

Inspector's Report PL07.248891

Development	Water abstraction and ancillary works
Location	Loch an Mhuillin, Gorumna Island, Co. Na. Gaillimhe
Planning Authority	Galway County Council
Planning Authority Reg. Ref.	17/49
Applicant(s)	Bradán Beo Teo
Type of Application	Permission
Planning Authority Decision	Refuse permission
Type of Appeal	First Party
Appellant(s)	Bradán Beo Teo
Observer(s)	Udaras Na Gaeltachta
	Peter Sweetman & Associates
	Coiste Fostaiochta Iorras Aithneach
	Inland Fisheries Ireland
	A ath a fill and -

Date of Site Inspection

13th October 2017

Inspector

Rónán O'Connor

Contents

1.0 Site	e Location and Description4
2.0 Pro	posed Development4
3.0 Pla	nning Authority Decision5
3.1.	Decision5
3.2.	Planning Authority Reports5
3.3.	Prescribed Bodies6
3.4.	Third Party Observations7
4.0 Pla	nning History10
5.0 Pol	licy Context
5.1.	Galway County Development Plan 2015-202111
5.2.	Natural Heritage Designations12
6.0 The	e Appeal 12
6.1.	Grounds of Appeal 12
6.2.	Planning Authority Response 14
6.3.	Observations
6.4.	Further Responses16
7.0 Pla	nning Assessment
8.0 Re	commendation
9.0 Rea	asons and Considerations32
10.0	Conditions

1.0 Site Location and Description

- 1.1. The site is located in the townland of Creelough, Gorumna Island, Lettermore, South Connemara, approximately 45km west of Galway City. The appeal site encompasses land between Loch an Mhuillin and Cloonawilleen Bay, and includes a portion of the lake itself.
- 1.2. The site is undulating in profile and is characterised by small field plots bounded by stone walls. The stated site area is 0.1Ha.

2.0 Proposed Development

- 2.1.1. The proposed development comprises works to facilitate the abstraction of water from Loch an Mhuilinn to supply an off shore salmon fish farm, for the control of disease. A detailed description is set out below:
 - Abstraction of freshwater from Loch an Mhuilinn and pumping to proposed headwall at coast road, from where a temporary pipeline (150mm diameter – approximate length 200m) will convey freshwater to a tarpaulin located offshore. The headwall will be 1.25m high and 2m wide.
 - Upgrading and extension of existing access track from an existing entrance at the coast road to the western shore of Loch an Mhuilinn. The access works involve upgrading 144m of existing trackway and the construction of 130m of new trackway, with a maximum width of 2.5m.
 - Construction of a fenced off hard standing enclosure 24m from the lake shore to facilitate the installation of temporary pumping equipment.
 - Installation of pumping equipment and operation of same from beginning of May to the end of September each year.
 - Installation of 44m linear length of 250mm above ground abstraction main from Loch an Mhuillinn to the temporary pumping facilities (20m in the lake and 24m overland on the proposed access track). The pipe will be installed on a temporary basis during the May to September abstraction period.
 - Installation of 116m liner length of 250mm diameter pumped main and associated fittings from the temporary pumping facilities towards the coast road (116m

overland along a field boundary). The pipe will be installed on a temporary basis during the May to September abstraction period.

- Installation of 70m linear length of 250mm diameter pumped main (permanent) under the coast road.
- 2.1.2. The applicant (Bradán Beo Teo) propose to abstract a total of 4,680m³ per week for
 22 weeks each summer from May to September inclusive. This will be undertaken for 6 hours per day for a maximum of 4 days per week.
- 2.1.3. The abstraction is to facilitate the control of disease at their existing offshore salmon fish farms.
- 2.1.4. Included with the application for planning permission were a Natura Impact
 Statement (NIS), a Hydrological Feasibility Assessment and Planning Report.
 Unsolicited Further Information was submitted by the applicant during the course of
 the planning application which consisted of the following documentation:
 - Updated Hydrological Feasibility Assessment (issue date 14/06/2017).
 - Response to Submission from the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs including Appendices.
 - Certificates of Registration in relation to organic certification.
 - Letter responding to submission made by Inland Fisheries Ireland (IFI).
 - National Survey of Sea Lice on Fish Farms in Ireland 2016.

3.0 Planning Authority Decision

3.1. Decision

3.1.1. Refuse permission for 2 reasons including (1) impact on drinking water supply, impact on human health, set an undesirable precedent for similar future private commercial development and (2) impact on Kilkieran Bay and Islands cSAC.

3.2. Planning Authority Reports

3.2.1. Planning Reports

- Concerns in relation to the applicants' compliance with stated abstraction rates.
- Would have a detrimental impact on the character of the landscape.
- Could have a long term detrimental impact on the drinking water supply source on Gorumna Island and the surrounding area served by the water supply, as Loch an Mhuillinn forms part of an interconnecting series of lakes to Lough Hibbert, a drinking water supply.
- Proposed development partially encroaches into the Kilkieran Bay and Islands cSAC.
- Likely to have significant, adverse impacts on cSAC.
- 3.2.2. Other Technical Reports

Water Services and Environment – Request further information in relation to chemical and physical properties of the lake, in particular the impact on temperature in the lake as a result of abstraction.

3.3. Prescribed Bodies

- 3.3.1. An Taisce
 - Scope of the planning application and its associated NIS are inadequate.
 - Has not considered functional interdependence between the offshore salmon farm and the pipe supplying it with freshwater.
 - Scope of NIS must cover the impact of the salmon farm itself, as well as construction of the pipe, extraction of freshwater and transportation of freshwater.
 - Parallels between High Court ruling on Bord na Mona's Edenderry Power Plant in relation to 'functional interdependence'.
 - Insufficient ecological data included with the application.
 - Cannot conclude that negative impacts on the freshwater ecology of Loch an Mhuilinn will not occur.
 - Obligation under the Water Framework Directive to preserve high water quality status.
- 3.3.2. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs

- Impact on the Kilkieran Bay and Island SAC.
- Impacts on other marine habitats and species including seabirds.
- Impacts on freshwater habitats and species associated with Loch an Mhuilinn.
- Lack of evidence in the NIS to support some of the statements and conclusions i.e. impact of freshwater discharge and impact on tarpaulin movements.
- No analysis of cumulative impacts no detail of marine based operations.
- Does not consider how freshwater treatment will impact on species in the SAC.
- 3.3.3. Inland Fisheries Ireland
 - Request Further information in relation to the following:
 - Request that a catchment wide electrofishing survey is carried out to determine migratory and resident fish stock status
 - Needs to be established if resident fish populations in Lough Mhuilinn spawn along the lakeshore and/or in the outflowing channel
 - o Bathymetry survey should also be carried out
 - Consideration of the cumulative hydrological impacts on Lough Mhuilinn and stream water levels when measured in conjunction with existing upstream Lettermullen GWS abstraction plant.
 - Report referred to by applicant 'Construction and Operation of Small Scale Hydro-Electric Schemes and Fisheries' applies to hydrological schemes where water is be returned to the downstream catchment – effect of loss of freshwater from the downstream catchment needs to be considered.

