



HABITAT DIRECTIVE APPROPRIATE ASSESSMENT SCREENING AND NATURA IMPACT STATEMENT (STAGE 2):

**THE FILLING OF LANDS WITH IMPORTED INERT SOIL & STONE FOR
AGRICULTURAL BENEFIT AND ALL ASSOCIATED ANCILLARY WORKS
AT CARROWNAMADDOO,
BALLINTOGER, CO. SLIGO.**

Client: Mullane Plant Hire Ltd.
c/o Earth Science Partnership (Ire.) Ltd,
Tonranny,
Westport,
Co. Mayo.

Site Location: Carrownamaddoo, Ballintogher, Co. Sligo.

Prepared By: Mr. Freddie P.R. Symmons B.Env.Sc (HONS) MCIEEM
*Senior Environmental Consultant and
Full Member of the Chartered Institute of Ecology and
Environmental Management*
Kingfisher Environmental Consultants.
The Railway Cottage,
Mullanboys, Inver,
Co. Donegal.
F94 R3P9

Report Ref: AA NIS Report-ESP-Mullane-Sligo-3.12.2020

Report Date: 3rd December 2020



1. Introduction

1.1 Preamble

Mr. Freddie Symmons - B.Env. Sc. (HONS) M.C.I.E.E.M *Senior Environmental Consultant and Ecologist* of Kingfisher Environmental Consultants and a *Full Member of the Chartered Institute of Ecology and Environmental Management* has been engaged by Earth Science Partnership (Ire.) Ltd. on behalf of Mullane Plant Hire Ltd. to carry out and prepare an Appropriate Assessment Screening and a Stage 2 Natura Impact Statement in relation to:

"Filling of lands (1.3 ha) with inert soil and stone (100,000 tonnes) over a 5-year period (20,000 tonnes/year)".

This report has been prepared by an experienced Senior Environmental Consultant and Ecologist with over 26 years professional experience to evaluate ecological receptors in the vicinity of the site. Potential impacts from the proposed work activities, which may affect designated sites (Natura 2000) are also considered. This report details the findings of Stage 2: Appropriate Assessment Natura Impact Statement with a summary of the Stage 1 AA Screening Findings.

1.1.1 Conclusions of Appropriate Assessment Screening for the Proposed Project without any Mitigation Measures

The proposed development site is **not** located either within or immediately adjacent to a Natura 2000 site (i.e. SAC or SPA). This has been confirmed through consultation with:

- NPWS website
- EPA Appropriate Assessment Screening GeoTool
- SAC and SPA maps provided at www.biodiversityireland.ie.
- Myplan.ie

The two screening maps included as **Figure 1.1.1.3** shows the proposed location of the site at Carrownamaddoo, Ballintogher, Co. Sligo in relation to the closest Natura 2000 Sites. This information is then presented in **Table 1.1.1.1** which summarises the Stage 1 Appropriate Assessment Screening information and forms the Screening Statement.

The closest point of the proposed development site to the closest Natura 2000 site is 1.1 km to the northeast to Lough Gill SAC site (Site Code 001976) -see **Table 1.1.1.1**. The Site Synopsis for the Lough Gill SAC site is listed in **Appendix 1** of this report.

There is however a small stream which flows along the north-east boundary of the site. This stream is one of several which enter into the small Lough Nameenbrack to the north-east of the site. The discharge from this small 0.48 ha lake is via a concrete pipe which then flows into a stream which eventually flows into Lough Gill some 1.1 km downstream. See **Figure 1.1.1.1** and **Figure 1.1.1.2** which are the local hydrology maps.

Having considered the potential for silt laden run-off during infilling works potentially entering the small field boundary stream and the prohibition of screening using mitigation measures, it is considered that that it would be prudent to carry out a Stage 2 NIS for this proposed development and that it cannot therefore be automatically screened out for appropriate assessment.

