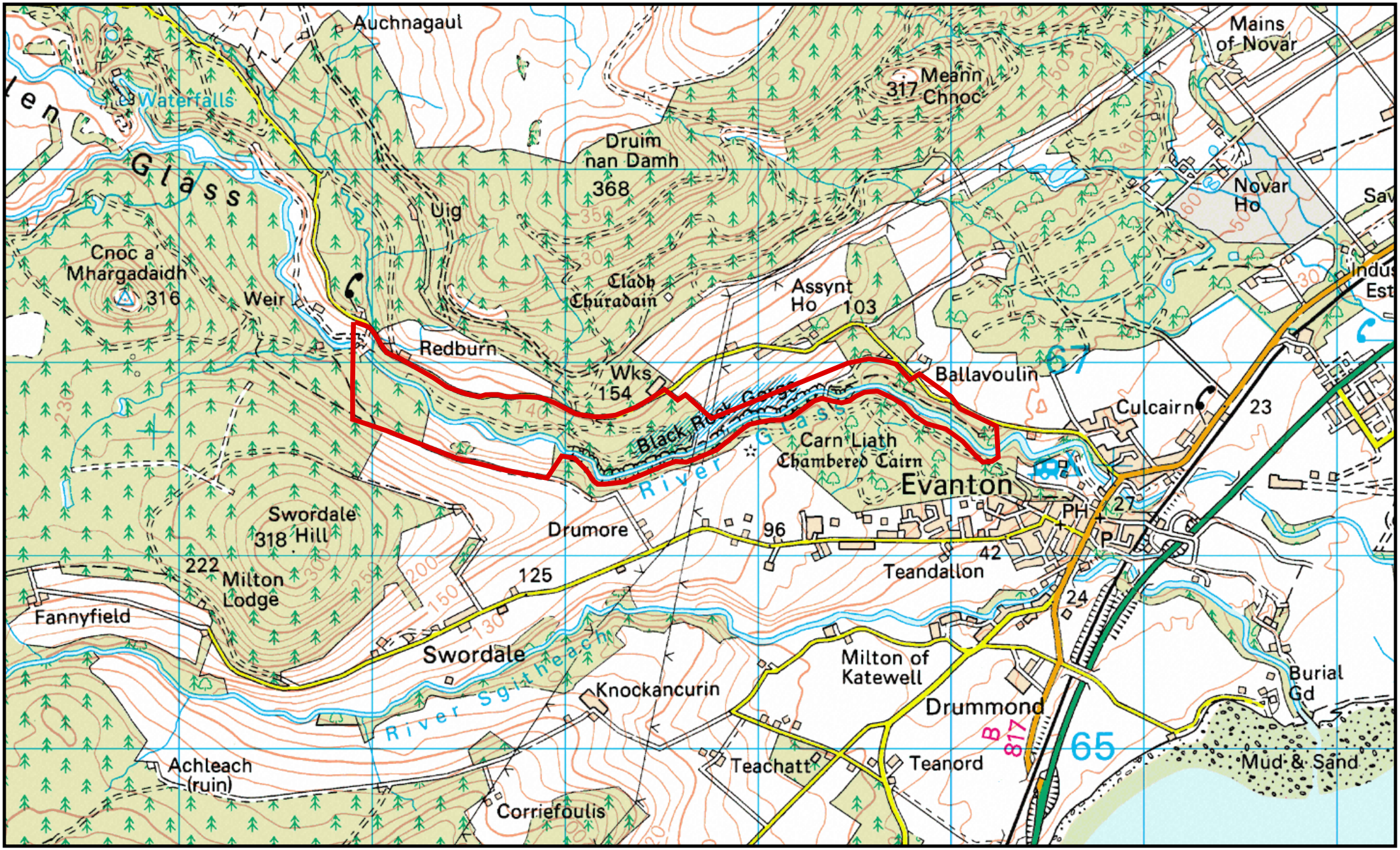
13. The public rights of way and all other established pedestrian routes through Evanton Wood and the Black Rock Gorge shall remain open throughout the construction period and the operation of the scheme. Notices shall be erected to advise of any diversions necessary, of a style and at locations to be agreed in writing with the Council's Access Officer before any work commences on site and shall be displayed before the paths are affected. All paths shall be reinstated immediately on completion of works in consultation with the Access Officer to the satisfaction of the Planning Authority.