3.4. Third Party Observations

3.4.1. 2 No. observations were received. The issues raised are as follows:

Bill Smyth – Galway City Angling Association

 No Appropriate Assessment or EIS has been finalised or published by the Department of Agriculture, Food and the Marine into the cumulative effects of the project.

- Precautionary principle should apply and no planning permission should be granted for the project.
- There is a viable alternative to open sea cage salmon farming/also GCC policy/On Land Closed Containment System.
- NIS submitted with the application contains no proper scientific research/took less than 24 days to prepare/a proper NIS should take months at least to prepare.
- Information in the documents submitted has been copied and pasted from other documents/information may be outdated/i.e. National Spatial Strategy is quoted but this has been withdrawn.
- Visual impact of the proposed tarpaulins and the pumping station.
- Damage done to the protected lagoons, reefs and other protected species beneath the water line in the SAC.
- Have observed the use of wellboats/may not get a foreshore licence if wellboats are being used/damage caused by wellboats to protected areas within the SAC/Photo attached to submission/wellboat dumps contaminated water into the bay/use of pesticides.
- Wellboats have been tracked to Scotland/Possible visiting Norway/Could transport infectious fish diseases/wellboats are required to be decontaminated.
- Towing of tarpaulins or the use of wellboats has not been covered in the NIS.
- Where are applicants dumping the contaminated water?
- AGD is not naturally occurring in Irish waters before it was brought here by the salmon fish farming industry.
- If permission is granted for this development it will not be a temporary structure/will be a cost to dismantling
- Fresh water does not kill the majority of sea lice
- Combined effect of abstracting water by the Group Water Supply Scheme and by the applicants will impact on water levels and raise water temperature, impacting on migration of sea trout, with subsequent impacts on otter and cormorants.

- Also possibility that pearl mussels and the slender naiad exist in the Gorumna Lake system/no surveys have been carried out to determine existence/context of the lake means it is possible that they existing i.e. presence of salmonoids, acidic/bog base rock, streams are not flowing at too steep a gradient and a lack of development on the island.
- Example is Knock River, not known to exist there until recently.
- Slender Naiad is protected under the EU Habitats Directive as both an Annex 2 and Annex 4 species/Plant Red Data Book Status is rare.
- Cannot predict water levels due to global warming precautionary principle must apply.
- Would set an undesirable principle.
- Agree with the reasons for refusal for the 2016 BBT application.
- Letters of consent may been signed by the same person.

Brian Curran – Ireland West Angling

- Previous application 16/702 refused for 3 reasons/repeat application/don't believe applicants have addressed the previous reasons for refusal.
- Applicants have been subject to three previous Enforcement notices.
- Impact on local water supply.
- Monitoring and documentation of the quantity of water that is being extracted.
- Impact of tarpaulins on boats operating in the area.
- Impact of existing infrastructure on the environment.
- Letters of consent should be witnessed by an appropriate authority.
- Application form is incomplete/misleading.
- All available documentation is not available in the Irish language.
- Project splitting has occurred development in its entirety needs to be subject to the appropriate environmental assessments before any planning permission is considered.
- An EIS is required for the application.

- Extraction will occur year round.
- Negative impact on tourism.
- Visual Impact Has a Landscape Character Assessment been completed?/Contrary to the objectives of the CDP.
- In relation to the Appropriate Assessment zone of impact considered in the screening process is too narrow/did not engage with the NPWS in relation to this application.
- NIS fails to consider impacts of pollutants such as noise and light/fails to identify or assess in-combination effects of other activities i.e. Fish Farm operations, Harbour Development in Rossaveal and dumping activity, proposed Marina Park, activities of nearby quarry.
- Appropriate Assessment of Aquaculture Activity in Kilkieran Bay and Islands has not been completed/published – difficult to see how this application could be granted in compliance with environmental legislation.
- Risks associated with transfer of fuel via quad bike.
- Disposal of contaminated water.
- Impact of abstraction on temperature of the lakes and streams concerned.
- Impacts of removing and demolishing sections of the 'temporary' development.
- Lack of assessment on protected bird populations.

4.0 **Planning History**

16/702 – Refuse - Water abstraction and associated works – for 3 reasons relating to (1) impact on drinking water supply, impact on human health, set an undesirable precedent for similar future private commercial development (2) Visual amenity and landscape impacts and (3) impact on Kilkieran Bay and Islands cSAC.

Enforcement

EN16/151 – Unauthorised installation of a pipeline from Loch an Mhuilinn into Coonawilleen Bay

EN15/136 – Unauthorised installation of a pipeline and abstraction pumping system from Loch An Mhuilinn into Cloonawilleen Bay

EN14/116 – Unauthorised installation of a pipeline from Loch an Mhuilinn into Coonawilleen Bay

5.0 Policy Context

5.1. **Project Ireland 2040 - National Planning Framework**

5.1.1. From 16th February 2018, the National Planning Framework has replaced the National Spatial Strategy (NSS) and now represents the overarching national planning policy document. The National Planning Framework sets a new course for planning and development in Ireland, to achieve a shared set of goals for every community across the country, focused on ten National Strategic Outcomes. Chapters of particular relevance to this appeal include chapters 1, 2, 3, 5, 7, 9, 10 and 11.

5.2. Galway County Development Plan 2015-2021

- 5.2.1. The relevant plan is the Galway County Development Plan 2015-2021.
- 5.2.2. The site lies within an area with a landscape rating of 'High' and a Landscape Sensitivity Class 4 – 'Special'. The landscape character area is – Lettermore and Gorumna Islands.
- 5.2.3. Relevant policies and objectives include:
 - Objective DS 6 Natura 2000 Network and Habitats Directive Assessment /Objective DS 9 – Projects/Associated Improvement Works/Infrastructure and Appropriate Assessment/Objective DS 10 – Impacts of Developments on Protected Sites.
 - Policy EDT 1/2/3/7 Promotes economic development including development and marketing of foods/Objectives EDT 11 – Rural Enterprise/Objective EDT 24 – Arts, Culture, Heritage, Food and Crafts.
 - Objective WS 2- EU Policies and Directives.

