CLIENT: CST Group

PROJECT: Proposed Northern Extension to Rossinver Cemetery, Rossinver, Co. Leitrim.

Screening for Appropriate Assessment Report.

Prepared by: Envest.

Date: April 2019
REPORT CONTROL

Client: CST Group on behalf of Fr. Pat Farrelly, Parochial House, Rossinver, Co. Leitrim

Project: AA Screening for Northern Graveyard Extension, Rossinver, Co. Leitrim

Job Number: ENV-4047

Document Checking:

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Unit 8A
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Sligo.

April 2019
Project Ref. ENV-4047
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1 INTRODUCTION

Envest was commissioned by CST Group on behalf of Fr. Pat Farrelly, Parochial House, Rossinver, Co. Leitrim to complete a Stage 1 Screening for Appropriate Assessment report for the proposed extension to the north of the existing cemetery in Rossinver, Co Leitrim. This Screening Report addresses the potential for construction works and the operational phase of the proposed project to impact on Natura 2000 sites within 15Km of the development site.

The purpose of this Screening Report is to inform the Appropriate Assessment process which is carried out by the appropriate competent authority, Leitrim County Council. Appropriate Assessment (AA) is an assessment of whether a plan or project, alone and in combination with other plans or projects, has the potential for significant effects on a designated European Site in view of the site’s conservation objectives.

The report was drafted by an experienced and qualified ecologist, with specific reference to the European Sites within the zone of influence of the proposed project; taking account the qualifying interests and conservation objectives of these designations. The assessment is determined based on details provided by CST Group, Chartered Consulting Engineers, 1 O’Connell Street, Sligo. WYG Environmental and Planning (NI) Limited (hereafter referred to as ‘WYG’) were commissioned by Envest to undertake a Hydrogeological Risk Assessment (HRA) to inform the Appropriate assessment process. This was undertaken by gaining an understanding of the environmental site setting and identifying any potential risk or impacts that could result from the extension of the existing graveyard on surface water and or the groundwater environment within the vicinity of the site. The Hydrogeological Risk Assessment report is available separately in the planning application documents.

2 THE APPROPRIATE ASSESSMENT PROCESS

Legislative Context

The assessment of impacts on designated European sites i.e. Special Protection Areas for birds (SPAs) and Special Areas of Conservation (SACs), derives from the EU Directive on the Conservation of Habitats, Flora and Fauna (92/43/EEC), more commonly known as the ‘The Habitats Directive’ which provides legal protection for habitats and species of European importance. SPAs and SACs are sites that form part of a network, known as Natura 2000 sites, designated across Europe in order to protect biodiversity within the European Union (EU).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate
Assessment: ‘Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the concerned and, if appropriate, after having obtained the opinion of the general public.’

Article 6(4) states: ‘If, in spite of a negative assessment of the implications for the [Natura 2000] site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.’

Appropriate Assessment Methodology

Article 6(3) of the EU Habitats Directive (92/43/EEC) defines the requirement for Appropriate Assessment of certain plans and projects. In order to inform the requirements of this Screening Report the following guidance documents have been referred to:

- **Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities.** (Department of Environment, Heritage and Local Government, 2010 revision);

- **Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.** Circular NPWS 1/10 & PSSP 2/10;


The Department of the Environment Heritage and Local Government Guidelines (DELHG, 2009), outlines the European Commission’s methodological guidance (EC, 2002). This guidance promotes a four-stage process in completing an AA and outlines the issues and tests at each stage. An
important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

Stage 1: Screening - Screening is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3):

- whether a plan or project is directly connected to or necessary for the management of the site, and
- whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site in view of its conservation objectives.

A project may be “screened-in” if there is a possibility or uncertainty of significant adverse effects upon the European site, thus the process must proceed to Stage 2 (AA). If there is no evidence to suggest significant effects due to the proposed plan or development the project is “screened-out” and AA is not required.

