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Appropriate Assessment Screening

In line with the requirements of Article 6(3) of the EU Habitats Directive

**For: Proposed upgrade works to Oranmore Library ,
Main Street, Oranmore, Co Galway. H91PC59**

By: Corrib Environmental Services.

October 2022

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1 Introduction.

Corrib Environmental Services were commissioned by Scott Tallon Walker Consultants to prepare an **Appropriate Assessment Screening Report** for Galway Co. Co. in line with the requirements of Article 6 (3) of the EU Habitats Directive (Directive 92/43 EC) of an application to carry out upgrade works to Oranmore Library, Main Street, Oranmore. The building is a listed structure reference number 240. The site is located close to Galway Bay Complex Special Area of Conservation, (SAC Site Code 000268) and close to Inner Galway Bay Special Protected Area (SPA Code 004031). These protected sites are designated under the EU Habitats Directive and EU Birds Directive, and so it is necessary that the potential impacts of the proposed works be assessed by the competent authority, in accordance with Article 6 of the Habitats Directive. This report provides the information necessary for the competent authority to complete an Appropriate Assessment of the potential impacts of the proposed works on sites of European importance in the area.

1.1 Statement of Authority.

This Screening Report has been prepared by Emmet Mc Gloin M.Sc (Hons) Rural Environmental Conservation Management.(UCD). B. Agr. Sc.(UCD.)

1.2 Statutory Context

The preparation of the Variation has had regard to Article 6 of the Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter referred to as the Habitats Directive). This is transposed in Ireland primarily by Part XAB of the Planning and Development (Amendment) Act 2010 and the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. 477) (hereafter referred to as the Habitats Regulations). The AA Screening process took account of guidance contained in the following documents:

- 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 NPW 1/10 & PSSP 2/10.
- 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 (European Commission Environment Directorate-General, 2001); hereafter referred to as the EC Article 6 Guidance Document. The guidance within this document provides a non-mandatory methodology for carrying out assessments required under Article 6(3) and (4) of the Habitats Directive.

• Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (EC Environment Directorate-General, 2000); hereafter referred to as MN2000. Variation to 4 Appropriate Assessment Screening Galway County Development Plan Galway County Council

• 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 European Commission (European Commission, January 2007).

• Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive

2 Methodology

This report was prepared in compliance with the European Communities (2002) *Assessment of projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*- the screening matrix (section 2 of this report) and the finding of no significant effect report matrix.(section 3 of this report) has been taken from Section 3 of these guidelines.

The provisions of *Article 6(4)* apply when the results of the preliminary assessment under *Article 6(3)* are negative or uncertain, that is that the plan or project will adversely affect the integrity of the site and /or where doubts remain as to the absence of adverse effects on the integrity.

2.1 Screening.

This stage examines the likely effects of a project or plan, either alone or in combination with other projects or plans, upon a Natura 2000 site and considers whether it can be objectively concluded that these effects will not be significant. This assessment comprises four steps: 1. Determining whether the project or plan is directly connected with or necessary to the management of the site; 2. Describing the project or plan and the description and characterisation of other projects or plans that in combination have the potential for having significant effects on the Natura 2000 site; 3. Identifying the potential effects on the Natura 2000 site; 4. Assessing the significance of any effects on the Natura 2000 site.

2.2 Appropriate Assessment

AA is a focused and detailed impact assessment of the implications of the plan or project, alone and in combination with other plans and projects, on the integrity of a Natura 2000 site in view of its conservation objectives. AA is a focused and detailed impact assessment of the implications of the plan or project, alone and in combination with other plans and projects, on the integrity of a Natura 2000 site in view of its conservation objectives. This is carried out in the event of it being concluded in the Screening process that there may be detrimental effects as a result of a project on the managing of a Natura site.

2.3. Assessment of Alternatives

If it can be concluded on the basis of AA that there will be no adverse effects on the integrity of a Natura 2000 site, the plan or project can proceed to authorisation, where

the normal planning or other requirements will apply in reaching a decision to approve or refuse. If adverse effects are likely, or in cases of doubt, the derogation steps of Article 6(4) will apply, but only in a case in which there are imperative reasons of overriding public interest (IROPI) requiring a project to proceed, there are no less damaging alternative solutions, and compensatory measures have been identified that can be put in place. The IROPI test is more rigorous and restrictive in relation to adverse effects on Annex I priority habitats and species. The Habitats Directive requires Member States to inform the Commission of the compensatory measures; this enables the Commission to review whether the compensatory measures are sufficient to ensure that the coherence of the network is maintained. If the Commission is not satisfied it may take steps against the Member State up to and including litigation in the European Court of Justice. Recourse to derogation to allow a plan or project to proceed should be pursued in exceptional circumstances only, and the Minister must be informed at an early stage of any possible IROPI case.

3. Appropriate Assessment Screening

3.1 Project Description.

This report is being prepared for Galway County Council to accompany a planning Application for upgrade works to the Library Building resulting from a requirement for the library to be brought into use for 'MY OPEN LIBRARY' which facilitates library members to have access to the library while unattended from 8.00am to 10.00pm seven days a week.

Also the proposed works are to bring the building up to date with fire escape requirements and disability access.

The works are to include a new internal main entrance lobby, new external exit lobby on side (south) elevation and rearrangement of stairs access to 2 separate balconies.

(site indicated on the attached aerial photograph and map, **Figure 1.**)