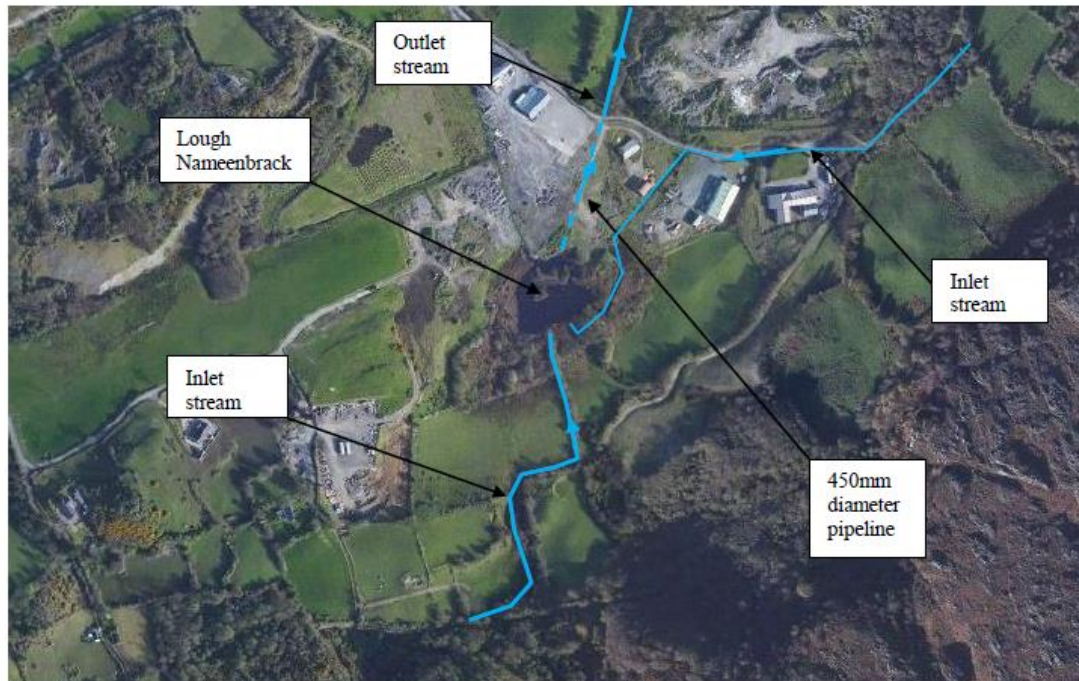


Figure 1.1.1.1: Drainage Map from the Flood Risk Assessment Report

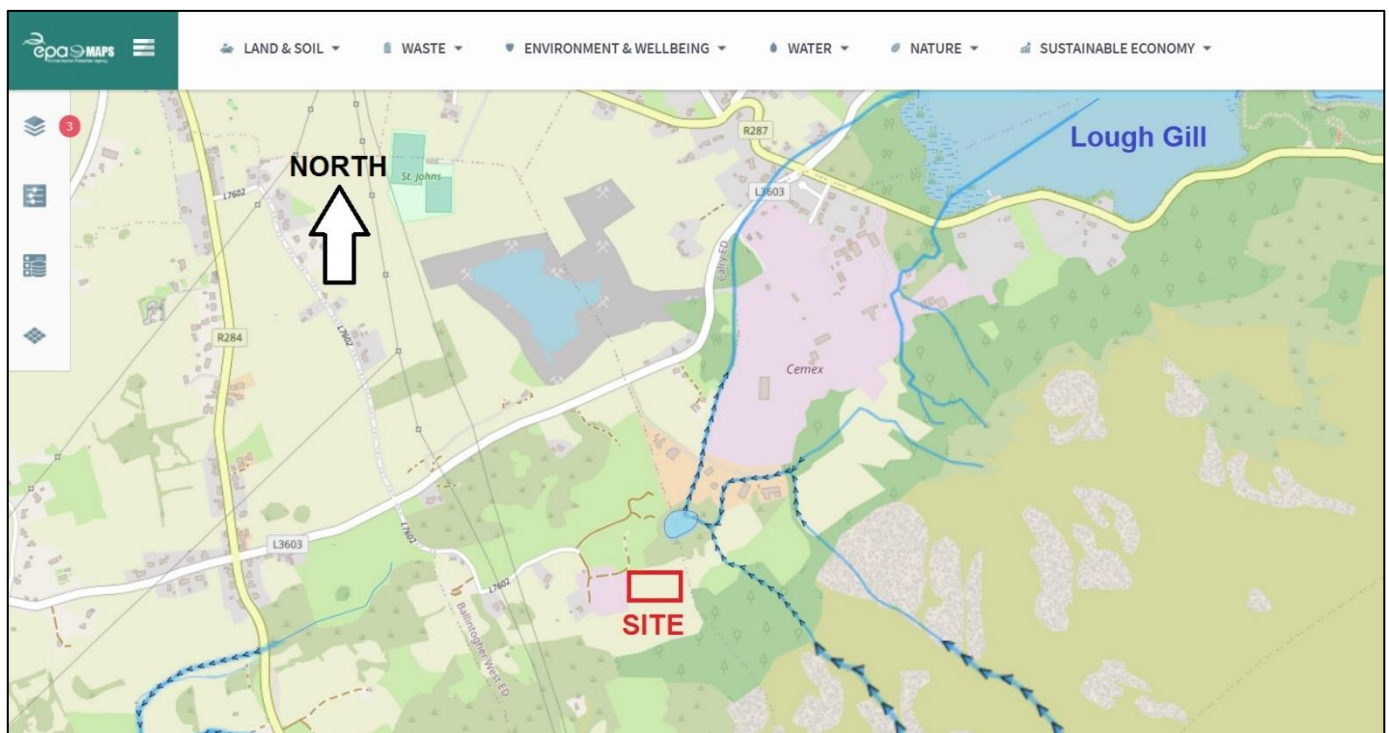


Figure 1.1.1.2: Hydrology Map of local area showing main drainage in the immediate vicinity of the Site (Source: EPA)

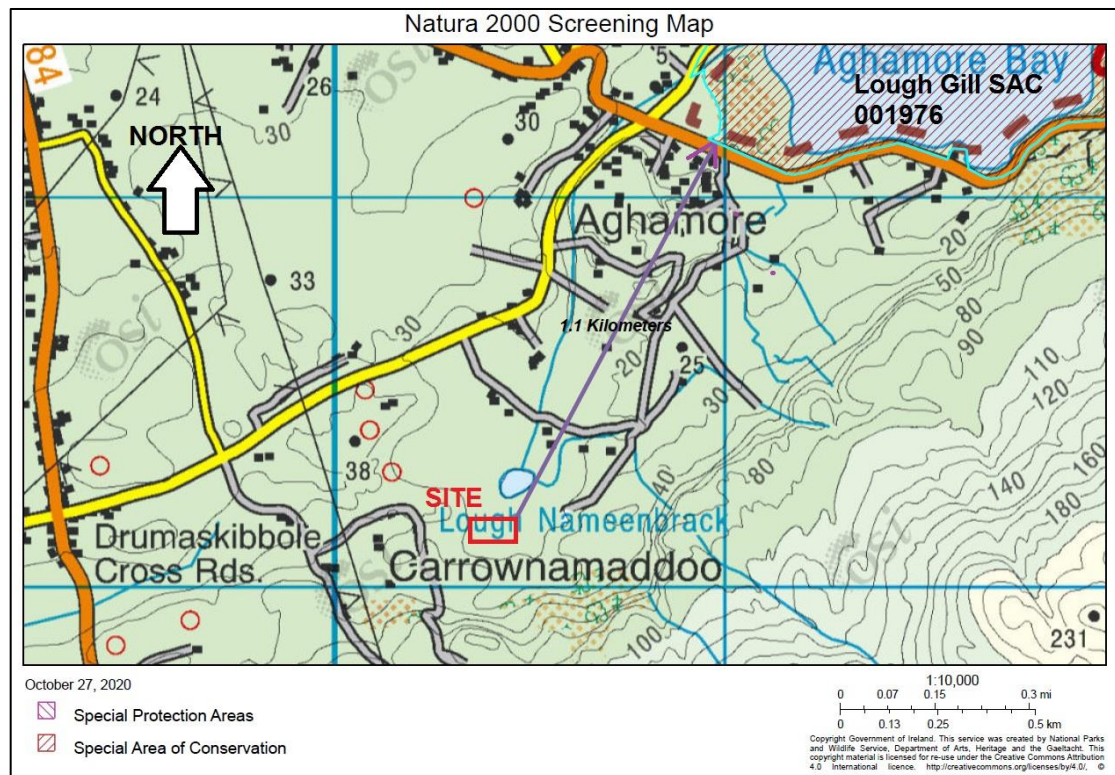
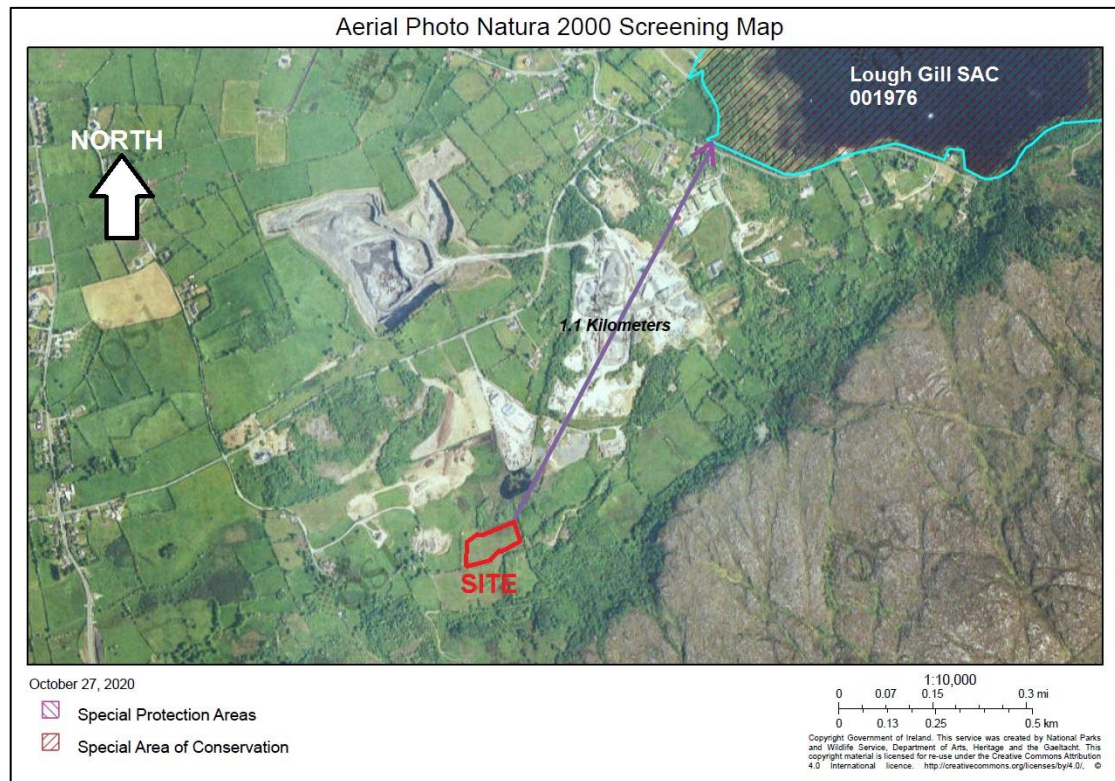


Figure 1.1.1.3 Natura 2000 Screening Aerial and OS Map for Proposed Development at Carrownamaddoo, Ballintogher, Co. Sligo.