Stage 2: Appropriate Assessment - This stage considers whether the plan or project, alone or in combination with other projects or plans, will have adverse effects on the integrity of a Natura 2000 site, and includes any mitigation measures necessary to avoid, reduce or offset negative effects. A Natura Impact Statement (NIS) containing a professional scientific examination of the proposal is produced and includes any mitigation measures to avoid, reduce or offset negative impacts.

Stage 3: Alternative Solutions - Where adverse effects on a European Site are identified in the AA process (detailed in the NIS), despite the prescription of mitigation, this third stage examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the European Site.

Stage 4: Imperative Reasons of Overriding Public Interest (IROPI)/Derogation - This stage is required where an alternative solution is not available. In this situation, the project can only proceed for Imperative Reasons of Overriding Public Interest (IROPI), despite the plan or project resulting in adverse effects on European Site(s). This stage provides for an assessment of compensation measures to maintain or enhance the overall coherence of the Natura 2000 network. The Commission must be informed of the compensatory measures. Compensatory measures must be practical, implementable, likely to succeed, proportionate and enforceable, and they must be approved by the Minister.

Consultation – Due to the short time scale available to complete the AA Screening report, consultation was not undertaken with any stakeholders at this time. A consultee response was received from Leitrim Co. Co.
**Desktop Review** - A desktop evaluation of information relating to Natura 2000 sites within 15 km of the proposed project were identified and reviewed using the National Parks and Wildlife Service (NPWS) online map viewer. The EPA Envision mapping system, Google Maps and publicly accessible biodiversity datasets were used to complement the information available from the NPWS system, and identify, where possible, habitats and possible ecological constraints of the proposed site. Other information on Habitats, Water Quality, Aquatic Ecology, and Hydrology in the area was obtained from all available studies and surveys.

This screening report addresses the following elements:

- Description of the proposed project.
- Identification of Natura 2000 sites within 15 km of the proposed project site with screening of such sites for potential individual and cumulative impacts of the proposed works on their conservation objectives.
- Assessment of significance of the proposed works on the identified Natura 2000 sites.
- This screening report provides the necessary information to enable the Competent Authority to screen the proposed project for the requirement to proceed to Stage 2 Appropriate Assessment, which is required if the effects of the proposed project are deemed to be significant, potentially significant or uncertain.

### 3 DESCRIPTION OF THE PROPOSED PROJECT

Rossinver is a small village in north County Leitrim, at the southern shore of Lough Melvin. Rossinver Graveyard is situated in the townland of Gubalaun beneath the shade of Sheawn mountain. It is very flat, and it lies beside the Ballagh river, which runs into Lough Melvin, a unique and internationally significant lake located in the counties of Leitrim and Fermanagh. The surrounding area is predominantly agricultural with sporadic housing.

The proposed burial ground extension is located to the north of an existing modern burial ground. The modern burial ground and the site of the proposed new burial ground are located to the east of a narrow roadway that provides access to a medieval church (Gubulaun Abbey) and graveyard which is located to the west of this roadway. The proposed development site is accessed by a double gate that currently serves the modern burial ground. The site is currently a greenfield site consisting of improved grassland bounded by stone wall, hedgerow, treelines and stock proof fencing.

Archaeological pre-development testing carried out in January 2019 by Anne Carey, on behalf of the client, which involved the excavation of five trenches at the site of the proposed development did not generate any unknown archaeological features or material. The highly mixed fills noted in
four of the five trenches indicated a relatively modern and probable mechanical disturbance within this area, indicating that the fill in these 4 trenches was re-deposited on the site and mixed with the existing material to form a loose, stoneless and unstable fill. The fifth trench comprised natural undisturbed sand and gravel layers under sod. Water was evident at various depths in the trenches, varying between 1.8m-2.1m.