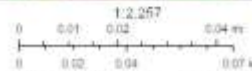
Oranmore Street Map

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OSI_Road_Centrelines



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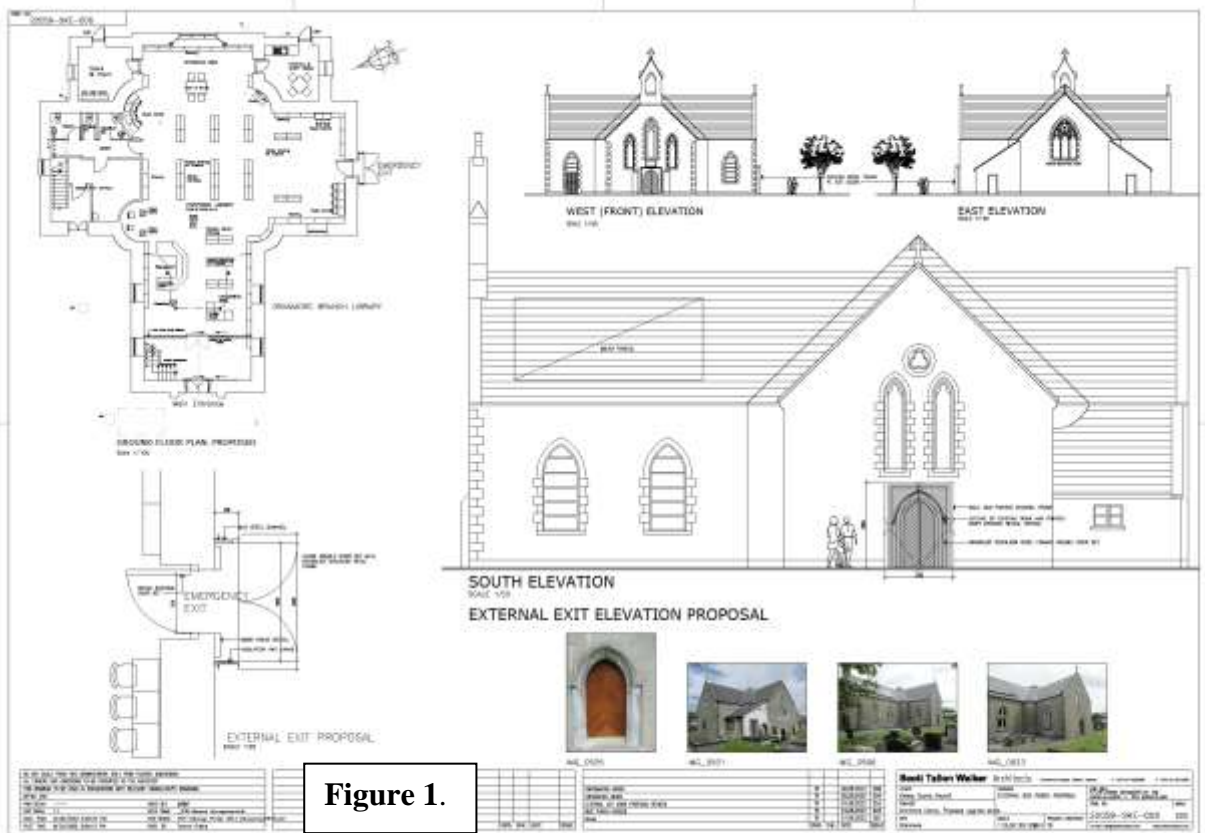


Figure 1.

3.2 Site Description.

The site is located on Main Street Oranmore. It was formally the RC Church. It is a wall enclosed area with a cemetery to the rear of the building. Refer to **Figure 1**.

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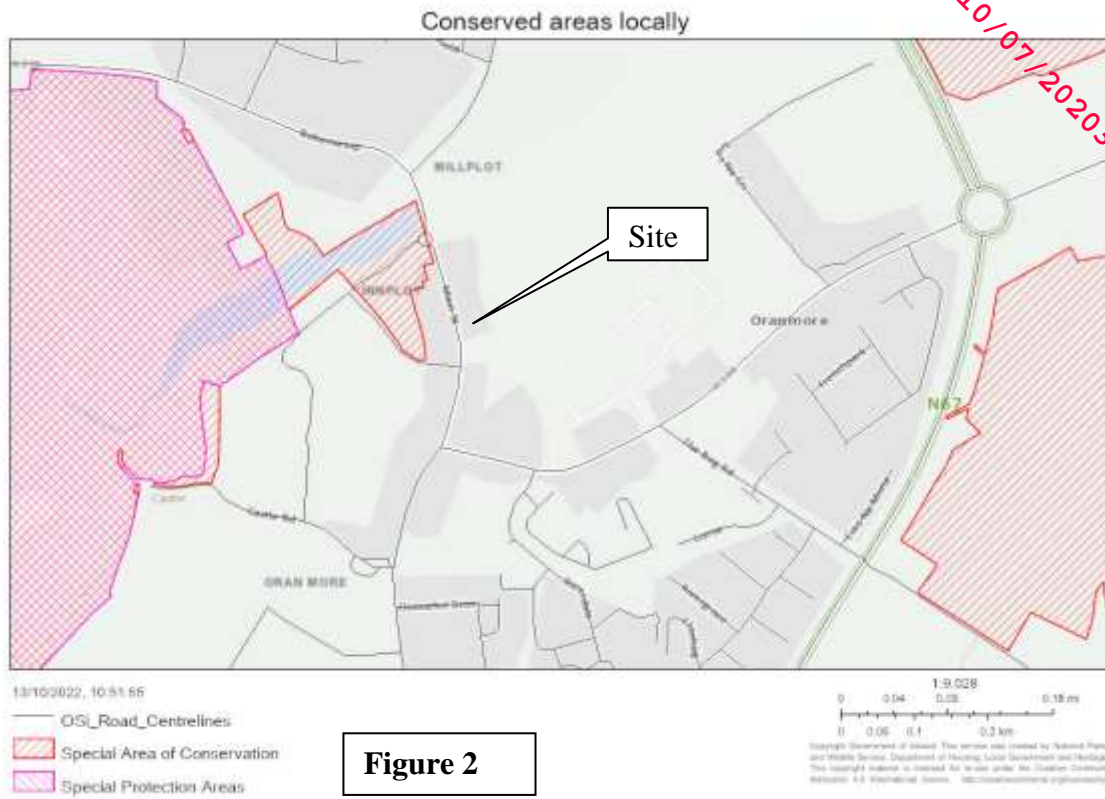


Figure 2

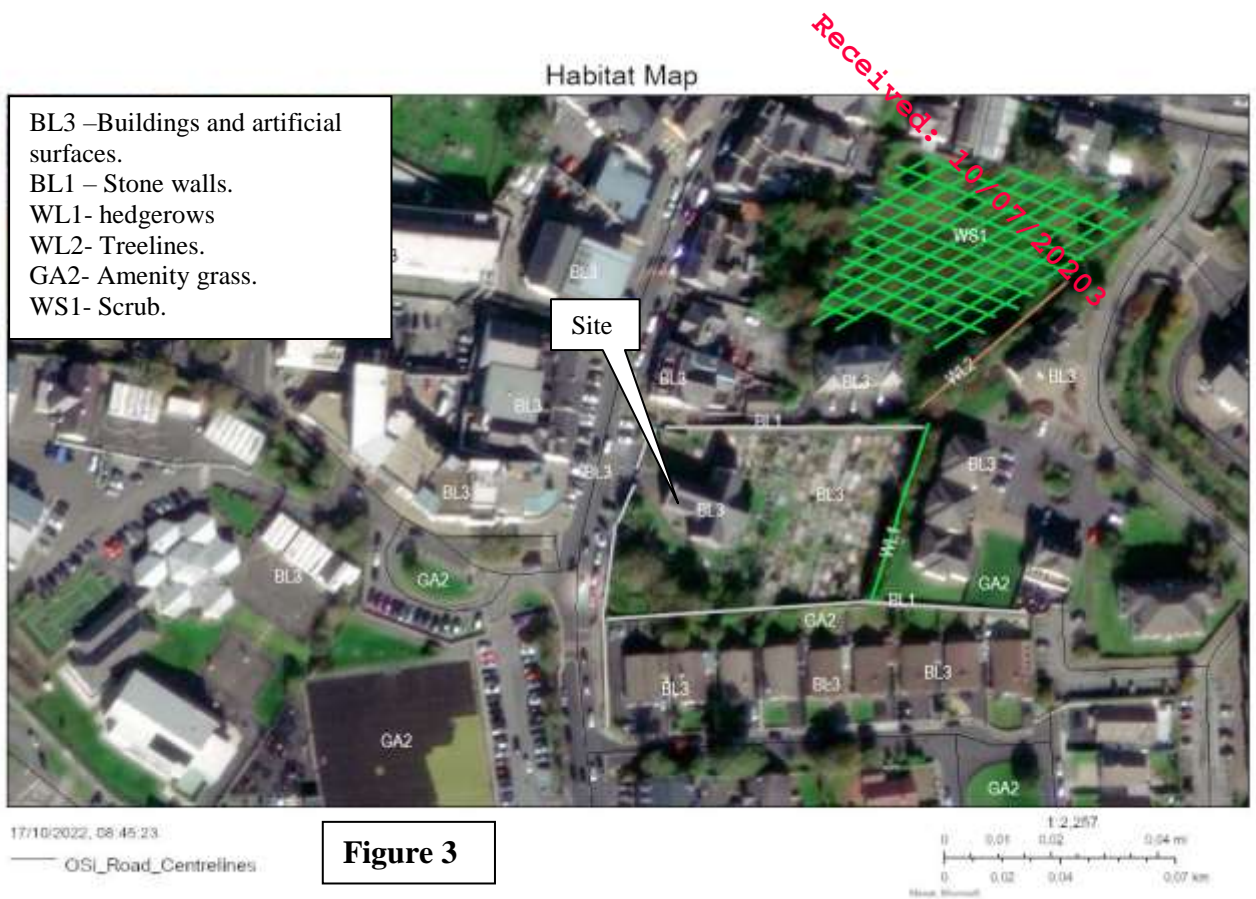
3.3 Ecology of surrounding location.