Restoration in the Event of Failure or Abandonment of the Scheme:

14. Unless otherwise agreed in writing by the Planning Authority, in the event of the scheme not generating electricity for a continuous period of twelve months with no realistic expectation of resumption in the foreseeable future, the site shall be reinstated within a period of eighteen months following the expiry of such period of cessation or within such timescale as agreed in writing by the Planning Authority. Reinstatement shall include the removal of the above ground infrastructure, if considered necessary and restoration of the natural water regime to normal flows, to the written satisfaction of the Planning Authority in consultation with other relevant authorities.

Signature: 

Designation: Area Planning and Building Standards Manager
Author: Dorothy Stott
Date: 14th August, 2007
Background Papers: The Highland Structure Plan
Ross and Cromarty East Local Plan
SPP1: The Planning System
SPP15: Planning For Rural Development
NPPG 6: Renewable Energy Development



The Highland Council
Comhairle na Gaidhealtachd
SERVING The Highland Community

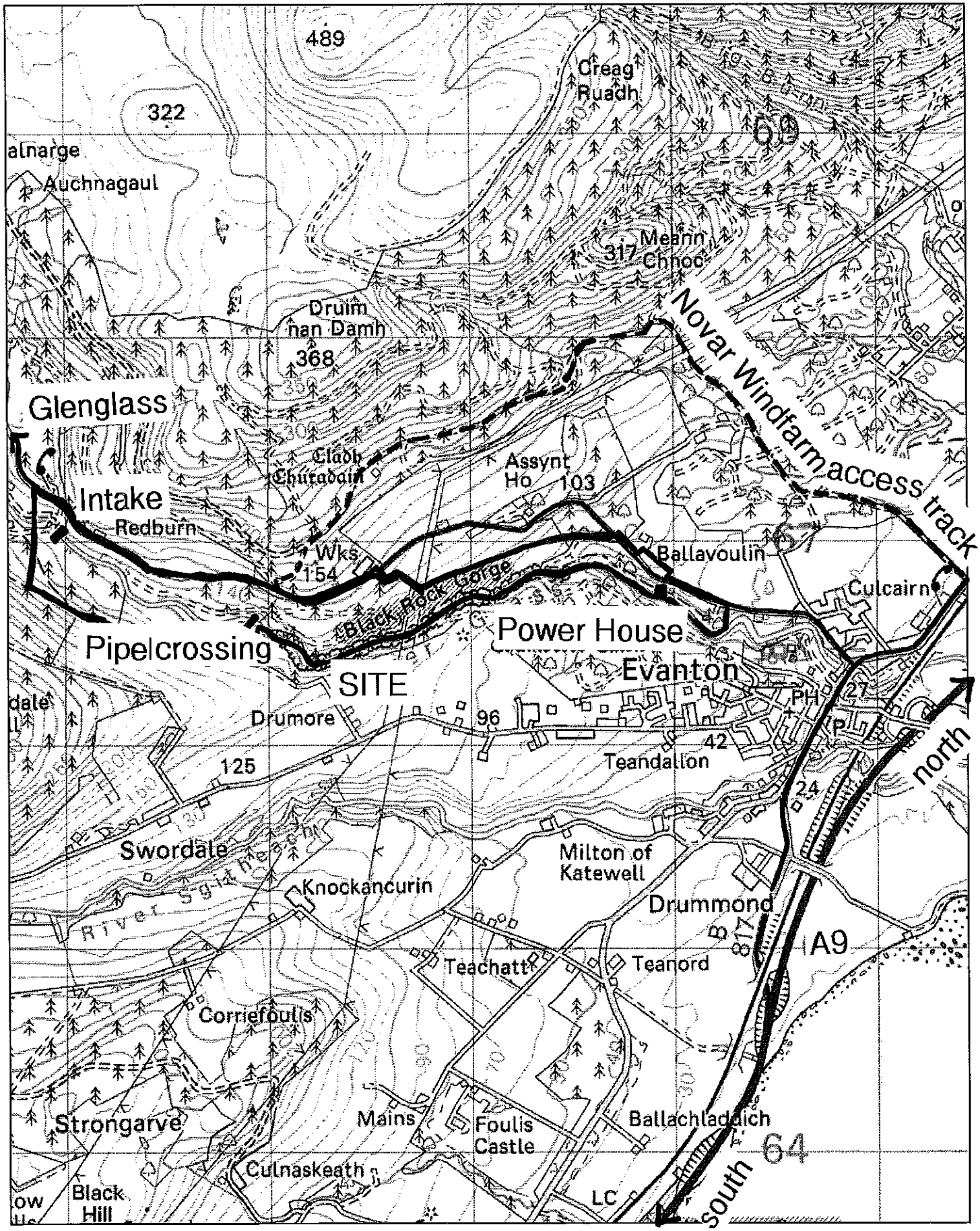
06/01166/S36RC Construction and operation of hydro electirc generating scheme (3.5MW) at Black Rock Evanton