The location of the site and scale of works can be seen in Figures 1 and 2 below. The layout proposed will reflect the existing graveyard adjoining the proposed site to the south as depicted in Figure 3.
Construction Methodology:
It is expected the proposed works will be completed within an 8-10-week time frame. The works include:

- Stripping approximately 150mm-200mm of existing topsoil in the areas where the concrete footways (paths) are to be constructed. There will be circa 150m of paths constructed.
- These proposed paths will be 'set-out' using timber formwork edging along their lengths.
- Sub-base of 225mm Clause 804 material will be placed in path by hand or using small machines (excavators/dumper etc.), which will subsequently be compacted using hand operated vibrators or small rollers.
- Ready mix concrete will be placed on the compacted sub-base using wheelbarrows or concreting buckets, small machines etc. which will subsequently be compacted and finished by hand.
- Existing topsoil will also be stripped where the headstone foundation beam is to be constructed and construction of the headstone foundation beam will follow the same methodology as the paths.
- Drainage will be installed to the perimeter of the paths consisting of a 150mm perforated pipe with a pea gravel surround. This will be excavated and laid using small machines.
- The site will be accessed through a double gate that currently serves the modern burial ground on the eastern side of the small access road.

4 SCREENING ASSESSMENT
This stage of the process identifies any likely significant effects upon European Sites from the proposed project, either alone or in combination with other projects or plans. Due to its location, Rossinver is surrounded by some of Sligo’s most valuable heritage sites that support a diversity of natural and seminatural habitats and a wide range of wildlife.

Identification of Relevant Natura 2000 Sites
In accordance with guidance from the Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities (2010), all designated sites within a distance of 15km from the proposed project site were identified to assess for potential impacts. A standard source-receptor-pathway conceptual model was used to identify 'relevant' European sites (i.e. those which could be potentially affected).

For significant effects to arise, there must be a risk enabled by having a:

- Source(s) – e.g. sediment run-off from construction works at proposed project site
- Receptor(s) – e.g. qualifying habitats and/or species of European Sites
- Pathway(s) – e.g. a watercourse connecting proposed project site to a European site
The identification of a pathway does not automatically mean that significant effects will arise. The likelihood for significant effects will depend upon the characteristics of the source (e.g. duration of construction works), the characteristics of the pathway (e.g. water quality status of the European site receiving run-off from preparation/construction and/or operation) and the characteristics of the receptor (e.g. the sensitivities of the European site and its qualifying interests).

Natura 2000 sites within an area extending 15km around the proposed project have been considered for potential impacts following the guidance published by DoEHLG (2009). These SACs, SPAs, ASSIs and NHAs are displayed in Table 1 below. The Republic of Ireland Natura 2000 Sites within 15km of the proposed site are shown in Figure 4 below. It has been evaluated that a wider radius was not required in the absence of pathways identified by which sites outside of this radius could potentially be affected.

**Figure 4:** Natura 2000 sites within 15km of the proposed site
Table 1: Designated Natura 2000 sites which are located within a 15km radius of the proposed site.