A walkover survey of the area was conducted on 14/10/2022 to establish habitats in the vicinity. The immediate area is all developed ground with various forms of building structures mainly domestic housing. The predominant habitat is built urban landscape (BL3). The area to the east of the Building is an active Cemetery (BL3). There are very few trees in the area. See **Figure 2** above.

The proposed development is situated circa 210m from the Galway Bay Complex SAC area to the north west and 330m to the east. Refer to **Figure 2**.

Refer to the habitat map **Figure 3** and full scale copy **Appendix C** of this report.

The Ecological evaluation of site area would be low value as it has much modification over time. Other Natura Sites within a 15km buffer of the proposed development but screened out due to lack of connectivity are listed in **Table 5** and displayed in **Figure 4**.



3.4 Brief Description of the Natura Sites which may be affected

Natura 2000 Sites are designated on the presence of certain habitats and species which are afforded protection under the Habitat and Birds Directives. These habitats and species are regarded as qualifying features of the Natura 2000 sites. **The details of the qualifying interests of the site are listed in Table 3 and described in Annex B.** (Slyne Head Peninsula Special Area of Conservation)

3.5 Potential Pressures and Threats to the Natura 2000 sites

The European Nature Information System (EUNIS) website contains data on all Natura sites, including details on the main threats to and pressures on their qualifying features. Potential threats to and pressures on the qualifying features of the Natura 2000 site are listed below.

Potential Pressures and Threats to Nearby Natura sites

Activity	Location	Intensity	Influence
Waste water	Outside	Low	Negative
Recreational	Inside	Low/Medium	Negative
Forestry	Outside	High	Negative.
Farming	Outside	Medium	Negative.
Dispersed	Outside	High	Negative

Habitation			
Hand cutting of Peat	Inside	low	Negative.
Leisure fishing	Inside	low	Neutral
Other human activity	Inside	High	Negative.

3.6 Conservation Objectives of Natura 2000 Sites

Once a site has been designated as a SAC, a Management Plan should be put together for the site which sets out the Conservation Objectives for the designated site. Every effort should then be made to ensure that these objectives are fulfilled, in order to prevent impacts to the qualifying features of the site and to maintain as far as possible their favourable conservation status.

European and national legislation places a collective obligation on Ireland to maintain at favourable conservation status sites designated as Special Areas of Conservation and Special Protection Areas.

Favourable Conservation status of a habitat is achieved when:

Its natural range, and area it covers within that range, are stable or increasing and the specific structure and functions which 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 is achieved when the population dynamics data on the species concerned indicate that it is maintaining itself on a long term basis as a viable component of its natural habitats and the natural range of the species in neither being reduced nor is likely to be reduced for the foreseeable future and there is and will probably continue to be, as sufficiently large habitat to maintain its population on a long term basis.

3.7 Identification of European Sites

Since the conservation management objectives for the European site focuses on maintaining the favourable conservation status of the qualifying interests of each site, the AA screening process concentrates on assessing the potential implications of the proposed development against the qualifying interests of the site.

The location of the proposed development in the context of the Natura sites is presented in **Figure 2**.

The qualifying interests and EU Codes of Galway Bay Complex SAC and Inner Galway Bay SPA are listed in **Table 3 and 4** and **Appendix B**.

The recognised threats and vulnerabilities are also documented.

3.8 Identification and Description of Potential Impacts

Ecological receptors of the potentially affected European site that are sensitive to potential impacts from the proposed development include habitats and species for which the site is designated. The characteristics, location and scale of the development together with the ecological requirements of the conservation interests of the European Site potentially affected have been taken into consideration in identifying potential impacts.

3.8.1 Other Plans and Projects in the Area

It is a requirement of the Appropriate Assessment process to consider the 'in-combination effects of the proposed development with other plans and projects in the area. **Table 1** below gives details of the other plans and projects in the area which may be affecting the surrounding Natura 2000 Sites.

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Table 1. Other Plans and Projects affecting Natura 2000 Sites

Name of Plan or Project	Key Policies/issues directly related to the relevant Natura Site	Potential Cumulative or in combination effects on the relevant Natura 2000 Sites
<i>Galway County Development Plan 2022-2028</i>	<p>Conserve, manage, protect and enhance the special character of the County as defined by its natural heritage, biodiversity and green infrastructure;</p> <p>To ensure compliance with the requirements of relevant International, European Directives and National Legislation in relation to Natural Heritage, Biodiversity, Green/Blue Infrastructure and Climate Change;</p> <p>Ensure climate change considerations are taken into account in the Natural Heritage, Biodiversity and Green/Blue Infrastructure;</p> <p>Continue to implement actions of the National Heritage Plan and the National Biodiversity Plan and the current <i>Galway County Heritage and Biodiversity Plan 2017-2022</i> in partnership with all relevant stakeholders and any successor to these documents;</p> <p>To promote the creation of an integrated and coherent green infrastructure network throughout County Galway in order to enhance connectivity, social inclusion, sense of place and the creation of wildlife corridors.</p>	Positive Impact
<i>Water Framework Directive</i>	The Water Framework Directive is linked to a number of other EU directives in several ways. These include Directives relating to the protection of biodiversity (Birds and Habitats	Positive Impact

	Directives), directives related to specific uses of waters (drinking water, bathing waters and urban waste water directives) and to directives concerned with the regulation of activities undertaken in the environment (Industrial Emissions and Environmental Impact Assessment directives).	Received: 10/07/20203
<i>NPWS Conservation Management Plans</i>	Conservation Management Plans for the Natura Site	Positive Impact
<i>Inland Fisheries Ireland (IFI) Corporate Plan 2011-2015</i>	Goals: To improve the protection and conservation of the resources To develop and improve wild fish populations To generate a better return for Ireland from the resource	Positive Impact
Planning Applications in the area	A search on Galway County Council online planning query system indicates that there have been few planning application in the area recently. The applications were generally modifications to existing structures.	Neutral Impact

A screening matrix summarising the outcome of the screening exercise in relation to the Natura sites is presented in **Table 2**.