- Policies NHB1/2/4/8 Seeks to protect natural heritage and water resources/Objective – NHB1 – Protected Habitats and Species /Objective NHB 3 – Water Resources /Objective NHB 8 – Coastal Zone/Objective NHB 10 – Protection of the Coastal Zone /Objective NHB14 – Protection of Riparian Zones.
- Policy LCM1 Preservation of Landscape Character.
- Policy G2 0 Economic Development in An Ghaeltacht.
- Policy AFF 1 Agri-Food Sector, Fisheries/Marine Resources and Forestry /Policy AFF 2 – Sustainable Management of Natural Resources/Policy AFF 6 – Sustainable Growth within Fishing and Marine Resource Sectors /Policy AFF 7 – Integrated Approach /Objective AFF 8 – Aquaculture /Objective AFF 9 – Inland Fishery Resources.

5.3. Natural Heritage Designations

5.3.1. The appeal site lies partially within the Kilkieran Bay and Islands SAC boundary.

6.0 The Appeal

6.1. Grounds of Appeal

- 6.1.1. As part of the appeal submission, the appellants have submitted a Natural Impact Statement (NIS), as submitted at planning application stage, an updated Hydrological Feasibility Assessment (issue date 12/07/2017), a survey of Loch an Mhuilinn Lake and Tributary Streams – Preliminary Report (dated 13/07/2017), National Survey of Sea Lice on Fish Farms in Ireland – 2016 and a Response to the Submission from Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.
- 6.1.2. The grounds of appeal are as follows:
 - Proposed development is appropriate in terms of the overall planning and sustainable development of the area.
 - Proposed development will not have any impact on public water supply or on public health.

- Will have no impact on the Natura 2000 network or on any other ecologically sensitive site.
- Appeal submission sets out background and history of the applicant, Bradán Beo Teo (BBT).
- Employs 25/26 people with 140 people directly employed in organic salmon farming and related activities in 2014/ Works will support a thriving industry.
- BBT has abstracted water from Loch an Mhuillin during summer months in recent years] Used to bath farmed salmon in fresh water to control disease (AGD) – also reduces sea lice.
- Freshwater being extracted at a rate of 4,680m³ per week.
- Treatment only occurs when sea temp is approx. 12 degree Celsius early May to later September.
- Water abstraction currently carried out using a boat mounted pump and pipeline to seashore which is removed from site in Autumn. This arrangement is not a practical long term solution. BBT proposes to put in place improved infrastructure for their operations.
- Proposal is compliant with National and Regional Policies including those of the National Spatial Strategy 2002 to 2020 and Planning Guidelines for the West Region 2010-2022, as well as Departmental Strategy and EU objectives/Proposal is compliant with Galway County Development Plan 2015-2021.
- Previous application was refused for three reasons applicants chose to undertake further reporting and assessment in order to address the issues by way of a new planning application. Planning Authority gave no consideration to the considerable additional documentation submitted.
- Hydrological Feasibility Assessment was updated to take account of new information that became available during the application process and an updated version was included as part of the unsolicited Further Information response.
- In relation to alleged unauthorised development, the planning authority have never commencement any enforcement proceedings.

- Applicant maintains that extraction of water from the lake does not require planning permission and has included a legal opinion in this regard.
- In relation to water supply, it is noted that Loch Hirbirt is located upstream of Loch on Mhuillin in a significantly higher raised water basin therefore development cannot impact on public water supply.
- Applicant argues that abstraction of water does not require planning permission, is therefore not unauthorised and therefore the reason for refusal is based on an incorrect statement.
- Reason for refusal does not clarify how it contravenes various plans, policies and legislation cited does not explain why vulnerability rating is pertinent.
- Submitted NIS concluded that there would be no significant impact on any European site.
- Response provided to the three no. third party submissions Inland Fisheries, An Taisce, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

6.2. Planning Authority Response

6.2.1. None.

6.3. Observations

- 6.3.1. Údarás na Gaeltachta
 - Coastal areas create a very challenging environment for the creation of new development opportunities and employment.
 - Aquaculture and fish processing sectors are promoted by An tÚdarás as part of its regional development strategy.
 - In 2012 An tÚdarás took a 30% shareholding in Bradán Beo Teo.
 - Done on the basis that the farming of salmon would be carried out in compliance with the highest environmental standards.
 - The Marine Institute's National Survey of Sea Lice indicated that Bradán Beo Teo salmon farm was being well managed.

- CDP has policies supporting this development.
- Irish Government has recognised potential of Ireland's marine resources has produced an integrated marine plan for Ireland in Feb 2012.
- Other strategies such as Food Wise 2025 have factored in an increase in production from sustainable aquaculture.
- National Strategic Plan for Sustainable Aquaculture Development promotes organic aquaculture practices and certification.
- BBT has organic certification.
- Freshwater treatment proposed here is endorsed by the National Strategic Plan for Sustainable Aquaculture Development.
- Applicants have engaged consulting engineers, hydrologists and ecologists and have consulted with Inland Fisheries Ireland (IFI).
- Have arranged for further surveys and studies requested by IFI.
- Consultants have put forward measures to address concerns of IFI including installation of monitoring equipment to measure lake surface level.
- Applicants have addressed the concerns of Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.
- BBT employs 25 people directly in fish farming.
- 6.3.2. Peter Sweetman & Associates on behalf of Galway against Salmon Cages, Galway City Salmon Angling Association and Wild Ireland.
 - Documentation included with planning application states that BBT have been abstracting water.
 - These unauthorised works have been subject to planning enforcement under EN16/15.
 - Application is invalid as it does not seek retention of these unauthorised works.
 - Reference is made to CJEU Case C 215/06.
 - Development is partly located in Kilkleran Bay and Islands SAC.
 - Any grant of permission would circumvent the rules of the Habitats Directive.