<table>
<thead>
<tr>
<th>Natura 2000 Site</th>
<th>Distance from Proposed Project (km)</th>
<th>Country</th>
<th>Location (Easting, Northing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lough Melvin SAC</td>
<td>0.064</td>
<td>Ireland</td>
<td>192358, 349733</td>
</tr>
<tr>
<td>Lough Melvin SAC</td>
<td>1.727</td>
<td>Northern Ireland</td>
<td>193781, 350758</td>
</tr>
<tr>
<td>Arroo Mountain SAC</td>
<td>3.665</td>
<td>Ireland</td>
<td>189371, 347657</td>
</tr>
<tr>
<td>Sligo/Leitrim Uplands SPA</td>
<td>8.215</td>
<td>Ireland</td>
<td>194119, 357589</td>
</tr>
<tr>
<td>Lough Gill SAC</td>
<td>8.837</td>
<td>Ireland</td>
<td>199734, 354165</td>
</tr>
<tr>
<td>Glenade Lough SAC</td>
<td>9.832</td>
<td>Ireland</td>
<td>183368, 345821</td>
</tr>
<tr>
<td>Ben Bulben, Gleniff And Glenade Complex SAC</td>
<td>11.206</td>
<td>Ireland</td>
<td>201029, 356270</td>
</tr>
<tr>
<td>Dunmuckrum Turloughs SAC</td>
<td>11.842</td>
<td>Ireland</td>
<td>187033, 360308</td>
</tr>
<tr>
<td>Lough Golagh and Breesy Hill SAC</td>
<td>12.296</td>
<td>Ireland</td>
<td>196256, 361414</td>
</tr>
<tr>
<td>Donegal Bay SPA</td>
<td>12.692</td>
<td>Ireland</td>
<td>187270, 361361</td>
</tr>
<tr>
<td>West Fermanagh Scarplands SAC</td>
<td>12.894</td>
<td>Northern Ireland</td>
<td>205007, 347118</td>
</tr>
<tr>
<td>Pettigoe Plateau SPA</td>
<td>12.931</td>
<td>Northern Ireland</td>
<td>197644, 361557</td>
</tr>
<tr>
<td>Pettigoe Plateau SAC</td>
<td>12.931</td>
<td>Northern Ireland</td>
<td>197644, 361557</td>
</tr>
<tr>
<td>Boleybrack Mountain SAC</td>
<td>13.347</td>
<td>Ireland</td>
<td>197644, 361557</td>
</tr>
<tr>
<td>Largalinny SAC</td>
<td>13.429</td>
<td>Northern Ireland</td>
<td>205430, 352926</td>
</tr>
</tbody>
</table>

The proposed site is not within any of the above designated areas. The potential impacts associated with the proposal on the qualifying interests of these sites have been considered as part of the Screening for AA. It is considered that there is potential for disturbance related impacts relating to preparation, construction and operational use of the graveyard on Lough Melvin SAC which is located adjacent to the proposed site (0.064km) as shown in Figure 5 below. Owing to distance and lack of connectivity from the proposal, other Natura 2000 sites have been consequently screened out from further consideration.

Figure 5: Site location in relation to Lough Melvin SAC.
Conservation Objectives

For appropriate assessment, regard must be given to potential impacts arising from the proposed project on the conservation objectives. A Natura 2000 site’s conservation objectives are defined by NPWS and are, “intended to ensure that the relevant Annex I habitats and Annex II species present on a site are maintained in a favourable condition” (DEHLG, 2010). The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. Favourable conservation status of a habitat can be described as being achieved when: “its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable”. Favourable conservation status of a species can be described as being achieved when: “population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.”

Lough Melvin SAC (site code: 000428):

Lough Melvin is designated as a SAC under the Habitats Directive for the following habitats and species as listed in Annex I and II of the Habitats Directive:

- [3130] Oligotrophic to Mesotrophic Standing Waters
- [6410] Molinia Meadows
- [1106] Atlantic Salmon (Salmo salar)
- [1355] Otter (Lutra lutra)

The area is underlain by sedimentary calp limestone, shale and sandstone. Lough Melvin is an oligo-mesotrophic lake and is approximately 13 km long by 3 km wide. The mean depth of the lake is 8.5 m, the maximum depth being 45 m. Several inflowing and outflowing streams and rivers are included in the designation, including the Ballagh river which runs adjacent to the proposed site as shown in Figure 5 above.

The SAC has a typical aquatic and emergent flora. Marginal vegetation is mainly wet grassland, but there are significant areas of wet woodland and some swamp and fen vegetation. Land use in surrounding areas is mainly agricultural though there are substantial areas of forestry. Some areas of bog and heath occur in the catchment. The site is of great importance for fish conservation, with three genetically distinct populations of brown trout and important populations of Atlantic Salmon. It may be one of the last examples in north-western Europe of a natural post-glacial salmonid lake. The site supports a population of Otter and has four Red Data Book plant species, notably Trollius europaeus L. ‘Globe-flower’.
The desktop study found no records of any species or habitats for which Lough Melvin SAC is designated within the subject lands or environs. Furthermore, no records of any species or habitats for which Lough Melvin SAC is designated were found within 1km of the proposed development site.