**Table 1.1.1.1: Natura 2000 Sites Screened against the Proposed Development Site
Carrownamaddoo, Ballintogher, Co. Sligo**

Name	Site Code	Designation	Qualifying Interests	Distance from the site (km)	Screen in/out/uncertainty
Lough Gill SAC	001976	SAC	<p>3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation</p> <p>6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites)</p> <p>91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles</p> <p>91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)*</p> <p>1106 Salmon (<i>Salmo salar</i>)</p> <p>1099 River Lamprey (<i>Lampetra fluviatilis</i>)</p> <p>1096 Brook Lamprey (<i>Lampetra planeri</i>)</p> <p>1355 Otter (<i>Lutra lutra</i>)</p> <p>1095 Sea Lamprey (<i>Petromyzon marinus</i>)</p> <p>1092 White-clawed Crayfish (<i>Austropotamobius pallipes</i>)</p>	1.1 km northeast of Proposed Site	<p>Screen In</p> <p>Site distance is significantly removed at over 1.1 km. No qualifying interests are within the proposed development site. However, a small field drain to the north-east of the site flowing into Lough Nameenbrack and from there onto Lough Gill is a potential pathway from the site to Lough Gill for potentially silt laden run-off water. Therefore Screen In for further assessment and carry out a Stage 2 NIS.</p>

Having ascertained during the AA Screening that it is not possible to exclude, as a matter of scientific certainty that the proposed development will not have an effect on any Natura 2000 site, individually or together with other plans and projects, a NIS has been prepared as a precautionary measure to inform and assist the competent authority in carrying out the Appropriate Assessment.

1.2. Project Description

The development will consist of the filling of lands with imported inert material consisting of soil & stone for agricultural benefit and all associated ancillary works at Carrownamaddoo, Ballintogher, Co. Sligo within an area of 1.3 hectares. The site layout plan is shown as **Figure 1.2.3**. The site layout plan shows a number of proposed mitigation measures which have been incorporated into the design of the site and the site operations. As a consequence an NIS accompanies this planning application.

It is confirmed that the land reclamation activity will not exceed 25,000 tonnes per annum of soil and stones being recovered and the proposed development will have no potential for significant impacts upon the environment and therefore neither an EIAR nor an EIA is required. The site will not require an EIAR as a Sub-Threshold project.



The reclamation of agricultural land is a soil material recovery activity and not a waste disposal activity. Uncontaminated, inert soil and stones will be delivered to the site in rigid trucks for use as fill material for re-contouring and land reclamation purposes at the site. The site will be restored to productive agricultural use.

It should be noted that all material imported will be pre-approved, i.e. inspected and found suitable for use, before it arrives at the site. This is standard operational procedures for such a facility. It is intended that the site will also operate under a Waste Facility Permit for EWC 17 05 04 only so only one type of material, inert soil and stone (Article 27 declared or EWC 17 05 04) will be handled on site.

The site is adjacent to an existing fill site operated by the applicant (Planning Reference P18/49) which operates under a Certificate of Registration (CoR). The proposed development will not commence until the CoR has been fully extinguished.

The application site is situated in the townland of Carrownamaddoo, Ballintogher, Co. Sligo. The site is situated approximately 2.5 km south of the outskirts of Sligo Town and approximately 3.7 km northeast of Ballysadare. Access to the site is via a private road which connects onto the L7602 road approximately 0.7 m north of the site.

The proposal consists of the filling of lands (1.3 ha) with inert soil and stone material (100,000 tonnes) over a 5-year period (20,000 tonnes/year).

The existing site consists of poor quality agricultural land at present and is subject to livestock grazing. The purpose of this application is for land restoration and improvement of land for agriculture.

The proposed site location is shown in a regional context in **Figure 1.2.1**. The site location is also shown in **Figure 1.2.2** which shows the site boundary, marked in red.