6.3.3. Coiste Fostaíochta Iorras Aithneach

- Letter of support from the Employment Committee Iorras Aithneach.
- Committee promotes employment opportunities in this district.
- Extreme lack of employment in this location unemployment rate above 30%.
- 2 of the most disadvantaged electoral districts are located here BBT carries out business in these two districts.
- Drop of 50% in the number of children attending primary school; drop of 60%. attending secondary school; possibility there will not be a football team in the near future; a large amount of young people emigrating.
- The Irish language, the sea and seashore are important resources.
- There should be no problem with water supply there is a high level of rainfall.
- Technical issues can be overcome.

6.4. Further Responses

- 6.4.1. Inland Fisheries Ireland
 - Primary concern is the possibility of interference with sea trout and eel movement, as well as deterioration of water quality and habitat within the Loch an Mhuilinn catchment during the operational phase of the project.
 - Application states that freshwater will be required between May and September this is when native wild fish are at their most vulnerable.
 - Primary migration run for sea trout typically occurs between the months of June and September while the sea trout smolt mitigation run downstream to the sea occurs in April and May.
 - Has been unregulated water abstraction from Lough Mhuilinn (Loch na gCeann).
 - Crucial that water levels in the outflowing stream from Loch an Mhuilinn are maintained to link the lake to the sea for fish migration purposes.
 - Failure to maintain sufficient water volumes could have serious implications for the populations of fish species and contravenes the legal obligation under the

Water Framework Directive to protect the ecological status of river catchments and channels.

- IFI undertook a catchment wide electrofishing survey of the Loch an Mhuilinn catchment on 13th July 2017 to determine all potential migratory and resident stock status and distribution. Confirmed presence of brown trout and sea trout, a substantial population of European eel were recorded in the outflowing stream, Abhainn an Damba.
- IFI will determine whether resident fish populations in Lough Mhuilinn spawn along the lake shore and/or in the outflowing channel - survey will be undertaken by IFI during the late autumn fish spawning season – will provide additional information in relation to the importance of shore spawning to the system and also the potential impacts of changes to normal water levels.
- This information will also need to be considered by IFI in order to make an informed decision on this appeal.

6.4.2. Appellants

Following a request from An Bord Pleanála, the applicants have submitted the following documentation, received on the 9th February 2018.

- Result of Inland Fisheries Ireland Survey of Trout Lake Spawning in Loch an Mhuilinn - concludes that no shoreline lake spawning of trout was observed. Noted significant salmon spawning was taking place in the inflowing stream to Loch an Mhuilinn.
- Hydrological Assessment Supplementary Report Sets out mitigation measures to ensure that IFI compensatory flow requirements for the outlet from Loch an Mhuilinn are met. Lake water level and flow data recorded between 1st August 2017 and 6th January 2018 are presented. Lake levels and outflow projections with and without mitigation measures in place are presented. The results of the Hydrological Modelling concludes that abstraction would not cause the outlet flow to reduce below 70 l/s, which is greater than the minimum fish passage compensatory flows (34 l/s). A number of recommendations are set out in the report including (i) abstraction should only be undertaken when lake levels upstream of the outlet are equal to or greater than 2.34m OD which gives flow

greater than 34 l/s in order to satisfy fish passage requirements (ii) Following a temporary cessation of abstraction due to low water levels, no further abstraction shall be undertaken until the lake recovers to a minimum water level of 2.44m OD (iii) Installation of water gauge and log of water abstraction activity.

 Response to An Bord Pleanála – Water Abstraction at Loch an Mhuilinn, Gorumna Island, Co. Galway - This considers the impact of abstraction on movements and spawning of migratory fish into Loch an Mhuilinn, including known populations of seatrout and European eel. The potential impact on water quality within the lake and the associated Annex 1 Habitat - 3110 Oligotrophic Waters containing very few minerals of sandy plains - is also considered. Impact on lake spawning fish are not considered likely given limited opportunities within the physical lake habitat and also based on the observations of the IFI survey. Impacts are thus restricted to the associated migratory movements of fish. Proposal is unlikely to affect the macrophyte community within the lake (an indicator of water quality), once the lake is allowed to recharge (i.e. the level of the lake should be allowed to return to 2.44m OD if water drops below the minimum lake level).

7.0 Planning Assessment

- 7.1. The following assessment covers the points made in the appeal submissions and also encapsulates my *de novo* consideration of the application. I note the comments raised by an observer in relation to the unauthorised activity on site and the comments on the validity of the application, as no retention has been sought for the unauthorised works. From my observations on site, there was no evidence of development activity within the appeal site boundary and retention permission is not required. I did note what appeared to be a pumping station and disconnected piping further south and south-west of the appeal site, beyond the appeal site boundary.
- 7.2. The main issues in the assessment of the proposed development are as follows:
 - Principle of Development
 - Impact on Water Supply
 - Ecology

- Impact on Landscape
- Flooding
- EIA
- Appropriate Assessment

7.3. Principle of Development

- 7.3.1. Economic development, in the county and the region, is supported by various policies and objectives of the CDP including Policies EDT 1, 2, 3 and 7, Objectives EDT 11 Rural Enterprise, Objective EDT 24 Arts, Culture, Heritage, Food and Crafts, Policy G2 Economic Development in An Ghaeltacht, Policy AFF 1 Agri-Food Sector, Fisheries/Marine Resources and Forestry, Policy AFF 6 Sustainable Growth within Fishing and Marine Resource Sectors and Objective AFF 8 Aquaculture.
- 7.3.2. As the development proposed here is facilitating the continuing activities of a salmon farming enterprise, there is no in principle objection to the development, subject to the detailed considerations below.

7.4. Impact on Potable Water Supply

- 7.4.1. The first reason for refusal cited by the Planning Authority related to the impact on the potable water supply from Loch Hirbirt, which is the source of a potable water supply source (Lettermullen Group Water Supply Scheme). The Loch and Mhuilinn catchment includes Loch Hirbirt, which is the water source for the Lettermullen Group Water Supply Scheme. Loch Hirbirt is located upstream of Loch an Bhalla, which in turn is located upstream of Loch an Mhuilinn. The lakes are joined by a stream which flows from Loch Hirbirt, to Loch an Bhalla and then to Loch an Mhuilinn. Loch an Mhuilinn is drained to the sea via a short stream (Abhainn an Damba).
- 7.4.2. The grounds of appeal argue that the proposed abstraction from Loch an Mhuilinn will have no impact on the water supply abstraction for the following reasons:
 - Loch Hirbirt is located upstream of Loch an Mhuilinn in a significantly higher raised basin (water level difference of 12m) - Abstraction works at Loch an Mhuilinn can therefore in no way influence or impact the water level in Loch

Hirbirt as the flow out of Loch Hirbirt, following abstraction for the water supply scheme, supplies Loch an Bhalla and in turn Loch an Mhuilinn.