Table 2.

Brief description of the project	The project under consideration is the proposed Upgrading of The Public Library on Main Street Oranmore, close to Galway Bay Complex SAC and Inner Galway Bay SPA.
Brief description of the Natura sites	Site Designation Status: Galway Bay Complex Special Area of Conservation, (SAC Site Code 000268) and Inner Galway Bay SPA are designated under the EU Habitats Directive (92/43/EEC) and the EU Birds Directive (2009/147/EEC) Qualifying Features: Galway Bay Complex Special Area of Conservation, (SAC) is of conservation significance due to the presence of 15 habitats listed under Annex I of the EU Habitats Directive and for the presence of several birds listed on Annex II of the Birds Directive Inner Galway Bay Special Protected Area is selected for 21 species listed on Annex II of the E.U. Birds Directive
Likely direct or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura sites by virtue;	The project is not integral to the sites or their management therefore no potential for direct impacts.

<ul style="list-style-type: none"> • Size and scale • Land take • Distance from the site or key features thereof. <p>Resource requirement(water abstraction)</p> <ul style="list-style-type: none"> • Emissions (to land water or air) • Excavations requirements • Transport requirements • Duration of construction, 	<p>It is a very small scale project on a developed area.</p> <p>There is no land take.</p> <p>300m removed from the coastal SAC/SPA conserved area. 600m removed from the inland section SAC area.</p> <p>None.</p> <p>None.</p> <p>None. Located by Public road.</p> <p>Construction time is short 4 to 6 months</p>
<p>Likely changes to the sites arising as a result of;</p> <ul style="list-style-type: none"> • Reduction of Habitat • Disturbance to key species • Habitat fragmentation • Reduction in species density • Changes in key indicators of conservation value(water quality etc.) • Climate change 	<p>There is no conserved habitat reduction or fragmentation of conserved area. There are no QI habitats or species close by.</p> <p>No impact on water quality is predicted.</p> <p>Wastewater is disposed of to the municipal wastewater treatment system.</p> <p>None predicted as modern building standards will apply.</p>
<p>Likely impacts on the Natura sites as a whole in terms of:</p> <ul style="list-style-type: none"> • Interference with the key relationships that define the structure of the site. • Interference with the key relationships that define the function of the site 	<p>This project will not interfere with any of the key relationships that define the conserved areas. There will be no reduction in the natural range of the sites or interference with any of the functions that give the sites their special status. This project is not likely to impact on any of the functions of the sites either in the short or long term.</p>
<p>Indicators of significance as a result of the identification of effects set out above in terms of</p> <ul style="list-style-type: none"> • Loss • Fragmentation • Disruption • Disturbance • Change to key elements of the site (eg water quality etc.) 	<p>N/a, outside of the protected area.</p> <p>N/a, outside of the protected area.</p> <p>N/a, outside of the protected area. There will be no disruption to the Conserved areas in question as there will be no works carried out in the conserved area. The project site is not an integral part of the conserved area.</p> <p>The proposed project is removed from the protected area and confined to the project area which is small in relative terms in an area that is already developed.</p> <p>Water management on site aimed to protect the environment.</p>
<p>Elements of the project or plan, or combination of elements, where the above impacts that are likely to be of significance or where the scale of magnitude of impacts is not known.</p>	
<p>In Combination/Cumulative impacts</p>	<p>It is a requirement of AA that the combined effects of the proposed development together with other plans or projects be considered. Based on the absence of potential significant effects due to the proposed development in isolation, it is</p>

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	<p>considered that there is no potential for cumulative or in-combination impacts of significance to occur.</p> <p>There are no other new plans or projects in the immediate area. There are numerous dwellings in the immediate vicinity.</p> <p>There are no approved un-started projects in the immediate area.</p> <p>There is no plan or project that if this proposed project were added that would lead to significant effect.</p> <p>Based on the absence of potential significant effects due to the proposed development in isolation, it is considered that there is no potential for cumulative or in-combination impacts of significance to occur. The proposed development is small scale and localised in its footprint within ground that has existing development.</p> <p>Effects that are not significant are beyond the current forecasting ability and are within the ability of the resource to absorb such change.</p> <p>It is not considered that the proposed project will have any potential impact on the Natura sites in question either alone or in combination with other plans or projects as outlined in this AA Screening report.</p>
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3.9 Conclusion of the Screening

Proposed development to upgrade the public Library on Main Street, Oranmore, close to Galway Bay Complex SAC and Inner Galway Bay SPA.

3.9.1 Is the plan or project directly connected with or necessary to the management of the sites (provide details)

While the project is close to the Natura Sites, the proposed development in the long or short term will have no effect on the protected site. It is a small scale project located in a site that is developed and removed the conserved area. The site area itself is low value ecologically. There is no perceived risk associated with the project from an environmental point of view. The project is small and within the confines of the existing developed area. The proposal does not involve any major construction activity. It has not nor will not have implications for the management of the site. All the surrounding area is dry. There is no risk of water contamination. There will be no disturbance to any conserved area or other habitat of importance. No special measures other than good building practices are required. Management of the Natura sites will not have to be modified as a result of this development. Therefore *Article 6(4)* does not apply and there is no need to prepare an Appropriate Assessment /Natura Impact Statement. This AA Screening Report is therefore issued as a 'Finding of No Significant Effects (FDNSE) Statement', in accordance with the *EU Commission's Methodological Guidance (EC, 2001)*.

The conclusion of this Screening exercise is that no significant effects are expected on the qualifying interests or conservation objectives of the surrounding Natura 2000

sites, as a result of the proposed development in question, alone or in combination with other plans or projects in the area.

A screening matrix summarising the outcome of the screening exercise in relation to the Natura sites is presented in **Table 2**.

Table 3 below presents the outcome of the screening in relation to each Qualifying Interest of the SAC and SPA sites.