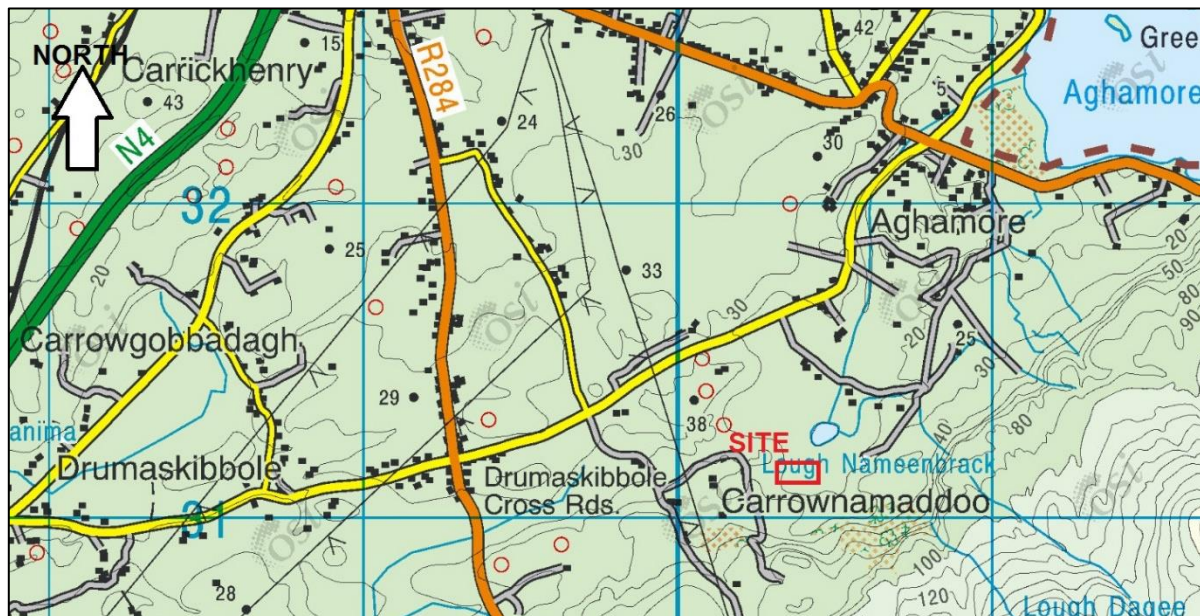


Figure 1.2.1: Regional Site Location Map

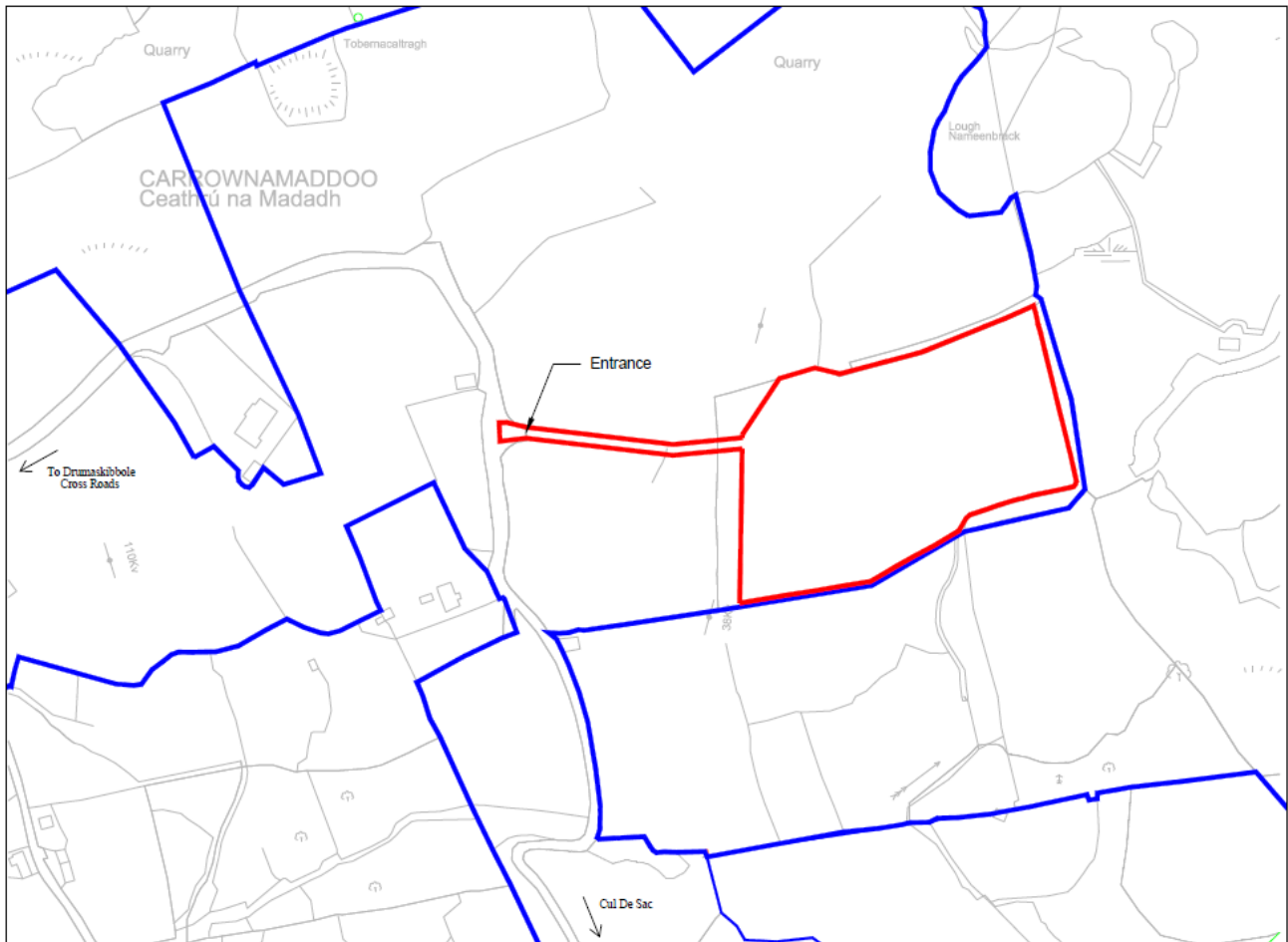


Figure 1.2.2: Site Location Map

Distinct Mitigation Measures have been incorporated into the design of the site to protect the drainage stream which flows along the north-eastern boundary of the site and which flows into Lough Nameenbrack and then eventually Lough Gill some 1.1 km north of the site. These are shown on the Site Layout Plan as **Figure 1.2.3** and specifically include:

1. A 5 metre buffer zone along the north-eastern boundary to the field stream where no fill will be placed – thus acting as a protection zone to the stream.
2. The placement of a silt-fence along the length of the boundary stream in the buffer zone area between the stream and the start of the fill. This will ensure no silt can enter the boundary stream during high rainfall events – see **Figure 1.2.4** and **Figure 1.2.5**.

The above two mitigation measures are deemed suitable and sufficient to ensure that there is no potential for any silt-laden waters entering the boundary stream and reaching Lough Gill SAC.

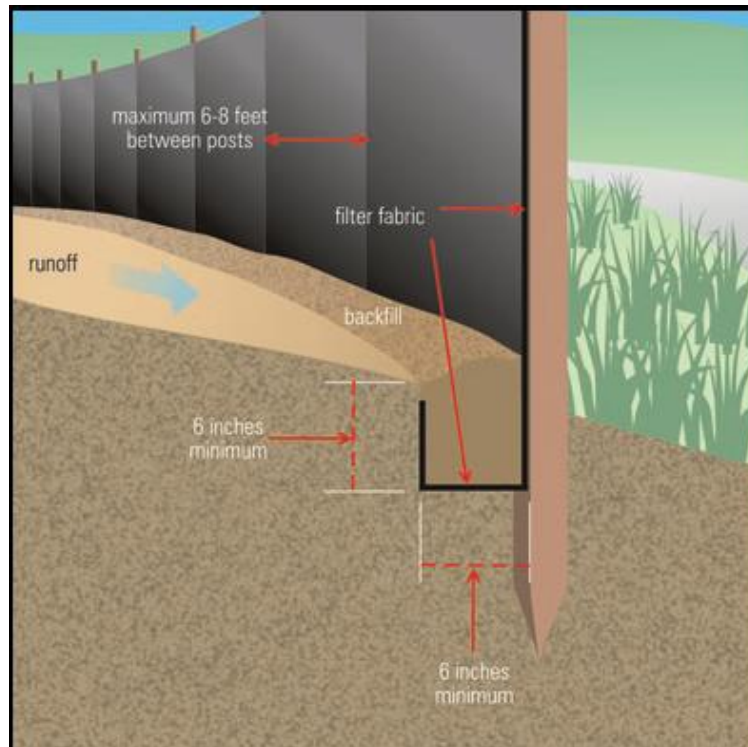


Figure 1.2.4: Example of EPA approved silt fence detail – temporary fence used during site works.