- (ii) The stream channel, and associated structures, that drains from Loch Hirbirt to Loch an Bhalla is its downstream boundary control/condition (i.e. controls the water level in Loch Hirbirt) and the feasible range of water levels in Loch an Mhuilinn can have no influence on water levels in Loch Hirbirt.
- (iii) The catchment lies within the Islands of Kilkerian Bay GWB which is classed as a 'Poorly Productive' and a 'Poor Aquifer' (bedrock which is generally unproductive except for local zones). There would likely by no interaction of significance between surface water and the aquifer in the study area.
- 7.4.3. I note the response on file of the Senior Engineer, Water Services and Environment, who has stated that the Divisional Engineer in the Western Division (who has responsibility for water supply) has no concerns in relation to the application.
- 7.4.4. The appellant has also submitted a letter from the Manager of the Lettermullen Group Water Supply Scheme that states that raw water abstraction capacity has not been impacted by water abstractions from Loch an Mhuilinn undertaken by Bradán Beo Teo.
- 7.4.5. Having regard to the above, and in the absence of any opposing scientific evidence on file, I do not consider that the proposal can have an impact on water levels in Loch Hirbirt and as such cannot impact on the group water supply scheme referred to in the reason for refusal.

7.5. Ecology

- 7.5.1. The main potential ecological impacts of the proposed development are the impacts on the ecology of the lake, including the impact on fish and eel movements, as a result of the extraction of water with a resultant change in water levels, and a change in the lake residence time (i.e. the average time water stays within the lake body) as well as any resultant deterioration in water quality and habitat. These are the primary concerns of Inland Fisheries Ireland (IFI) as outlined in their submission on the appeal, received on 7th November 2017.
- 7.5.2. I refer to the above submission from IFI and this submission notes the primary migration run for sea trout occurs between June and September and sea trout moult

migration run downstream occurs between April and May. It is stated that IFI carried out a catchment wide electrofishing survey of the Loch an Mhuilinn catchment in July 2017. I note the appellants have submitted this survey report with their appeal submission (entitled 'A survey of Loch an Mhuilinn Lake and Tributary Streams – Preliminary Report - dated 13/07/2017). The survey confirms that Brown and Sea Trout were present as well as a substantial population of European eel.

- 7.5.3. A further survey entitled 'Survey of Trout Lake Spawning in Loch an Mhuilinn', carried out by the IFI (on 27/11/2017) was submitted to An Bord Pleanála by the applicant on 9th February 2018, following a request for same. This notes that no shoreline lake spawning of trout was observed in the potential spawning areas of the Loch an Mhuilinn shoreline. No evidence of lake spawning or evidence of previous spawning in the form of reds were observed. The survey noted significant salmon spawning was taking place in the inflowing stream to Loch an Mhuilinn. It is concluded that it is unlikely that trout utilise the shoreline of Loch an Mhuilinn as spawning habitat.
- 7.5.4. A further report was submitted to An Bord Pleanála on 9th February 2018 entitled 'Response to An Bord Pleanála – Water Abstraction at Loch an Mhuilinn, Gorumna Island, Co. Galway'. This considers the impact of abstraction on movements and spawning of migratory fish into Loch an Mhuilinn, including known populations of seatrout and European eel. The potential impacts on water quality within the lake and the associated Annex 1 Habitat - 3110 Oligotrophic Waters containing very few minerals of sandy plains - is also considered.
- 7.5.5. Impact on lake spawning fish are not considered likely given limited opportunities within the physical lake habitat and also based on the observations of the IFI survey (as summarised above). Impacts are thus restricted to the associated migratory movements of fish in and out of the system within the adjoining tributaries (i.e. threshold water levels/flow rates for fish movement and spawning). Impacts on same and proposed mitigation measures are considered in paragraphs 7.5.8 and 7.5.13 below.
- 7.5.6. It is noted in the report that water abstraction can result in increased lake residence time, causing increased amounts of algae, periphyton and macrophytes. However the report concludes that the change to the residence time as a result of the

abstraction (from 14.5 days to 14.4 days as cited in the Hydrological Feasability Assessment dated 12/07/2017) is unlikely to affect the macrophyte community within the lake, once the lake is allowed to recharge following a period of low water levels. It is recommended that the littoral macrophyte community be monitored following a 2 year period of abstraction in conjunction with a repeat catchment wide electro-fishing survey.

- 7.5.7. An updated Hydrological Assessment Supplementary Report –Water Level and Flow Monitoring, was submitted to An Bord Pleanala on 9th February 2018. This document sets out mitigation measures to ensure that flow requirements for the outlet from Loch an Mhuilinn are met, in order to allow for movement of salmonids. Lake water level and flow data recorded between 1st August 2017 and 6th January 2018 are presented, as well as Lake levels and outflow projections with and without mitigation measures in place (Hydrological Modelling).
- 7.5.8. Impacts of previous abstractions between June 2017 and September 2018 are presented, and lake levels were also monitored between September 2017 and January 2018. This average water level was recorded as 2.53m OD with a maximum of 2.76m OD and a minimum of 2.37m OD. The report also refers to a lake level measured on 13th October 2015, of 2.33m OD which followed a period of dry weather.
- 7.5.9. The results of the Hydrological Modelling, which considers the potential impact on lake levels and lake outflow as a result of abstraction, concludes that the proposed abstraction would reduce the lake level by no more than 1.5cm respectively. Abstraction would not cause the outlet flow to reduce below 70 l/s, which is greater than the required minimum fish passage compensatory flows (34 l/s), as set out in the Section 2 of the report.
- 7.5.10. A number of recommendations are set out in the supplementary report including:
 - Rainfall records in tandem with rain forecasts should be used to plan abstraction operations.
 - The abstraction should only be undertaken when lake levels upstream of the outlet are equal to or greater than 2.34m OD which gives flow greater than 34 l/s in order to satisfy fish passage requirements.