Table 3: Potential for likely Significant Effects on Galway Bay Complex SAC

EU Annex I Habitats	Potential for Significant Impacts	Requirement for Stage 2 AA
[1140] Tidal Mudflats and Sandflats	Removed from proposed development. No impact pathway.	No.
Coastal lagoons [1150] Reefs [1170]	Removed from proposed development. No impact pathway	No
[1160] Large Shallow Inlets and Bays	Removed from proposed development and hydrological pathways will be protected.	No
[1170] Reefs	Removed from proposed development. Downstream therefore no impact pathway	No
[1220] Perennial Vegetation of Stony Banks	There are no hydrological links between the proposed development site and the SAC, therefore adverse impact on this aquatic species are not foreseen.	No
[1230] Vegetated sea cliffs of the Atlantic and Baltic coasts	Removed from proposed development. No impact pathway.	No
[1310] Salicornia Mud	The project is not linked hydrologically.	No
[1330] Atlantic Salt Meadows	Removed from proposed development	No
[1410] Mediterranean Salt Meadows	Removed from proposed development.	No
[3180] Turloughs*	Removed from proposed development.	No
[5130] Juniper Scrub	Removed from the proposed development.	No
[6210] Orchid-rich Calcareous Grassland*	No impact identified.	No
[7210] Cladium Fens*	Removed.	No
[7230] Alkaline Fens	Removed. No impact identified.	No
[8240] Limestone Pavement*	Removed. No impact identified	No
EU Annex 1 Species	Potential for significant impact	Requirement for stage 2 AA
[1355] Otter (<i>Lutra lutra</i>)	Removed from any water channels.	No

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[1365] Common (Harbour) Seal (Phoca vitulina)	Removed from any water channel. Surface and ground water will be protected so no significant impacts are foreseen.	No
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Table 4: Potential for likely Significant Effects on Inner Galway Bay SPA.

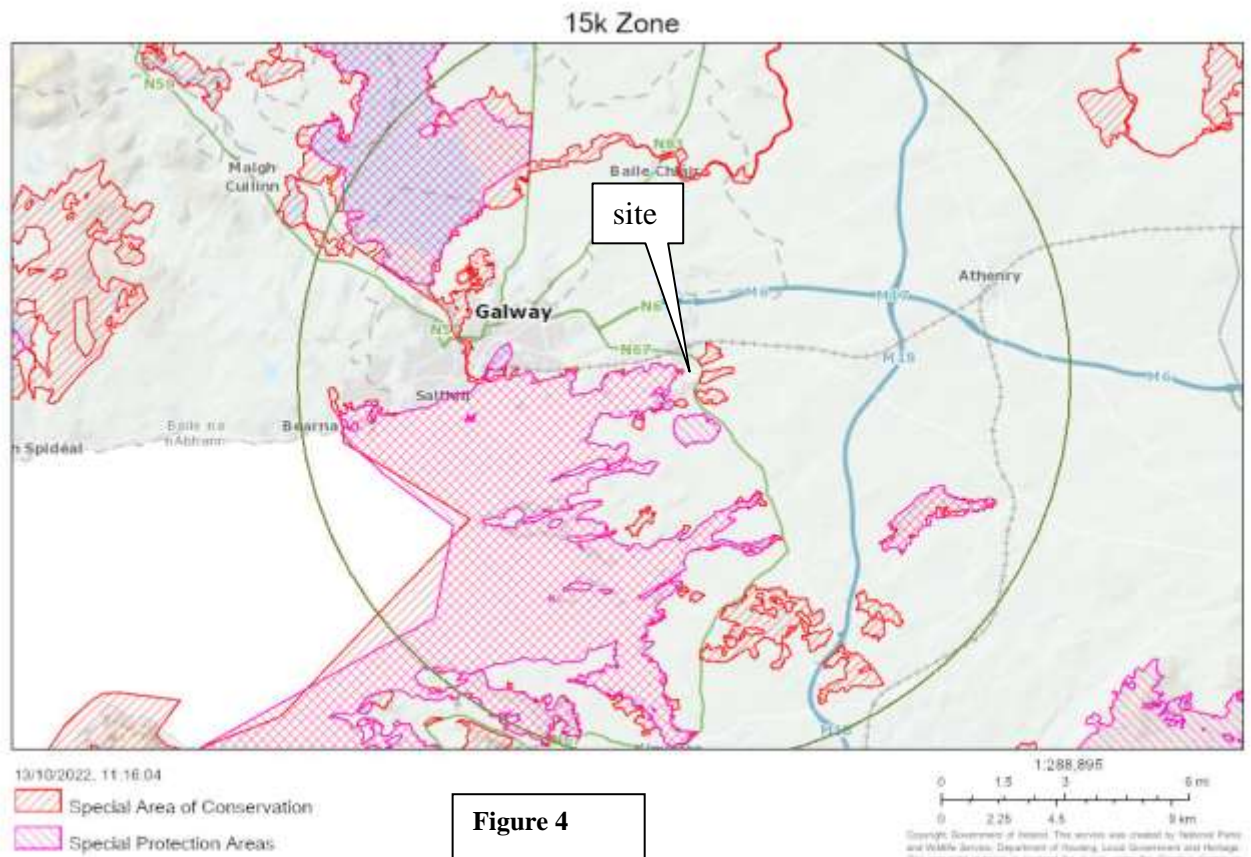
EU Annex 11 Species	Potential for Significant Impacts	Requirement for Stage 2 AA
Black-throated Diver (Gavia arctica) [A002]	Removed from proposed development. No impact pathway.	No
Great Northern Diver (Gavia immer) [A003]	Removed from proposed development. No impact.	No
Cormorant (Phalacrocorax carbo) [A017]	Removed	No
Grey Heron (Ardea cinerea) [A028]	No impact pathway	No
Light-bellied Brent Goose (Branta bernicla hrota) [A046]	Removed	No
Wigeon (Anas penelope) [A050]	Removed	No
Teal (Anas crecca) [A052]	Removed	No
Red-breasted Merganser (Mergus serrator) [A069]	No impact. Removed	No
Ringed Plover (Charadrius hiaticula) [A137]	Removed	No
Golden Plover (Pluvialis apricaria) [A140]	No impact pathway	No
Lapwing (Vanellus vanellus) [A142]	No impact	No
Dunlin (Calidris alpina) [A149]	No impact	No
Bar-tailed Godwit (Limosa lapponica) [A157]	No impact	No
Curlew (Numenius arquata) [A160]	No impact	No
Redshank (Tringa totanus) [A162]	No impact	No
Turnstone (Arenaria interpres) [A169]	No impact	No
Black-headed Gull (Chroicocephalus ridibundus) [A179]	No impact	No
Common Gull (Larus canus) [A182]	No impact	No
Sandwich Tern (Sterna sandvicensis) [A191]	No impact	No
Common Tern (Sterna hirundo) [A193]	No impact	No
Wetland and Waterbirds [A999]	No impact	No

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Table 5: Protected Habitats in the vicinity of the development

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Name of site	Site Code	Distance to the proposed development
Rahasane Turlough SPA	004089	9.7km
Creganna Marsh SPA	004142	1.4km
Lough Fingal Complex SAC	000606	8.5m
Ardrahan Grassland SAC	002244	12.0km
Castletaylor Complex SAC	000242	10.7km
Rahasane Turlough SAC	000322	9.7km
Lough Corrib SAC	000297	7.9km
Lough Corrib SPA	004042	10.5Km