Figure 1.2.5: Example of silt fence in operation

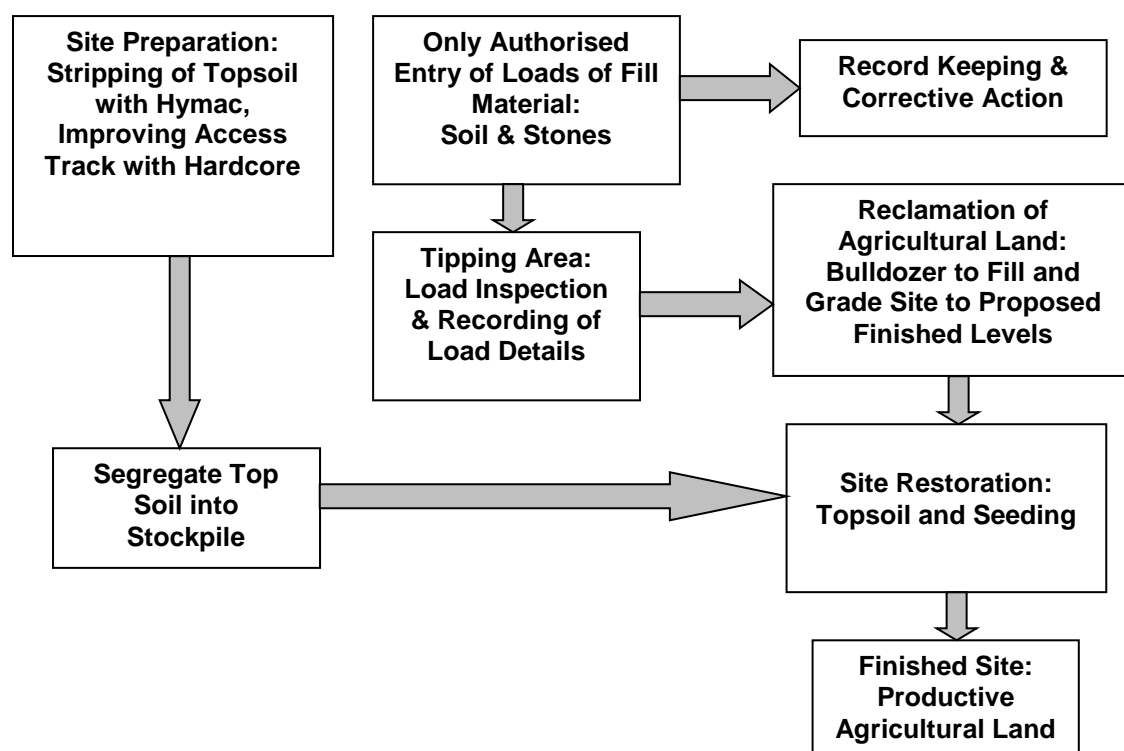


The initial site works will be carried out by a track machine (i.e. Hymac Digger) and a bulldozer. During the filling phase only the bulldozer will remain on site. The machinery will be regularly maintained.

Diesel fuel for the machinery will not be stored on site but will rather be brought onto site in leak proof containers as required (i.e. mobile fuel bowzers). All deliveries of soil material to the site will be by rigid trucks. The proposed land reclamation works will improve the land through the raising of the level of the land (re-contouring) with inert uncontaminated soil as shown in the proposed site layout plan and the proposed sections submitted with the planning application.

The land reclamation activity will be temporary in nature and will have a consequential benefit to agriculture. Following completion of the recovery activity, topsoil will be spread evenly over the site to a minimum depth, after firming, of at least 300 mm. Any topsoil which is delivered to the site during the recovery activity will be stockpiled separately for this purpose. The site will then be prepared for seeding by raking or harrowing, and by rolling. The site will then be restored for agriculture.

Flow-Chart of On-Site Processes



The development location consists of non-annexed habitat type – being poor agricultural grassland and is segregated from Lough Gill which is the nearest Natura 2000 site by a minimum of 1.1 km. In the intervening area there are quarries, dwellings, commercial buildings, regional and local access roads which all form artificial boundaries between the proposed site and Lough Gill.



The proposed development does not require water abstraction or direct discharge to surface water, land or air. No changes to surface water quality (microbiologically, chemically, physically or quantitatively) are anticipated given that there are no direct discharges to or abstraction from surface water.

No fuel is to be stored on site, refuelling of machinery will take place at a designated location near the entrance of the site. Procedures will be put in place in the event of accidental spillages.

All necessary mitigation measures have been incorporated into the design of the site and the proposed works to ensure that no silt laden storm-water can escape the site. Consequently, the applicant can be confident that all normal emissions are captured within the site and that there is no significant risk to any surface water features outside the site.

2. Background to Appropriate Assessment

With the introduction of the Birds Directive in 1979 and the Habitats Directive in 1992 came the obligation to establish the Natura 2000 network of sites of highest biodiversity importance for rare and threatened habitats and species across the EU. In Ireland, the Natura 2000 network of European sites comprises Special Areas of Conservation (SAC's) and Special Protection Areas (SPA's).

Appropriate Assessment (AA) involves a case-by-case examination of the implications of a development for the Natura 2000 site and its conservation objectives. This may be presented in the form of a Natura Impact Statement. In general terms, implicit in Article 6(3) of the Habitats Directive is an obligation to put concern for potential effects on Natura 2000 sites at the forefront of every decision made in relation to plans and projects at all stages.

Each step in the assessment process precedes and provides a basis for other steps. The results at each step must be documented and recorded carefully so there is full traceability and transparency of the decisions made. They also determine the decisions that ultimately may be made in relation to approval or refusal of a plan or project. AA is not a prohibition on new development or activities but involves a case-by-case examination of the implications for the Natura 2000 site and its conservation objectives.

In the preparation of this Natura Impact Statement report, careful attention has been made to fully document and reference all the site selection and suitability assessment procedures as they chronologically occurred. This is in accordance with the principles of Appropriate Assessment.

3. References

The following references and source material have been referred to our used in the preparation of this Appropriate Assessment Natura Impact Statement:

- Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (2001)
- Birds Directive (79/409/EEC)
- Environment Heritage and Local Government (10 December 2009) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities, Dublin.
- Environment Heritage and Local Government (March 11 2010) Circular NPW 1/10 & PSSP 2/10: Appropriate Assessment under Article 6 of the Habitats Directive: guidance for Planning Authorities, Dublin.
- Environment Heritage and Local Government: Circular LG/08 Water Services Investment and Rural Water: Protection of Natural Heritage and National Monuments Programmes



- Environmental Protection Agency (n.d.) Waste Water Discharge Licensing - Appropriate Assessment - Note on Appropriate Assessments for the purposes of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007) Wexford, EPA.
- Environmental Protection Agency (2000) Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, Wexford, EPA.
- European Communities (Natural Habitats) Regulations, 1997 (S.I. No. 94 of 1997) (which has been amended twice, S.I. No. 233 of 1998 & S.I. No. 378 of 2005).
- Gardiner, M. J. & T. Radford. (1980). Soil Associations of Ireland and their Land Use Potential: Explanatory Bulletin to Soil Map of Ireland. Dublin. An Foras Taluntais.
- Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. Clarification of the concepts of: Alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the Commission (2007)
- Habitats Directive (92/43/EEC)
- National Parks and Wildlife Service Website – www.npws.ie: Site Synopsis and Mapping Data for Natura 2000 Sites.
- Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007)

4. Overview of Natura 2000 Sites in Relation to Soil Recovery Facility at Carrownamaddoo, Ballintogher, Co. Sligo

The proposed development site is **not** located either within or immediately adjacent to a Natura 2000 site (i.e. SAC or SPA). This has been confirmed through consultation with:

- NPWS website
- EPA Appropriate Assessment Screening GeoTool
- SAC and SPA maps provided at www.biodiversityireland.ie.
- Myplan.ie

The closest point of the proposed development site to the closest Natura 2000 site is 1.1 km to the northeast to Lough Gill SAC site (Site Code 001976) -see **Table 4.1**. The Site Synopsis for the Lough Gill SAC site is listed in **Appendix 1** of this report.

The two screening maps included as **Figure 4.1** shows the proposed location of the site at Carrownamaddoo, Ballintogher, Co. Sligo in relation to the closest Natura 2000 Site – Lough Gill SAC.