- Following a temporary cessation of abstraction due to low water levels, no further abstraction shall be undertaken until the lake recovers to a minimum water level of 2.44m OD.
- Installation of water gauge and log of water abstraction activity.
- 7.5.11. The applicants have also submitted a report entitled 'Loch an Mhuilinn Salmonid Spawning Habitat Assessment & Bathymetry Survey'. This recommends the installation of a water measurement gauge near the intake area to monitor water levels during pumping operations and maximum abstraction rates.
- 7.5.12. The Hydrological Feasibility Assessment (issued date 12/07/17) also considers water quality and habitat deterioration in the context of the EU Water Framework Directive (WDF; 2000/60/EC) as does the report entitled 'Response to An Bord Pleanála Water Abstraction at Loch an Mhuilinn, Gorumna Island, Co. Galway', submitted on the 9th February 2018. The Water Framework Directive applies to rivers, lakes, groundwater, estuaries and coastal waters. Member States must aim to achieve good status in all waters by 2015 and must ensure that status does not deteriorate in any waters.
- 7.5.13. Loch an Mhuilinn lies within the 'Furnace_SC_010 Subcatchment' and is part of the 'Galway Bay North' Catchment. A Sub-Catchment Assessment is not available for this Subcatchment (<u>www.catchments.ie</u> accessed 16th May 2018) and as such a WFD Status is not known.
- 7.5.14. The Hydrological Feasibility Assessment attempts to examine the likely WFD implications in terms of the ratio of abstraction to the existing water inflow rates into the lake in the lake. The WFD has developed risk categories for ecological impact and thresholds for surface water abstraction based on the net abstraction to the 95%-ile flow rate (the 95%-ile is the flow rate into a watercourse which is exceeded 95% of the time. It is also termed the low flow rate). This is set out in the table below:

Risk Category	Risk Classification	Ratio of net abstraction to 95%-ile flow
2b	Not at risk	<5%
2a	Probably not at risk	5 to 10%

1b	Probably at risk	10 to 40%
1a	At risk	>40%

- 7.5.21. The annual proposed abstraction rate (year round average) is 3.3 l/s and the 95%-ile flow rate for Loch an Mhuillin is 11 l/s. Based on the ratio of the proposed abstraction to the low flow rate (i.e. the 95%-ile), this would result in Loch on Mhuilinn being categorised as a 1b 'Probably at Risk'.
- 7.5.22. However, the report refers to an alternative methodology as set out in a report entitled 'Revised Risk Assessment Methodology for Surface Water Abstractions', utilised by Eastern River Basin District (ERBD) Project , which assesses impact in terms of the ratio of the proposed abstraction to the 50%-ile flow (i.e. the median inflow rate into the lake). I have had regard to this report in my assessment. This median flow rate is considered to be more ecologically relevant, given that changes to low flow rate (i.e. the 95%-ile) will not have a material impact on the changes that affect lake ecology i.e. lake level fluctuation and change in residence time.
- 7.5.23. Considering the ratio of the proposed abstraction rate (year round average) with the more ecologically relevant 50%-ile, Loch an Mhuilinn can be reclassified as '2a-Probably not at significant risk' of ecological impact, having regard to the table above.
- 7.5.24. Having regard to the significant volume of information submitted with the appeal, and having had due regard to same, it is my view that the key issue relating to the ecology of the lake is requirement to maintain the minimum lake level of 2.34m OD, as recommended in the Hydrological Assessment Supplementary Report in order to facilitate migratory passage of salmonids and in order to maintain water quality. If this minimum level is breached, water abstraction should cease and the lake should be allowed to recharge and the water level should be allowed to reach 2.44m OD. It is possible to ensure an exact water level by the use of a water level gauge, and to restrict water abstraction should the water level of the lake fall below this level, and to require that the lake should be allowed to recharge to a water level of 2.44m OD before the resumption of abstraction. Should the Board be minded to grant permission relevant conditions should be imposed in this regard.

7.6. Impact on Landscape

7.6.1. I note that the appeal site lies within an area with a landscape rating of 'High' and a Landscape Sensitivity Class 4 – 'Special'. However, I am of the opinion that, due to the low lying nature of the pipeline, and the small scale nature of the pumping equipment and headwall, the development will not be visually obtrusive, and that there will be no adverse visual impact arising nor will there be an adverse impact on the landscape character.

7.7. Flood Risk

- 7.7.1. A Preliminary Flood Risk Assessment is included in Section 3.5 of the Hydrological Feasibility Assessment (dated 12/07/2017). This notes that the proposed pumping site is to be located on ground adjacent to the lake at 4m OD, with the finished level of the pumping platform at least 5m OD.
- 7.7.2. Having regard to flood mapping data from the OPW, the pumping station location appears to be in Flood Zone B (Coastal 1 in 200 yr event). However the Preliminary Flood Risk Assessment notes the pumping station will have a 0.6m freeboard above the 1 in 200 year flood level. Subject to this being enforced by way of condition, I am satisfied the proposal is not vulnerable to flooding, nor will it result in an increase in flood risk in the surrounding area.

7.8. Environmental Impact Assessment

- 7.8.1. The Environmental Impact Assessment (EIA) Directive (2014/52/EU) entered into force on 15 May 2014, with a requirement that it be transposed into national legislation by 16 May 2017.
- 7.8.2. The Directive has not to date been transposed into Irish legislation. Circular Letter 1/2017 issued by the Department of Housing, Planning, Community and Local Government (DHPCLG) sets out the transitional arrangements in advance of the commencement of the transposing legislation.
- 7.8.3. Article 4(1) and (2) maintains the provision in the 2011 Directive of setting out the projects for which EIA is mandatory in Annex I, and the projects for which the member states can determine whether the project shall be subject to EIA in Annex II. No changes are proposed to these schedules in the 2014 Directive.

- 7.8.4. Schedule 5 of the Planning and Development Regulations, 2001 (as amended), sets out Annex I and Annex II projects which mandatorily require an EIS. Part 1, Schedule 5 outlines classes of development that require EIS and Part 2, Schedule 5 outlines classes of developments that require EIS but are subject to thresholds. I have examined the Part 1, Schedule 5 projects and I do not consider that the water abstraction and ancillary works proposed are included in any of these project descriptions. I have also examined the Part 2, Schedule 5 projects and I do not consider that these projects would be applicable to this development as proposed.
- 7.8.5. As such EIA and the submission of an Environmental Impact Assessment Report (EIAR) is not required in this instance.