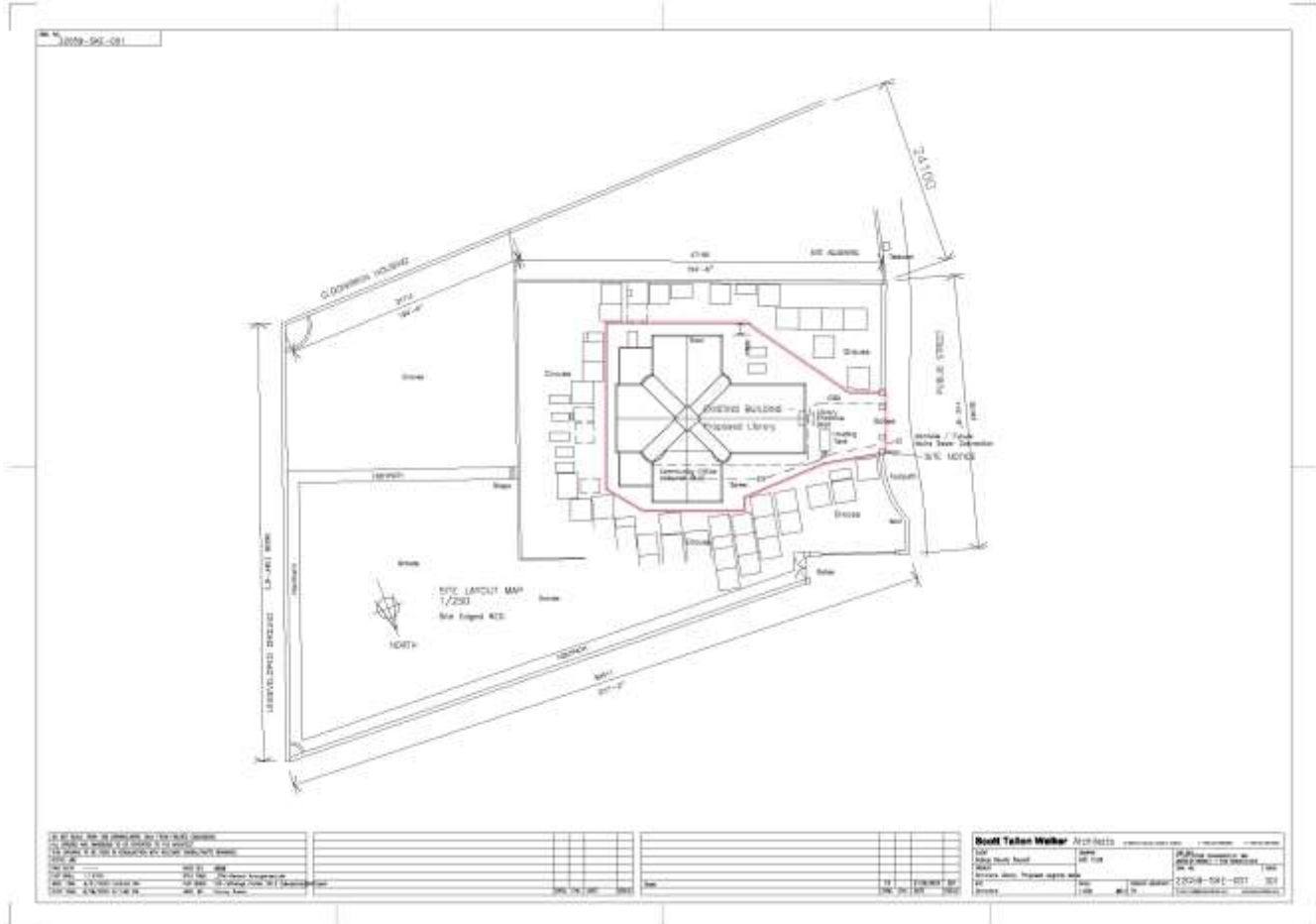
4. References.

- Existing records. NPWS, OSI. Field study. EU Habitats Directive, and EU 2002 Assessment of projects affecting Natura sites.
- DEHLG (2009) Appropriate Assessment of Plans and Project in Ireland. Guidance for Planning Authorities.
- Galway County Development Plan 2015-2021
- Guide to Habitats in Ireland (Fossit.J.)
- National Biodiversity Data Centre (NBDC).
- Habitat Survey Guidelines (The Heritage Council)
- Existing records. NPWS, OSI. Field study. EU Habitats Directive, and EU 2002

Assessment of projects affecting Natura sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC
 Existing and Historical maps.
 IEEM (2006) Guidelines for Ecological Assessment.
 Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report, European Commission, 2017.

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Appendix A.



Appendix B.

Site Name: Galway Bay Complex SAC Site Code: 000268

Situated on the west coast of Ireland, this site comprises the inner, shallow part of a large bay which is partially sheltered by the Aran Islands. The Burren karstic limestone fringes the southern sides and extends into the sublittoral. West of Galway city the bedrock geology is granite. There are numerous shallow and intertidal inlets on the eastern and southern sides, notably Muckinish, Aughinish and Kinvarra Bays. A number of small islands composed of glacial deposits are located along the eastern side. These include Eddy Island, Deer Island and Tawin Island. A diverse range of