15 August 2007

SUPPLIED BY THE HIGHLAND COUNCIL

N

Scale
1:25000



The Highland Council
Comhairle na Gaidhealtachd
SERVING The Highland Community

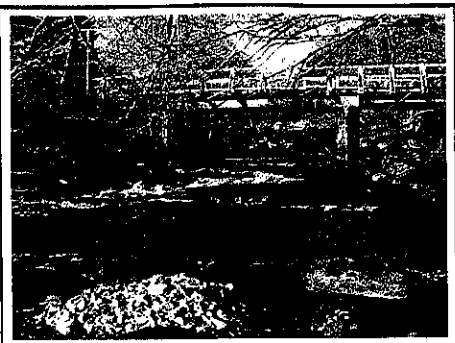
Black Rock, Evanton

Location Plan

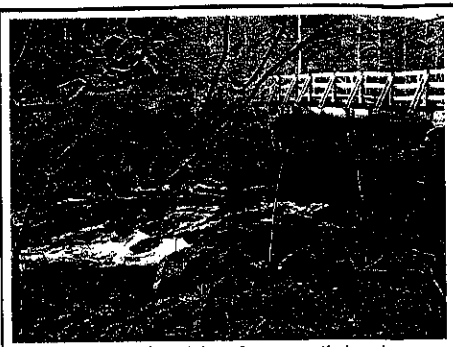
Scale : 1:24971

Date : 14/08/2007

Figure 2

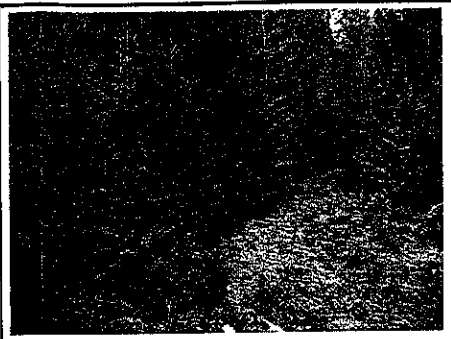


1. Intake location (view north west,

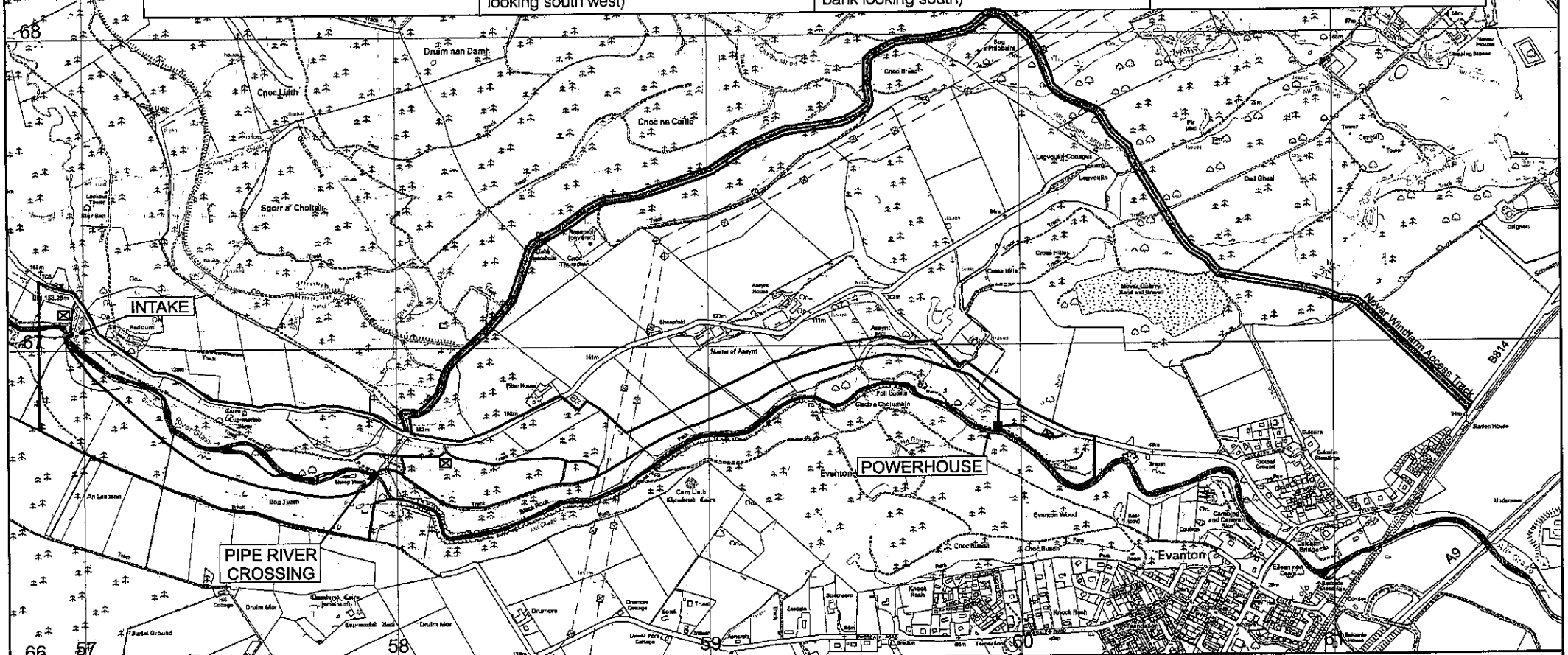


2. Intake location (view from north bank looking south west)

3. Powerhouse location (view from north bank looking south)



4. Powerhouse location (view north east)



Key

- Pipe route
- Intake
- Powerhouse
- Pipe Bridge
- Access via Existing Tracks
- Extent of Glen Glass Road used by Construction Traffic
- New Temporary Track
- Indicative Compound Area
- Upgrading of Existing Track for Permanent Use
- Red Line Planning Boundary

ash design + assessment

Dwg. No. 105026/02				Rev.	Status FINAL		
Drawn EM	Date 09/03/06	Checked JS	Date 08/12/06		Approved JS	Date 08/12/06	
Scale 1:12,500		21 Gordon Street , Glasgow G1 3PL Tel: 0141 227 3388 Fax: 0141 227 3389					

Client: npower renewables

Project: BLACK ROCK HYDRO SCHEME

Title: Scheme Proposals