7.9. Appropriate Assessment

- 7.9.1. Legal protection is provided for habitats and species of European importance under the Habitats Directive 92/43/EEC, which established a network of designated conservation areas known as Natura 2000 or European sites, which include Special Areas of Conservation (SAC) under the Habitats Directive and Special Protection Areas (SPA) under the Birds Directive (Directive 2009/147/EC). Article 6(3) of the Habitats Directive requires Appropriate Assessment to be carried out for any plan or project not directly connected with or necessary to the management of a European site (or sites) concerned, but that it likely to have a significant effect thereon, on its own or in combination with other plans or projects, in view of its conservation objectives.
- 7.9.2. The proposed development is not directly connected with or necessary to the management of any European site.
- 7.9.3. The applicant has submitted a Natura Impact Statement (NIS) addressing the possible likely effects, if any, on any European sites.
- 7.9.4. I note that an observer on the appeal has argued that any grant of permission would circumvent the rules of the Habitats Directive. An Taisce, the Department of Arts, Heritage, Regional and Rural Affairs, and Galway City Angling Association and Ireland West Angling, in their submissions at planning application stage, have raised concerns in relation to the Natura Impact Statement and considered the scope of the NIS is inadequate and does not consider the relationship between the proposal and the offshore salmon farm, does not consider impacts of the operation of the fish farm

and cumulative impacts, does not consider impacts on marine habitats and species including seabirds, as well as habitats and species associated with Loch an Mhuilinn. It was also considered that out of date information was utilised, that there were alternatives available and that project splitting has occurred. It was stated that the precautionary principle should apply and that the application should be refused on this basis.

7.9.5. These issues are considered in the assessment below.

Stage 1 Screening

- 7.9.6. Stage 1 is concerned with determining whether a described development, not being a development directly connected with or necessary to the management of a European site, in itself or in-combination with other described projects or plans, has the potential to have significant effects on any European site.
- 7.9.7. The appeal site located in proximity to, and partly within the boundaries of, the Kilkieran Bay and Islands SAC (site code 002111). Other Natura 2000 sites within a 15km radius of the subject site include Slyne Head to Ardmore Point Islands SPA (5.9km north-west of the appeal site), Inishmore Island SAC (c 8km south of the appeal site), Inishmore SPA (c 12.7 km south-west of the appeal site at the closest extent), Connemara Bog SPA (c13.4 km north-east of the site), the Connemara Bog Complex SAC (c10.7km east of the appeal site at the closest point) and Lough Nageeron SAC (located c13.5km north-west of the appeal site). I note that the Kilkieran Bay and Islands SAC, overlaps the boundaries of the Slyne Head to Ardmore Point Islands SPA, and adjoins the boundaries of the Connemara Bog SPA.
- 7.9.8. While there is a hydrological link via sea to a number of the Natura 2000 sites identified above (Slyne Head to Ardmore Point Islands SPA, Inishmore Island SAC and Inishmore SPA and Connemara Bog SPA), given the nature of the project and the distance from the appeal site to these Natura 2000 sites, the only Natura 2000 site that has the potential to be impacted is the Kilkieran Bay and Islands SAC.
- 7.9.9. Conservation Objectives for the Kilkieran Bay SAC are to maintain the favourable conservation condition of:
 - Mudflats and sandflats not covered by seawater at low tide
 - Coastal lagoons

- Large shallow inlets and bays
- Reefs
- Atlantic salt meadows (Glauco-Puccinellietalia maritimae)
- Mediterranean salt meadows (Juncetalia maritimi)
- Slender Naiad Najas flexilis
- Machairs (* in Ireland)
- Lowland hay meadows
- Otter Lutra lutra
- Harbour seal Phoca vitulina
- 7.9.10. In carrying out a Stage 1 Screening, I have had regard to the NIS submitted, and other relevant information on the file, my observations on site and the Conservation Objectives Series document for Kilkieran and Islands SAC (4th Feb 2014) and other related documentation accessed on the National Park and Wildlife Services website (accessed 23/11/2017).
- 7.9.11. In my view there are likely significant effects on the above habitats and species of qualifying interests that could result from the proposed development. Potential direct effects are deterioration in water quality during both the construction and operational phases as well as potential impact on foraging opportunities for species of qualifying interest, resulting from a decline in salmonid numbers. Potential in-combination effects include potential cumulative impacts of the operation of aquaculture activities within proximity to the appeal site.
- 7.9.12. However, having regard to the above considerations, it is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects is likely to have a significant effect on the Kilkieran Bay and Islands SAC (site code 002111), in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) is therefore required.

Stage 2 Appropriate Assessment

- 7.9.13. The Stage 2 Appropriate Assessment concerns European Site No. 002111- Kilkieran Bay and Islands SAC.
- 7.9.14. The impact of the proposed works on the integrity of the Kilkieran Bay and Islands SAC is considered with respect to the qualifying interests and conservation objectives.
- 7.9.15. It is my view that the habitats of qualifying interests that are likely to be affected are (i) Large Shallow Inlets and bays and (ii) reefs, given that these are the only habitats either within, or in close proximity to, the appeal site. The species of qualifying interest likely to be affected are (i) otter and (ii) harbour seal, given that these are known to be present either within, or in close proximity to, the appeal site.
- 7.9.16. In relation to the construction phase, potential direct impacts are a loss of habitat of conservation interest and disturbance to qualifying species. The construction of the headwall and associated in road pipeline will involve the laying of the pipe under the road which will connect to a precast concrete headwall placed into the existing wall. A potential source-pathway-receptor include possible spills of silt and pollutants directly from the construction site onto the foreshore and into the coastal waters, resulting in a deterioration in water quality, possible loss of habitat of conservation interest.
- 7.9.17. In relation to same, the submitted Natura Impact Statement sets out a range of mitigation measures and it is stated that the majority of works will take place from the road side and pollution control measures will be put in place. The foreshore region will be fenced off prior to any commencement of works and no machinery will be permitted into this fenced off area. There will be no storage of equipment within the SAC. The expected duration of construction works will be a maximum of 5 days. Best practice construction measures can ensure that these direct impacts are mitigated against.
- 7.9.18. In this instance, there is no loss of habitats of conservation interest, or impact on species of conservation interest as result of the construction works, given the limited scale of the works and the mitigation works outlined above.
- 7.9.19. In relation to the operational phase, potential direct impacts are from the off-shore150mm pipeline, which will be approximately 200m in length, and connection of

same to the headwall, which lies within the SAC boundary. This pipeline will be in place 4 days a week, for 6 hours per day, over the summer months only (May to Sep). The pipeline will lie upon an intertidal rocky shore connected to the headwall and extending out to the tarpaulin. The bay is made up of rock, cobble and gravels along the shore line with outcrops of rocks within the bay. The proposed pipeline will lie along the rock and cobble shore before joining the sea and tarpaulin. The pipeline will be connected by hand to the headwall.