marine, coastal and terrestrial habitats, including several listed on Annex I of the E.U. Habitats Directive, occur within the site, making the area of high scientific importance. 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): [1140] Tidal Mudflats and Sandflats [1150] Coastal Lagoons* [1160] Large Shallow Inlets and Bays [1170] Reefs [1220] Perennial Vegetation of Stony Banks [1230] Vegetated sea cliffs of the Atlantic and Baltic coasts [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [3180] Turloughs* [5130] Juniper Scrub [6210] Orchid-rich Calcareous Grassland* [7210] Cladium Fens* [7230] Alkaline Fens [8240] Limestone Pavement* [1355] Otter (*Lutra lutra*) [1365] Common (Harbour) Seal (*Phoca vitulina*) Galway Bay South holds a very high number of littoral communities (12). They range from rocky terraces, to sandy beaches with rock or sand dunes behind. The intertidal sediments of Galway Bay support good examples of communities that are moderately exposed to wave action. A well-defined talitrid amphipod zone in the Version date: 10.12.2015 2 of 5 000268_Rev15.Docx upper shore gives way to an intertidal, mid shore zone with sparse epifauna or infauna. On the lower, flat part of the shore, the tubes of the deposit-feeding terebellid worm, *Lanice conchilega*, are common on the surface. Nereid and cirratulid polychaete worms (*Hediste diversicolor*, *Arenicola marina*), small crustaceans and bivalves (*Angulus tenuis*, *Cerastoderma edule* and *Macoma balthica*) are present. The area has the country's only recorded example of the littoral community characterized by *Fucus serratus* with sponges, ascidians and red seaweeds on tide-swept lower eulittoral mixed substrata. This community has very high species richness (85 species), as do the sublittoral fringe communities on the Finavarra reef (88 species). The rare Purple Sea Urchin *Paracentrotus lividus* and the foliose red alga *Phyllophora sicula* are present at Finavarra, whereas the red alga *Rhodomenia delicatula* and the rare brown alga, *Ascophyllum nodosum* var. *mackii*, occur in Kinvarra and Muckinish Bays. Sublittorally, the area has a number of distinctive and important communities. Of particular note is that Ireland's only reported piddock (bivalve mollusc) bed thrives in the shallows of Aughinish Bay. The rare sponge, *Mycale contarenii*, is also found here. There is further interest in an extensive maerl bed of *Phymatolithon calcareum* which occurs in the strong tidal currents of Muckinish Bay. There is also maerl off Finavarra Point and in Kinvarra Bay (*Lithothamnion corallioides*, *Lithophyllum dentatum* and *Lithophyllum fasciculatum*). An oyster bed in Kinvarra Bay and seagrass (*Zostera* spp.) beds off Finavarra Point are also important features. Other significant habitats which occur include secondary maerl beds and communities strongly influenced by tidal streams. Saltmarshes are frequent within this extensive coastal site, with both E.U. Habitats Directive types, 'Atlantic Salt Meadow' and 'Mediterranean Salt Meadow' well represented. Most of the saltmarshes are classified as the bay type, with the substrate being mud or mud/sand. There is one lagoon type and one estuary type. Lagoon saltmarshes are the rarest type found in Ireland. The best examples of saltmarsh are located in inner Galway bay, east of a line running between Galway city and Kinvarra. In this area the coastline is highly indented, thus providing the sheltered conditions necessary for extensive saltmarsh development. Common saltmarsh species include Thrift (*Armeria maritima*), Red Fescue (*Festuca rubra*), Common Scurvygrass (*Cochlearia officinalis*), Lax-flowered Sea-lavender (*Limonium humile*), Common Saltmarsh-grass (*Puccinellia maritima*), Saltmarsh Rush (*Juncus gerardi*) and Sea Rush (*Juncus maritimus*). On the lower levels of the saltmarshes and within pans there occurs Glasswort (*Salicornia europaea* agg.). A

noteworthy feature of the saltmarsh habitat within this site is the presence of dwarfed brown seaweeds in the vegetation. These are also known as “turf fucoids” and typical species include *Fucus* spp., *Ascophyllum nodosum* and *Pelvetia canaliculata*. A number of locally rare vascular plant species also grow in saltmarsh areas within the site. These include Reflexed Saltmarsh-grass (*Puccinellia distans*) and Sea-purslane (*Halimione portulacoides*), which are both relatively rare in the western half of the country. Shingle and stony beaches can be found throughout the site, with the best examples along the more exposed shores to the south and west of Galway city and to the north and east of Finavarra, Co. Clare. In general, these shingle shorelines are sparsely vegetated and frequently occur interspersed with areas of sandy beach and/or bedrock shore. The associated flora is dominated by plant species of frequently disturbed maritime habitats. To the south and west of Galway city, typical plants include Curled Dock (*Rumex crispus*), Common Couch (*Elymus repens*), Sea Sandwort (*Honkenya peploides*), Sea Beet (*Beta vulgaris* subsp. *maritima*), Sea Mayweed (*Matricaria maritima*), Silverweed (*Potentilla anserina*) and Oraches (*Atriplex* spp.). Two rare plant species are associated with the habitat: Henbane (*Hyoscyamus niger*), a threatened species listed in the Irish Red Data Book, grows on shingle beach to the south of Lough Atalia; there are also old records for the threatened plant species Seakale (*Crambe maritima*). Soft coastal cliffs reaching heights in excess of 10m occur at Rusheen. These support coastal grassland with very sparse vegetation cover. Species recorded include Sea Plantain (*Plantago maritima*), Creeping Bent (*Agrostis stolonifera*), False Oat-grass (*Arrhenatherum elatius*), Cock’s Foot (*Dactylis glomerata*), Red Fescue, Common Bird’s-foot-trefoil (*Lotus corniculatus*), and the lichens *Ramalina* sp. and *Xanthoria parietina*. They are considered highly representative of the rarer soft type of sea cliffs in Ireland. An excellent range of lagoons of different types, sizes and salinities occurs within the site. This habitat is given priority status on Annex I of the E.U. Habitats Directive. One unusual type of lagoon, karstic rock lagoon, is particularly well represented. This type of lagoon is common on the Aran Islands, but on mainland Ireland, all but one are confined to this site. Additionally, the best example of all karstic lagoons in the country, Lough Murree, is found at this site. The flora of the habitat is rich and diverse, reflecting the range of salinities in the different lagoons. It is typically brackish, with two species of Tasselweed (*Ruppia* spp.), two Red Data charophytes *Chara canescens* and *Lamprothamnion papulosum*, and *Chaetomorpha linum*, an alga (all lagoonal specialists). The fauna of the lagoon is also rich, diverse and lagoonal. At least 10 lagoonal specialist species were recorded in 1996 and 1998 from the combined habitat of all the lagoons, which is one of the highest number for any lagoonal habitat in the country. Many of the species appear to be rare. The lagoons within this site are excellent examples of the habitat type and of high conservation importance. Other terrestrial habitats within this site which are of conservation importance include Great Fen-sedge (*Cladium mariscus*)-dominated fen and Black Bog-rush (*Schoenus nigricans*)-dominated alkaline fen at Oranmore, a turlough of moderate size at Ballinacourty, limestone pavement at Ballyconry, Gleninagh North and Newquay, dry calcareous grassland with orchids (best examples occurring west of Salthill), Juniper (*Juniperus communis*) scrub formations at Oranmore, wet grassland and an area of deciduous woodland at Barna. The orchid-rich grassland occurs on a series of small drumlin hills found to the west of Galway City, and is largely confined to the sides of the hills. Calcicole species such as Kidney Vetch (*Anthyllis vulneraria*), Harebell (*Campanula rotundifolia*), Spring Gentian (*Gentiana verna*), Common Spottedorchid (*Dactylorhiza fuchsii*), Lesser Twayblade