Conservation Objectives for these habitats and species within the SAC were identified by NPWS (2018) and relate primarily to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected. The NPWS Conservation Objectives are available on [www.npws.ie](http://www.npws.ie).

### Other Plans or Projects

In accordance with the EU guidance document on Appropriate Assessment, “Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites”, other plans and projects in the area must be considered in addition to the site for the proposed project at the screening stage. This is required in order to identify any possible cumulative or in combination impacts of the proposed project with other plans or developments on the relevant Natura 2000 sites. Existing plans and projects which have been examined include:

- **Leitrim County Development Plan 2015-2021**

In relation to protection of the Natural Environment / Natural Heritage, the Council will ensure that any plan or project and any associated works, individually or in combination with other plans or projects, are subject to ‘Appropriate Assessment’ to ensure there are no likely significant effects on the integrity (defined by the structure and function) of any Natura 2000 site(s) and that the requirements of Article 6(3) and 6(4) of the EU Habitats Directive are fully satisfied.

A number of objectives and policies are outlined in the plan to protect and maintain the favourable conservation status and conservation value of all-natural heritage sites and to promote the maintenance and, as appropriate, achievement of ‘favourable conservation status’ of habitats and species in association with the NPWS.

**Policy 76** It is the policy of the Council to protect and conserve Special Areas of Conservation and Special Protection Areas including ‘Candidate’ and ‘Proposed’ areas.

**Policy 77** It is the Policy of the Council to ensure that all Plans and Projects that have the potential to negatively impact on the integrity of the Natura 2000 network, will be subject to a Habitats Directive Assessment (HDA), in accordance with Article 6 of the Habitats Directive and in accordance with best practice and guidance.
Policy 78 No projects or programme giving rise to significant adverse; direct, indirect, secondary or cumulative impacts upon the integrity of any Natura 2000 sites, having regard to their qualifying interests and conservation objectives, arising from their size, scale, area or land take, shall be permitted on the basis of this Plan (either alone or in combination with other plans or projects).

Objective 62 It is an objective of the Council to protect those sites identified as Special Areas of Conservation as well as any other sites that may be so identified during the lifetime of this plan.

Objective 63 It is an objective of the Council to protect the character, appearance and quality of the habitats and semi-natural features in County Leitrim such as woodlands, hedgerows, peatlands, wetlands and artificial waterways of historic or ecological importance.

Policy 80 It is the policy of the Council to protect ecological networks linking protected and designated important sites within the County, in accordance with Article 10 of the Habitats Directive.

Policy 83 It is the Council’s policy to ensure the preservation of sound deciduous trees, woodlands and native hedgerows, without excessively inhibiting development.

Objective 78 It is an objective of the Council to protect and preserve existing hedgerows and minimise their removal. Where their removal is necessary to seek their replacement with new hedgerow material native to the area.

Policy 94 It is the policy of the Council to promote the use of sustainable drainage systems, which balance the impact of urban drainage through the achievement of control of runoff quantity and quality and enhancing amenity and habitat.

The potential impact of this plan on the proposed project is deemed to be positive. It contains numerous measures, objectives and policies which will directly and/or indirectly contribute to the conservation of Natura 2000 sites. It will assist in the implementation of the requirements of the Habitats Directive and will ensure that the proposed project will not have a significant impact on Natura 2000 sites in view of their conservation objectives.
5 FINDINGS OF THE SCREENING FOR AA

The purpose of this section of the screening for appropriate assessment is to examine the possibility that the proposed project, either individually or in combination with other plans and projects, may result in significant negative effects on the Conservation Objectives and the integrity of Lough Melvin SAC. Direct, indirect and cumulative impacts arising from the proposed project are identified with regard to potential impacts affecting the designated Natura 2000 site as follows:

- disturbance / fragmentation of Annex I habitats;
- disturbance to Annex II species;
- impacts affecting the structure and function of the designated site;
- hydrological changes / water quality impacts.
The proposed development involves extending an existing modern burial ground into a greenfield site to the north of the existing burial ground. The site will be accessed through an existing double gate that currently serves the modern burial ground. The proposed works are in close proximity to Lough Melvin SAC as shown in Figure 5.