Table 4.1: Closest Natura 2000 Site to the Proposed Development of a Soil Recovery Facility at Carrownamaddoo, Ballintogher, Co. Sligo

Name	Site Code	Designation	Qualifying Interests	Distance from the site (km)
Lough Gill SAC	001976	SAC	<p>3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation</p> <p>6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites)</p> <p>91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles</p> <p>91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)*</p> <p>1106 Salmon (<i>Salmo salar</i>)</p> <p>1099 River Lamprey (<i>Lampetra fluviatilis</i>)</p> <p>1096 Brook Lamprey (<i>Lampetra planeri</i>)</p> <p>1355 Otter (<i>Lutra lutra</i>)</p> <p>1095 Sea Lamprey (<i>Petromyzon marinus</i>)</p> <p>1092 White-clawed Crayfish (<i>Austropotamobius pallipes</i>)</p>	1.1 km northeast of Proposed Site

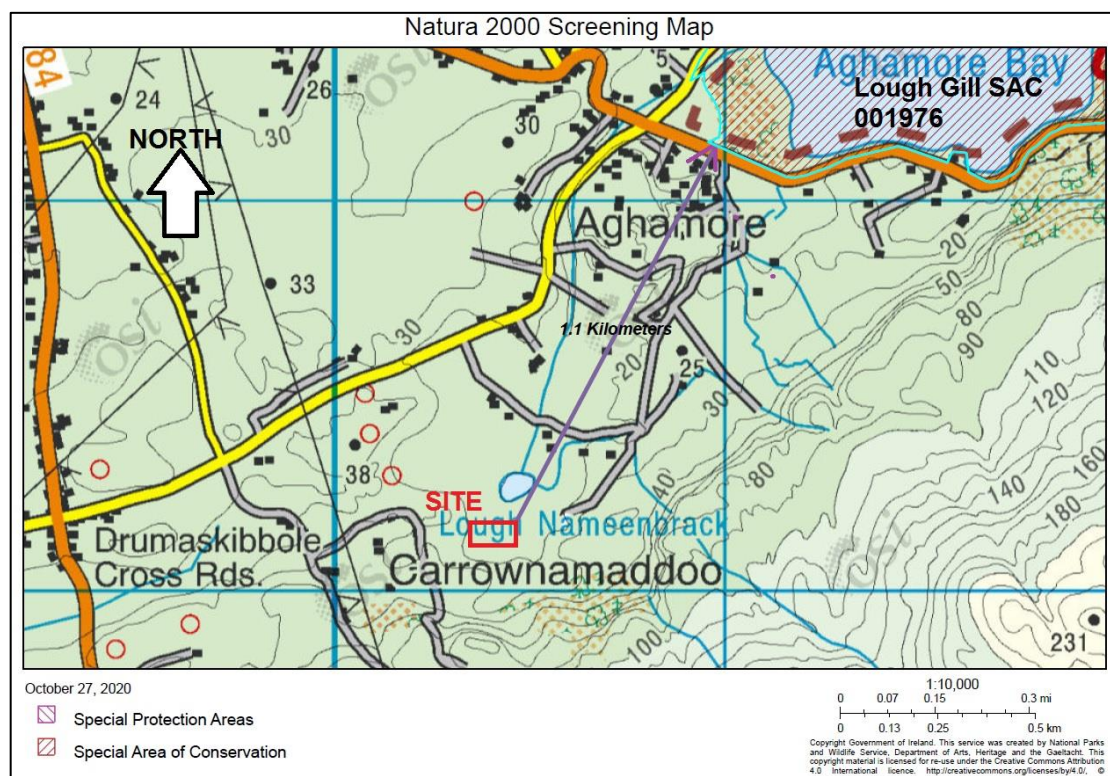
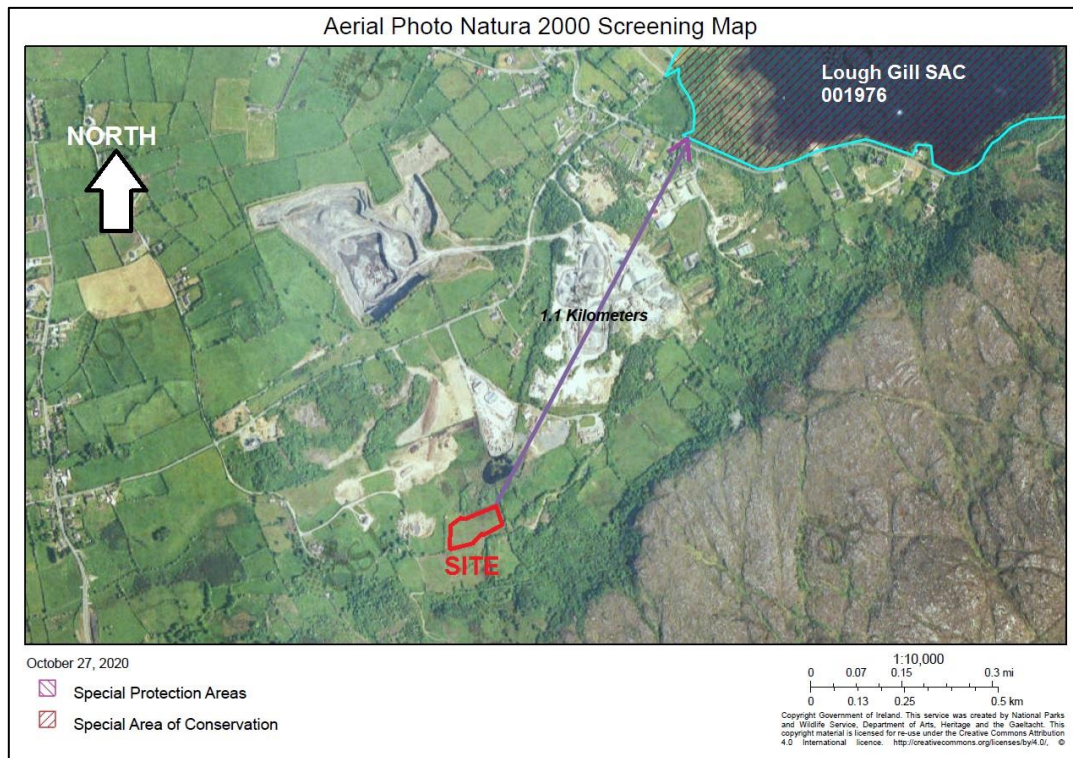


Figure 4.1: Closest Natura 2000 Site to the Proposed Development of a Soil Recovery Facility at Soil Recovery Facility at Carrownamaddoo, Ballintogher, Co. Sligo



4.1 Qualifying Interests

The Site Synopsis for the Lough Gill SAC site is listed in **Appendix 1** of this report. The qualifying interests for the site is listed in **Table 4.1**.

4.2 Conservation Objectives

The following are the general Conservation Objectives of the Lough Gill SAC:

1. To maintain the Annex I habitats for which the SAC and SPA has been selected at favourable conservation status.
2. To maintain the Annex II species for which the SAC and SPA has been selected at favourable conservation status.
3. To establish the extent, species richness and biodiversity of the entire sites.
4. To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

4.3 Existing land Use and Ecology at Proposed Site

The ecology of the proposed development site at Carrownamaddoo has been described in accordance with *Fossit, J.A., 2000. A Guide to Habitats in Ireland, The Heritage Council, Kilkenny.*

In addition, the following references have been used in the preparation of this habitat description:

- Devlin, Z. 2014. The Wildflowers of Ireland – A Field Guide: The Collins Press, Cork.
- Harrap, S. 2013. Harrap's Wild Flowers – A Field Guide to Wild Flowers of Britain & Ireland. Bloomsbury, London.
- Hubbard, C. E. 1992. Grasses: A Guide to their Structure, Identification, Uses and Distribution in the British Isles.
- Jermy, A. C., Chater, A. O. & R. W. David. 1982. Sedges of the British Isles: BSBI Handbook No. 1. BSBI, London.
- Joyce, P. M. 1998. Growing Broadleaves – Silvicultural Guidelines for Ash, Sycamore, Wild Cherry, Beech & Oak in Ireland. Coford, Dublin. Smith, A. J.E. 1978. The Moss Flora of Britain & Ireland. Cambridge University Press, Cambridge.
- Stace, C. A. 1991. New Flora of the British Isles.
- Streeter, D. 2016. Collins Wild Flower Guide 2nd Edition – The Most Complete Guide to the Wild Flowers of Britain and Ireland. William Collins, London.
- Webb, D. A. Parnell J. & D. Doogue. 1996. An Irish Flora. Dundalgan Press Ltd., Dundalk.
- www.wildflowersireland.ie

The existing site consists of poor quality agricultural land at present and is subject to livestock grazing. The purpose of this application is for land restoration and improvement of land for agriculture.