(*Listera ovata*), Pyramidal Orchid (*Anacamptis pyramidalis*), Yellow-wort (*Blackstonia perfoliata*) and Greater Knapweed (*Centaurea scabiosa*) are found here, among others. Juniper is also found in this area. Version date: 10.12.2015 4 of 5 000268_Rev15.Docx Areas of alkaline and Cladium fen as best represented near Oranmore, and species such as Great Fen-sedge, Common Reed (*Phragmites australis*), Purple Moor-grass (*Molinia caerulea*), Bogbean (*Menyanthes trifoliata*) and Long-stalked Yellow-sedge (*Carex lepidocarpa*) are found along with the usually dominant, Black Bog-rush. The turlough at Ballinacourty floods to about 25 ha in winter, and has vegetation with a typical zonation. Wetland species such as Amphibious Bistort (*Polygonum amphibium*), Common Marsh-bedstraw (*Galium palustre*) and Marsh Cinquefoil (*Potentilla palustris*) are found near the swallow-hole, with species of wet grassland close to the flood limit (e.g. Silverweed, *Potentilla anserina*, Water Mint, *Mentha aquatica* and Creeping Bent, *Agrostis stolonifera*). Sedges (*Carex* spp.) dominate in between. Inner Galway Bay provides extensive good quality habitat for Common Seal (maximum count of 317 in the all-Ireland survey of 2003). This species is listed on Annex II of the E.U. Habitats Directive. The seals use a range of haul-out sites distributed through the bay - these include inner Oranmore Bay, Rabbit Island, St. Brendan's Island, Tawin Island, Kinvarra Bay, Aughinish Bay and Ballyvaughan. The site provides optimum habitat for Otter, also an Annex II-listed species. Galway Bay is a very important ornithological site. The shallow waters provide excellent habitat for Great Northern Divers (35), Black-throated Divers (28), Scaup (39), Long-tailed Duck (27) and Red-breasted Merganser (232). (Figures given are peak average maxima over the 3 winters 1994/95 to 1996/97). All of these populations are of national importance. The intertidal areas and shoreline provides feeding and roosting habitat for wintering waterfowl, with Brent Goose (517) having a population of international importance and a further 11 species having populations of national importance. Four of the regular wintering species are listed on Annex I of the E.U. Birds Directive - Golden Plover, Bar-tailed Godwit and the two diver species. Breeding birds are also of importance, with significant populations of Sandwich Terns (81 pairs in 1995) and Common Terns (99 pairs in 1995), both also being listed on Annex I of the E.U. Birds Directive. A large Cormorant colony (approx. 300 pairs in 1989) occurs on Deer Island. Fishing and aquaculture are the main commercial activities within the site. A concern is that sewage effluent and detritus of the aquaculture industry could be deleterious to benthic communities. Reef and sediment communities are vulnerable to disturbance or compaction from tractors accessing oyster trestles. The *Paracentrotus lividus* populations have been shown to be vulnerable to over-fishing. Extraction of maerl in Galway Bay is a threat. Owing to the proximity of Galway city, shoreline and terrestrial habitats are under pressure from urban expansion and recreational activities. Eutrophication is probably affecting some of the lagoons and is a continued threat. Drainage is a general threat to the turlough and fen habitats. Bird populations may be disturbed by aquaculture activities. This large coastal site is of immense conservation importance, with many habitats listed on Annex I of the E.U. Habitats Directive, four of which have priority status Version date: 10.12.2015 5 of 5 000268_Rev15.Docx (lagoon, Cladium fen, turlough and orchid-rich calcareous grassland). The examples of shallow bays, reefs, lagoons and saltmarshes found within this site are amongst the best in the country. The site supports an important Common Seal colony and a breeding Otter population (Annex II species), and six regular Annex I E.U. Birds Directive species. The site also has four Red Data Book plant species, plus a host of rare or scarce marine and lagoonal animal and plant species.

SITE NAME: INNER GALWAY BAY SPA SITE CODE: 004031

Inner Galway Bay SPA is a very large, marine-dominated site situated on the west coast of Ireland. The inner bay is protected from exposure to Atlantic swells by the Aran Islands and Black Head. Subsidiary bays and inlets (e.g. Poul-na-clough, Aughinish and Kinvarra Bays) add texture to the patterns of water movement and sediment deposition, which lends variety to the marine habitats and communities. The terraced Carboniferous (Viséan) limestone platform of the Burren sweeps down to the shore and into the sublittoral. The long shoreline is noted for its diversity, and comprises complex mixtures of bedrock shore, shingle beach, sandy beach and fringing salt marshes. Intertidal sand and mud flats occur around much of the shoreline, with the largest areas being found on the sheltered eastern coast between Oranmore Bay and Kinvarra Bay. A number of small islands and rocky islets in the Bay are included within the site. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Black-throated Diver, Great Northern Diver, Cormorant, Grey Heron, Light-bellied Brent Goose, Wigeon, Teal, Redbreasted Merganser, Ringed Plover, Golden Plover, Lapwing, Dunlin, Bar-tailed Godwit, Curlew, Redshank, Turnstone, Black-headed Gull, Common Gull, Sandwich Tern and Common Tern. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds. Inner Galway Bay supports an excellent diversity of wintering wetland birds, with divers, grebes, cormorants, dabbling duck, sea duck and waders all well represented. There are internationally important wintering populations of Great Northern Diver (88) and Light-Bellied Brent Goose (676) and nationally important wintering populations of an additional sixteen species i.e. Black-throated Diver (36), Cormorant (266), Grey Heron (102), Wigeon (1,168), Teal (700), Red-breasted Merganser (249), Ringed Plover (335), Golden Plover (2,030), Lapwing (3,969), Dunlin (2,155), Bartailed Godwit (447), Curlew (697), Redshank (505), Turnstone (182), Black-headed Gull (1,941) and Common Gull (1,066) - all figures given are five year mean peaks for the seasons 1995/96 to 1999/2000. Of note is that the populations of Red-breasted Merganser and Ringed Plover represent 6.8% and 2.3% of the respective all-Ireland totals. Other species which occur in notable numbers include Little Grebe (35), Longtailed Duck (21), Scaup (44) and Herring Gull (216). In addition, the following species also use the site: Great Crested Grebe (16), Mallard (200), Common Scoter (87), Oystercatcher (576), Grey Plover (60), Black-tailed Godwit (46), Mute Swan (150) and Great Black-backed Gull (129). The site provides both feeding and roost sites for most of the species. Little Egret, a species which has recently colonised Ireland, also occurs at this site. The site has several important populations of breeding birds, most notably colonies of Sandwich Tern (81 pairs in 1995) and Common Tern (98 pairs in 1995 on Green Island and 46 pairs in 2001 on Mutton Island). A large Cormorant colony occurs on Deer Island - this had 200 pairs in 1985 and 300 pairs in 1989. Inner Galway Bay SPA is of high ornithological importance with two wintering species having populations of international importance and a further sixteen wintering species having populations of national importance. The breeding colonies of Sandwich Tern, Common Tern and Cormorant are also of national importance. Also of note is that six of the regularly occurring species are listed on Annex I of the E.U. Birds Directive, i.e. Black-throated Diver, Great Northern Diver, Golden Plover, Bartailed Godwit, Sandwich Tern and Common Tern.

Inner Galway Bay is a Ramsar Convention site and part of the Inner Galway Bay SPA
is a Wildfowl Sanctuary.

Appendix C

Received: 10/07/20203

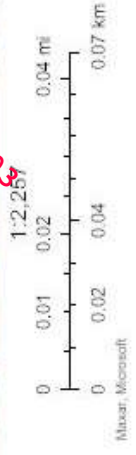
Habitat Map



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