The construction phase will be 8-10 weeks in duration. Construction aspects will involve:

- Stripping approximately 150mm-200mm of existing topsoil in the areas where the concrete footways (paths) and headstone foundation beams are to be constructed.
- Sub-base of 225mm Clause 804 material will be placed in these areas by hand or using small machines (excavators/dumper etc.) and will subsequently be compacted using hand operated vibrators or small rollers.
- Ready mix concrete will be placed on the compacted sub-base using wheelbarrows or concreting buckets, small machines etc. and will be compacted and finished by hand.
- Drainage will be installed to the perimeter of the paths consisting of a 150mm perforated pipe with a pea gravel surround. This will be excavated and laid using small machines.

Construction will be in accordance with appropriate construction methodology (Construction Environmental Management Plan), standard operating procedures and Health and Safety standards.

Based on information provided by the Client, there has been approximately 30 No. burials in the last 5 No. years in the existing graveyard. Therefore, the assessment of potential impact due to the proposed northern extension is based on a realistic assumed rate of 6 No. burials per annum.

There will be no direct land take of Annex I habitats for which Lough Melvin SAC is designated. However, it must be considered that there may be potential for indirect impact on its qualifying interests. There is a potential risk of indirect impacts to these Annex I habitats and Annex II species due to adverse water quality impacts on the adjacent Ballagh River designated within Lough Melvin SAC.

During the preparation and construction phase there is a risk of ingress of silt, construction run-off or spillage of petrochemicals from the operation of plant machinery and work activities of personnel. Appropriate steps taken in in the design of the proposed works will ensure that there is no sediment or polluting run off.

<table>
<thead>
<tr>
<th>Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>The proposed development involves extending an existing modern burial ground into a greenfield site to the north of the existing burial ground. The site will be accessed through an existing double gate that currently serves the modern burial ground. The proposed works are in close proximity to Lough Melvin SAC as shown in Figure 5.</td>
</tr>
<tr>
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</tr>
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</tr>
<tr>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Describe any likely direct, indirect or secondary impacts of the project on the Natura 2000 Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Size and scale;</td>
</tr>
<tr>
<td>- Land-take;</td>
</tr>
<tr>
<td>- Distance from Natura 2000 Site or key features of the Site;</td>
</tr>
<tr>
<td>- Resource requirements;</td>
</tr>
<tr>
<td>- Emissions;</td>
</tr>
<tr>
<td>- Excavation requirements;</td>
</tr>
<tr>
<td>- Transportation requirements;</td>
</tr>
<tr>
<td>- Duration of construction, operation etc</td>
</tr>
<tr>
<td>There will be no direct land take of Annex I habitats for which Lough Melvin SAC is designated. However, it must be considered that there may be potential for indirect impact on its qualifying interests. There is a potential risk of indirect impacts to these Annex I habitats and Annex II species due to adverse water quality impacts on the adjacent Ballagh River designated within Lough Melvin SAC.</td>
</tr>
<tr>
<td>During the preparation and construction phase there is a risk of ingress of silt, construction run-off or spillage of petrochemicals from the operation of plant machinery and work activities of personnel. Appropriate steps taken in in the design of the proposed works will ensure that there is no sediment or polluting run off.</td>
</tr>
</tbody>
</table>
During the operation phase there is a risk of contamination of Ballagh river from site activities/burials. The burial of corpses and their subsequent degradation causes the release of chemical compounds that can potentially pollute groundwater. The Hydrological Risk Assessment report concludes that based on the relationship between burial rates, vulnerability class and level of risk presented, this site poses an overall risk rating of 'Moderate'. Factors including the till thickness, permeability of the sandy soils and water entries into the trial trenches all contributed to the moderate groundwater vulnerability rating. Given that the existing cemetery is situated the same distance from Ballagh River and Lough Melvin, the proposed site does not pose any significant increased risk than the existing cemetery in terms of distance, ground conditions, or receptors. The loam rich sand is expected to extend as far as the Ballagh River and Lough Melvyn and its properties are expected to afford a level of natural attenuation to any contamination released to ground by the small number of burials proposed each year.