The development location consists of non- annexed habitat type – being poor agricultural grassland and is segregated from Lough Gill which is the nearest Natura 2000 site by a minimum of 1.1 km. In the intervening area there are quarries, dwellings, commercial buildings, regional and local access roads which all form artificial boundaries between the proposed site and Lough Gill.



The habitat types found within the site at Carrownamaddoo, Ballintogher, Co. Sligo and in the immediate vicinity are non-priority habitats and none of the habitats or species found within the proposed site boundary are worthy of specific conservation. The on-site habitat is a non-priority habitat consisting of agricultural grassland that has no particular ecological conservation value and does not form the basis of designation of the Lough Gill SAC site and therefore does not form a part of this Natura 2000 site in terms of feeding grounds; species regeneration or nesting.

5. Consideration of Any Likely Significant Effects upon Natura 2000 Sites Following Adoption of Mitigation Measures.

5.1 Summary of Potential Impacts and Assessment

The following table is based on a table taken from the Box 4 of EC (2002) and sets out examples of significance indicators. This is being used as an impact prediction to assess the potential for significant impacts upon the Slaney River Valley SAC site from the proposed soil recovery facility at Carrownamaddoo, Ballintogher, Co. Sligo.

This takes into account the project location; the project description; mitigation and precautionary measures which have been incorporated; and the status and ecology of the existing site for development:

Impact Type	Significance Indicator for this Site
Loss of Habitat Area	No Loss to any part of Natura 2000 Site
Fragmentation	No fragmentation to Natura 2000 Site
Disturbance	No Direct or Indirect disturbance to Natura 2000 Site
Species Population Density	No Change or Replacement of Species Population
Water Resource	No relative change to surface waters
Water Quality	No significant direct or indirect impact

The conclusions of the assessment of impacts upon the listed Natura 2000 site has shown that there will be no likely significant impacts upon the Lough Gill SAC site identified by the proposed development at Carrownamaddoo, Ballintogher, Co. Sligo. This is further discussed below in more detail:

5.2 Impact Prediction & Conservation Objectives

5.2.1 Any impact on an Annex I habitat

The proposed soil recovery facility will occur outside of any Annex 1 designated habitat and there will be no direct significant impacts on the Natura 2000 site or its Annex 1 habitats. The method statement for the infilling works as set out in the project description which includes mitigation and precautionary measures eliminates any potential for indirect impacts through site drainage or siltation potentially impacting upon the adjacent stream and therefore the Lough Gill SAC.

Therefore it can be concluded that the proposed development will not compromise the maintenance of Annex I habitats for which the Lough Gill SAC has been selected at favourable conservation status.



5.2.2 Causing reduction in the area of the habitat or Natura 2000 site

The proposed soil recovery facility at Carrownamaddoo, Ballintogher, Co. Sligo, will occur on non-priority habitats which are located over 1.1 km away from the Lough Gill SAC Natura 2000 site boundary.

There will be no loss of any area of Natura 2000 sites as a consequence of the proposed development and the proposed development will not result in any impact on any Annex II species of flora or fauna.

5.2.3 Causing direct or indirect damage to the physical quality of the environment (e.g. water quality and supply, soil compaction) in the Natura 2000 site

There will be no direct or indirect damage to the physical quality of the environment with the proposed development site. The proposed site is outside of any Annex 1 designated habitat and there will be no significant impacts on any Natura 2000 site or their Annex 1 habitats.

The method statement for the infilling works and which includes mitigation and precautionary measures eliminates any potential for indirect impacts through site drainage or siltation potentially impacting upon the adjacent stream and therefore the Lough Gill SAC.

Distinct Mitigation Measures have been incorporated into the design of the site to protect the drainage stream which flows along the north-eastern boundary of the site and which flows into Lough Nameenbrack and then eventually Lough Gill some 1.1 km north of the site. These are shown on the Site Layout Plan as **Figure 1.2.3** and specifically include:

1. A 5 metre buffer zone along the north-eastern boundary to the field stream where no fill will be placed – thus acting as a protection zone to the stream.
2. The placement of a silt-fence along the length of the boundary stream in the buffer zone area between the stream and the start of the fill. This will ensure no silt can enter the boundary stream during high rainfall events.

The above two mitigation measures are deemed suitable and sufficient to ensure that there is no potential for any silt-laden waters entering the boundary stream and reaching Lough Gill SAC.

There will be no significant impacts via indirect means by surface water discharges as these have been carefully mitigated against to create no possibility of significant impacts upon the Lough Gill SAC.

5.2.4 Causing serious or ongoing disturbance to species or habitats for which the Natura 2000 site is selected (e.g. increased noise, illumination and human activity)

The proposed development of a soil recovery facility will cause no significant disturbance during infilling works. The site is physically removed from the Lough Gill SAC by over 1.1 km and in the intervening area there are quarries, dwellings, commercial buildings, regional and local access roads which all form artificial boundaries between the proposed site and Lough Gill.

The method statement for the proposed works which includes mitigation and precautionary measures eliminates any potential for indirect impacts through dust and noise. The development poses no potential new impact or significant impact upon the maintenance of species or habitats at the Natura 2000 site.



5.2.5 Causing direct or indirect damage to the size, characteristics or reproductive ability of populations on the Natura 2000 site

The proposed soil recovery facility at Carrownamaddoo, Ballintogher, Co. Sligo will have no direct or indirect damage to the size, characteristics or reproductive ability of populations on the Lough Gill SAC Natura 2000 site.

The proposed development will not compromise or negatively impact upon water quality, which could impact upon fish populations and plant species and invertebrates upon which the birdlife feed. This is confirmed through the adoption of appropriate and suitable precautionary and mitigation measures including an earthen berm.

5.2.6 Interfering with mitigation measures put in place for other plans or projects

The proposed soil recovery facility at Carrownamaddoo, Ballintogher, Co. Sligo will have no direct or indirect impacts upon mitigation measures put in place for other plans or projects. The proposed development is considered reasonable and well thought out and sensitive to the existing site.

5.2.7 Potential Cumulative Effects from Other Plans or Projects upon Natura 2000 Site

The site at Carrownamaddoo, Ballintogher, Co. Sligo will not commence operations until the adjoining Certificate of Registration site activity has been completed. The proposed soil recovery facility at Carrownamaddoo, Ballintogher, Co. Sligo will have no significant negative direct or indirect impacts upon the Lough Gill SAC site. The development will not create a cumulative impact upon the Natura 2000 site in combination with any other plans or projects.