- 7.9.20. In relation to the connection of the pipeline and associated movements, I have had regard to the limited extent of the pipeline and the limited amounts of movements associated with its connection. At high and moderate tides, the pipeline will float on the seawater. At low tide it will rest on the foreshore. I do not consider that any significant effects will result from this, given the relatively small scale of the pipeline.
- 7.9.21. Potential direct impacts may also result from the abstraction of water from Loch an Mhuillinn. There is an existing source-pathway-receptor in the form of the stream (Abhainn an Damba) that forms a hydrological connection from Loch an Mhuillinn to the SAC. Any reduction in the numbers of salmonid species that travel from the lake to the coastline via the stream, may result in a loss of foraging opportunities for the otter and harbour seal, species of conservation interest. However, having regard to the detailed assessment on the ecology of the lake as considered in Section 7.5 of this report, it is not considered that salmonids will be adversely impacted upon, subject to minimum water levels in the lake being maintained, and as such there will be no direct impact on the otters or harbour seals.
- 7.9.22. A further direct impact is the potential impact from pollutants emanating from the pump station itself, with any pollutants entering the lake adversely impacting the ecology of the lake, including salmonid stocks. Furthermore, there is the potential for such pollutants to travel downstream from the lake to the SAC, adversely impacting on the habitats and species of conservation interest identified above.
- 7.9.23. Section 9 of the Natura Impact Statement sets out a range of avoidance and mitigation measures which include pollution control measures. The pump station itself is contained within a fully bunded container to ensure no leakage or spills of hydrocarbons. This is sufficient to ensure that no pollutants enter the lake and will ensure no impact on the SAC.

- 7.9.24. I do not consider that there will be significant impacts on the qualifying habitats and species as a result of the movement of the tarpaulins.
- 7.9.25. Furthermore, I do not consider that there will be a significant impact resulting from the release of freshwater at the location of the salmon farms, given the submitted evidence relating to the dispersion of freshwater into the saltwater of Casheen Bay (Appendix II) of the 'Response to Submission from the Department of Arts, Heritage, Regional and Rural and Gaeltacht Affairs'. This concludes that there will be a negligible impact on the surrounding environment as a result of the freshwater dispersion, with salinity values quickly returning to ambient levels following dispersion.
- 7.9.26. In relation to in-combination effects, I have had regard to the information on the file, including Appendix III of the response to the submission of Department of Arts, Heritage, Regional and Rural and Gaeltacht Affairs 'Report supporting Appropriate Assessment of Aquaculture and Risk Assessment of Fisheries in Kilkieran Bay and Islands SAC' carried out by the Marine Institute. This report concludes that certain aquaculture activities, including salmon culture, could have a disturbing effect on sensitive community types, by virtue of the extent of their activities. However, given the relatively limited scale of this proposal, I consider it reasonable to conclude that the proposed development, in-combination with other aquaculture activities within the SAC, will not have a significant impact on habitats and species of qualifying interest identified above.
- 7.9.27. I consider it reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European Site No. 002111- Kilkieran Bay and Islands SAC, in view of this site's Conservation Objectives.

8.0 **Recommendation**

I recommend that planning permission should be granted, subject to conditions, as set out below.

9.0 Reasons and Considerations

Having regard to the nature and scale of the proposed development, and the policies of the current Galway County Development Plan, it is considered that, subject to compliance with the conditions below, the proposed development would not seriously injure the visual amenity of the area, would not have a negative impact on ecology and would not have a significant negative impact on the conservation objectives of any European Site. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

10.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the plans and particulars submitted on the 16th day of June 2017, and as amended by the further plans and particulars received by An Bord Pleanála on the 17th day of July 2017 and on the 9th February 2018, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. (a) The water abstraction regime shall comply with the submission to the planning authority on the 24th day of January 2017, as amended by the plans and particulars submitted on the 16th day of June 2017, and as amended by the further plans and particulars received by An Bord Pleanála on the 17th day of July 2017, and on the 9th February 2018. In any case water abstraction shall be limited to a maximum of 1,170m³ per day and a maximum of 4,680m³ per week, limited to a period between the 1st day of May and the 30th day of September each year. Any deviation from this abstraction regime shall be the subject of a separate application for

planning permission. The quantity of water being abstracted shall be monitored on an annual basis and the results of this monitoring shall be submitted to the planning authority and Inland Fisheries Ireland.

(b) No Water abstraction shall take place should the water level of the lake fall below 2.34m OD. Furthermore, should the water level fall below this level, no further abstraction shall take place until the water level returns to at least 2.44m OD. Details of the proposed water level gauge(s) shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. These details shall provide for the transmission of the information obtained to both the planning authority and Inland Fisheries Ireland.

(c) The information detailed in (a) and (b) above shall be submitted every three months over the first two years of the operation of the scheme and then at intervals to be agreed with the planning authority.

(d) Prior the commencement of development. The developer shall erect a gauge board in the vicinity of the intake displaying lake levels which must be exceeded before abstraction commences and also during abstraction. The precise siting of this board shall be agreed in writing with the planning authority.

Reason: To protect the environment.

- 3. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including:
 - (a) details of site security fencing and hoardings,

(b) details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site,

(c) measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network,

(d) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels,

(e) containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater,

(f) details of on-site re-fuelling arrangements, including use of drip trays,

(g) details of how it is proposed to manage excavated soil, and

(h) means to ensure that surface water run-off is controlled such that no deleterious levels of silt or other pollutants enter local surface water drains or watercourses.

A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan shall be kept for inspection by the planning authority.

Reason: In the interest of environmental protection, amenities, public health and safety.

4. No external artificial lighting shall be installed or operated on site, unless otherwise authorised by a prior grant of planning permission.

Reason: In the interest of visual and residential amenity.

5. All surface water run-off from the development shall be collected and disposed of within the site to soakpits.

Reason: To prevent pollution.

 The finished floor level of the proposed pumping compound shall be at least 5m OD.

Reason: In the interest of environmental protection.

Rónán O'Connor Planning Inspector

25th May 2018