**Describe any likely changes to the site arising as a result of the following:**

- Reduction of habitat area;
- Disturbance of key species;
- Habitat or species fragmentation;
- Reduction in species density;
- Changes in key indicators of conservation value;
- Climate change

**Reduction of habitat area:** No part of the proposed works is located within Lough Melvin SAC. Consequently, there should be no reduction in Annex I habitats as a result of the proposal. Bearing in mind the adjoining area is an existing burial ground, it is not expected that any significant habitat fragmentation impacts will result from the proposal.

**Disturbance of key species / Reduction in species density:** Lough Melvin SAC is designated for Salmon and Otter. The proposed works has potential to cause an impact to these key species. Nonetheless it is predicted that with strict adherence to design measures, construction methodology and standard operating procedures and considering the surrounding site is a well-established burial ground where these species are already accustomed to disturbance from activities, these impacts are likely to be negligible in the short-term and negligible in the long-term.

**Habitat or species fragmentation:** The project will not result in direct habitat or species fragmentations.

**Changes in key indicators of conservation value:** A key indicator for Lough Melvin SAC is water quality. Considering the surrounding site is an existing burial ground and with strict adherence to construction methodology and mitigation inherent in the design of the cemetery in addition to the greenfield nature of the site and surrounding area which will afford a level of natural attenuation to any contamination released to ground by the small number of burials proposed each year, it is expected that the proposed there will not be a significant effect on the water quality of surface water or ground water coming from the site.
**Climate change:** Greenhouse gas emissions as a result of the project will be insignificant.

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<th>Likely impacts on the Natura 2000 sites as a whole</th>
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<td>• Interference with the Key Relationships that Define the Structure of the Natura 2000 Site;</td>
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<td>• Interference with Key Relationships that Define the Function of the Natura 2000 Site</td>
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With strict adherence to design measures, construction methodology and standard operating procedures deterioration in water quality resulting from the project and potential disturbance to wildlife is not envisaged. Hence, there will be no significant impact on the structure or function of Lough Melvin SAC from the proposal.
6 CONCLUSIONS

To determine the potential impacts, if any, of the proposed development on nearby Natura 2000 sites, a screening process for Appropriate Assessment was undertaken. The proposed site is in close proximity to Lough Melvin SAC and immediately adjacent to the existing burial grounds.

The AA screening process considered potential impacts which may arise during the preparation, construction and operational phases of the proposed project. This assessment comprised an evaluation of the pathways for effects on the qualifying interests of designated European Sites, with reference to the location, size, scale, and duration (construction and operation) associated with the proposal.

In conjunction with the findings of the Hydrogeological Risk Assessment, it is considered that the proposed project does not include any element that has the potential to significantly alter the favourable conservation objectives associated with the species and habitats, or, interfere with the key relationships that define the structure or function, either alone or in combination with other impacts, of Lough Melvin SAC. This is provided that strict adherence to design measures, appropriate construction methods and standard operating procedures are undertaken.

This proposed extension of the burial ground is to the north of the existing burial ground. It is understood that the existing burial ground is full. Therefore, the existing burial ground, will not operate concurrently. It is concluded that there are no likely potential impacts, whether direct, indirect or cumulative/in combination, which could give rise to adverse effects on the qualifying interests or the conservation objectives of Lough Melvin SAC and that the integrity of this site will not be affected.

Consequently, this proposed development does not require a NIS or need to advance in the Appropriate Assessment process. However, a determination of the need for a Stage 2 ‘Appropriate Assessment and the preparation of a Natura Impact Statement will be decided upon by the Competent Authority, Leitrim County Council.
### REFERENCES


European Communities (Environmental Impact Assessment) Regulations, 1989 to 2001


Murphy, D.F. (2004). *Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites*. Eastern Regional Fisheries Board, Dublin