6. Have the Conservation Objectives Been Met

It is reasonable to determine that the conservation objectives of a European Site will be met if its habitats and species are maintained at a favourable conservation status. Given that the proposed soil recovery facility at Carrownamaddoo, Ballintogher, Co. Sligo will not have a negative impact upon the Annex 1 Habitats or Annex II Species, nor upon surface waters through the implementation of precautionary and mitigation measures; it is concluded that the conservation objectives of the Lough Gill SAC site will be met by allowing the proposed development works to proceed.

7. Conclusions of Natura Impact Statement Report

The findings and conclusions of the Appropriate Assessment Natura Impact Statement have been documented, with the necessary supporting evidence and objective criteria. The NIS conclusions are that the development of a proposed soil recovery facility at Carrownamaddoo, Ballintogher, Co. Sligo will:

1. Have no significant impact upon surface water quality either during the infilling phase or the post construction phase. The proposed development will not cause deterioration of water quality, which would have a negative impact upon the Lough Gill SAC Natura 2000 site. This is confirmed through the precautionary and mitigation measures incorporated into the Method Statement for the infilling works.
2. There will no loss of any Natura 2000 site area. There will be no loss of Annex I habitats; or Annex II species upon which any Natura 2000 site qualifies for its conservation status as a consequence of permitting the proposed development to proceed.
3. There will be no cumulative impact upon any Natura 2000 sites in combination with other plans or projects.



4. The proposed soil recovery facility at Carrownamaddoo, Ballintogher, Co. Sligo will not compromise the maintenance of Annex I habitats for which any Natura 2000 site has been selected at favourable conservation status.

5. It is concluded that the conservation objectives of the Lough Gill SAC site will be met as the habitats and species will be maintained at a favourable conservation status. Therefore, there is no reason why the proposed development should be precluded from proceeding.

Yours sincerely,

FREDDIE P.R. SYMMONS B.Env. Sc. (HONS) M.C.I.E.E.M

Senior Environmental Consultant

Full Member of the Chartered Institute of Ecology and Environmental Management

APPENDIX 1: SITE SYNOPSIS FOR LOUGH GILL SAC



SITE SYNOPSIS

Site Name: Lough Gill SAC

Site Code: 001976

This site includes Lough Gill, Doon Lough to the north-east, the Bonet River (as far as, but not including, Glenade Lough), and a stretch of the Owenmore River near Manorhamilton in Co. Leitrim. Lough Gill itself, 2 km east of Sligo town, lies at a geological junction of ancient metamorphic rocks which produce acid groundwater, and limestone which dissolves in the groundwater.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[3150] Natural Eutrophic Lakes
[6210] Orchid-rich Calcareous Grassland*
[91A0] Old Oak Woodlands
[91E0] Alluvial Forests*
[1092] White-clawed Crayfish (*Austropotamobius pallipes*)
[1095] Sea Lamprey (*Petromyzon marinus*)
[1096] Brook Lamprey (*Lampetra planeri*)
[1099] River Lamprey (*Lampetra fluviatilis*)
[1106] Atlantic Salmon (*Salmo salar*)
[1355] Otter (*Lutra lutra*)

Lough Gill is a large lake, being 8 km long, and has steep limestone shores and underwater cliffs. It is over 20 m deep in places. The lake appears to be naturally eutrophic. The aquatic macrophyte flora is very limited, probably due to the rapid increase in depth around most of the margin. Species such as pondweeds (*Potamogeton* spp.) are present, as well as Shoreweed (*Littorella uniflora*). Where the lake shore has a shallow gradient, some swamp vegetation occurs, mainly dominated by Common Reed (*Phragmites australis*), with Common Club-rush (*Scirpus lacustris*) and sedges (*Carex* spp.).

The Old Oak Woodlands within this site are dominated by oak (*Quercus* spp.), Rowan (*Sorbus aucuparia*) and willows (*Salix* spp.). A number of interesting tree species occur. Strawberry Tree (*Arbutus unedo*) is found in its most northerly site in the world. Yew (*Taxus baccata*) occurs in abundance. Bird Cherry (*Prunus padus*), a Red Data Book species, is also found, as is the nationally scarce Rock Whitebeam (*Sorbus rupicola*). Some areas of conifer plantation occur in association with these woodlands.



There is a fringe of deciduous woodland along most of the length of the Garvoge River. In parts it is dense and impenetrable, with a very wet marshy underlayer. Some areas are dominated by Rusty Willow (*Salix cinerea* subsp. *oleifolia*), with Alder (*Alnus glutinosa*) also occurring commonly. Other tree species present include Goat Willow (*Salix caprea*), Hazel (*Corylus avellana*), Rhododendron (*Rhododendron ponticum*) and Cherry Laurel (*Prunus laurocerasus*). Both of the latter species are invasive aliens. In the understorey, species such as Guelder-rose (*Viburnum opulus*), Gipsywort (*Lycopus europaeus*) and Skullcap (*Scutellaria galericulata*) are found. Reedswamp is also common along the river. Another area of alluvial wet woodland is found at the mouth of the Bonet River. Here there is dense willow (*Salix* sp.) scrub, along with Reed Canary-grass (*Phalaris arundinacea*), and also areas where Alder and Goat Willow are dominant.

Areas of unimproved wet and dry grassland also occur within the site, the former particularly by the lake and the latter well developed in the north-east of the site and in the vicinity of O'Rourke's Table. Orchid-rich Calcareous Grassland, a priority habitat listed on Annex I of the E.U. Habitats Directive, has been reported from Clogher Beg, according to the Irish Semi-natural Grasslands Survey, 2010. Heath-covered hillsides above the woods are dominated by Heather (*Calluna vulgaris*).

The site also supports several rare plant species, including Yellow Bird's-nest (*Monotropa hypopitys*), the lady's-mantle species *Alchemilla glaucescens*, Ivy Broomrape (*Orobanchae hederaceae*), Black Bryony (*Tamus communis*), Intermediate Wintergreen (*Pyrola media*) and Bird's-nest Orchid (*Neottia nidus-avis*). There is also an unconfirmed record for Melancholy Thistle (*Cirsium helenioides*) from the eastern side of the site.

Both the woods and the mountains are used by a large herd of Fallow Deer. The site is of considerable importance for the presence of four Red Data Book fish species that are listed on Annex II of the E.U. Habitats Directive - Brook Lamprey (*Lampetra planeri*), River Lamprey (*Lampetra fluviatilis*), Sea Lamprey (*Petromyzon marinus*) and Atlantic Salmon (*Salmo salar*). The Lough Gill system gets a very early run of spring salmon, while the Bonet holds stocks of salmon from spring right through to the end of the season. White-clawed Crayfish (*Austropotamobius pallipes*), Otter and Pine Marten are well established on this site, the first two are both Annex II species. The woodlands have a fauna which includes several rare snail species.

Lough Gill supports low numbers of wintering waterfowl, mostly Mallard (<150), Tufted Duck (20-30) and Goldeneye (<20). A small colony of Common Tern breed on the islands (20 pairs in 1993), while Kingfisher are found on the lake and rivers. Both of these species are listed on Annex I of the E.U. Birds Directive. A colony of Black-headed Gulls (63 pairs in 1992) occurs with the terns. The woods support a good diversity of bird species including Jay, Woodcock and Blackcap.

The site is of importance for four habitats listed on Annex I of the E.U. Habitats Directive, including two with priority status. It is also noted for the high number of rare or scarce animal and plant species.