MWP

APPROPRIATE ASSESSMENT SCREENING REPORT

Glencarrig, Celbridge, Co.Kildare

Garyaron Homes Ltd.

August 2022



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Appendices

Appendix 1 – Finding of no significant effects

Appendix 2 – Stages of AA



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22439	6003	А	15/11/2021	МКу	HD	МКе	Final
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1. Introduction

Planning permission for a 'Large-scale Residential Development' (LRD) application is being lodged to Kildare County Council under the appointment of the applicant Garyaron Homes Ltd, on lands at Glencarrig House, Simmonstown, Celbridge, Co. Kildare. Permission is being sought for the construction of 137 No. residential units with creche, landscaped spaces and associated works and services.

Malachy Walsh and Partners Engineering and Environmental consultants (MWP) has been engaged by John Fleming Architects (JFA) to undertake a screening for Appropriate Assessment of the project to accompany the application.

This screening for Appropriate Assessment has been undertaken to determine whether the proposal is likely to have a significant effect on any European site (i.e. Natura 2000 Sites), in view of the sites' conservation objectives.

This screening for Appropriate Assessment has been undertaken by ecologists from MWP.

1.1 Legislative Context

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats and wild fauna and flora by the designation of Special Areas of Conservation (SACs) and the Birds Directive (2009/147/EC)¹ seeks to protect birds of special importance by the designation of Special Protection Areas (SPAs). It is the responsibility of each member state to designate SPAs and SACs, both of which form part of Natura 2000, a network of protected sites throughout the European Community. Further information is available at:

http://ec.europa.eu/environment/nature/legislation/habitatsdirective/

http://www.npws.ie/planning/appropriateassessment/

The current assessment was conducted within this legislative framework and also the DoEHLG (2009) guidelines. As outlined in these, it is the responsibility of the proponent of the project, in this case Garyaron Homes Ltd., to provide a comprehensive and objective screening for Appropriate Assessment, which can then be used by the competent authority, in order to conduct the Appropriate Assessment (DoEHLG, 2009).

1.2 Stages of Appropriate Assessment

The Appropriate Assessment process is a four-stage process with issues and tests at each stage. The purpose of the screening assessment is to record in a transparent and reasoned manner the likely effects on Natura 2000 sites of a proposed development. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required. The stages are set out in Appendix 2.

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¹ This is the codified version of Directive 79/409/EEC as amended (see http://ec.europa.eu/environment/nature/legislation/birdsdirective/index en.htm)



2. Assessment Methodology

2.1 Appropriate Assessment Guidance

This screening for Appropriate Assessment, or Stage 1, has been undertaken in accordance with the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2001), the European Commission Guidance 'Managing Natura 2000 Sites' Brussels, 21.11.2018 C (2018) 7621 final (EC, 2000), and Appropriate Assessment of Plans & Projects - Guidance for Planning Authorities prepared by the NPWS (DoEHLG, 2009 (rev. 2010)).

2.2 Desk Study

In order to complete the screening for Appropriate Assessment certain information on the existing environment is required. A desk study was carried out to collate available information on the proposed development site's natural environment. This comprised a review of the following publications, data and datasets:

- OSI Aerial photography and 1:50000 mapping
- National Parks and Wildlife Service (NPWS)
- National Biodiversity Data Centre (NBDC) (on-line map-viewer)
- BirdWatch Ireland
- Teagasc soil area maps (NBDC website)
- Geological Survey Ireland (GSI) area maps
- Environmental Protection Agency (EPA) water quality data
- Eastern River Basin District (ERBD) datasets (Water Framework Directive)
- Other information sources and reports footnoted in the course of the report

3. Screening for Appropriate Assessment

As set out in the NPWS guidance (DoEHLG, 2009), the task of establishing whether a plan or project is likely to have an effect on a Natura 2000 Site is based on a preliminary impact assessment using available information and data, including that outlined above, and other available environmental information, supplemented as necessary by local site information and ecological surveys. This is followed by a determination of whether there is a risk that the effects identified could be significant. The precautionary principle approach is required.

Once the potential impacts that may arise from the proposed development are identified the significance of these is assessed through the use of key indicators:

- Habitat loss
- Habitat alteration
- Habitat or species fragmentation
- Disturbance and/or displacement of species
- Water quality and resource.



Screening for Appropriate Assessment (Stage 1) determines the need for a full Appropriate Assessment (Stage 2) and consists of a number of steps, each of which is addressed in the following sections of this report:

- 4.1 Establish whether the proposal is necessary for the management of a Natura 2000 Site
- **4.2** Description of the proposal
- 4.3 Identification of Natura 2000 Sites potentially affected
- 4.4 Identification and description of potential individual and cumulative impacts of the works
- 4.5 Assessment of the significance of the impacts on the integrity of Natura 2000 Sites
- **4.6** Conclusion of screening stage

The purpose of the screening assessment is to record in a transparent and reasoned manner the likely effects, on relevant Natura 2000 Sites, of the proposed works.

3.1 Management of Natura 2000 Sites

The proposal is not connected with or necessary to the conservation management of a Natura 2000 Site.

3.2 Description of Project

The proposed development site is located on the south east edge of the village of Celbridge, Co. Kildare, within 1.5 km of Celbridge town centre, within a semi-urban area. The proposed development site is bounded to the north and west by Hazelhatch Park, Simmonstown Stud Farm to the south and Simmonstown Road (L502) and Hazelhatch Road (R405) to the east. Celbridge GAA is located to the east of the site, across the R405.

The proposed development site is relatively flat. Structures onsite include a two-story house, with a shed, barn building and stables to its north. The proposed development site borders consist of mature non-native treelines and small mixed woodlands. The proposed development site is located within the townlands of Commons and Simmonstown.



Figure 1. Site Location



The proposed development site covers an area of circa 2.1 Ha. The proposed development will consist of: (a) the demolition (total area approx. 800 sqm) of the existing buildings on site and the existing front boundary treatment; and (b) the construction of a new residential and creche scheme of 137 no. units in a mixture of houses and apartment units ranging from 2 to 5 storeys in height as follows:

- Block A (3-5 storey apartment block) comprising 39 no. apartments (19 no. 1 bed and 20 no. 2 bed units)
- Block B (4-5 storey apartment block) comprising 51 no. apartments (24 no. 1 bed and 27 no. 2 bed units)
- Block C (3-4 storey apartment block) comprising 25 no. apartments (11 no. 1 bed and 14 no. 2 bed units)
- Houses (2 -3 storeys) comprising 22 no. house units (6 no. 4-bed semi-detached, 6 no. 3 bed semi-detached, 5 no. 3-bed terraced and 6 no. 3-bed end of terrace)

A separate building will accommodate a Childcare Facility/creche of approximately 248 sqm with outdoor play area of 460 sqm. A Bike Store building (86 sqm) and Plant Room/ ESB-Sub-station building (66.9 sqm) are also proposed.

Each residential unit will be afforded with private open space in the form of a balcony or terrace in the case of the apartment units and a rear garden in the case of the housing units. Public open space is proposed in the form of play areas, outdoor seating and planting and pedestrian and cyclist links (approximately 4,380 sqm).

A total of 129 no. car parking spaces are provided at surface level (44 housing/81 apartments/4 creche), including 7 no. Accessible spaces; 80 no. bicycle spaces (for Visitors and Residents, in bike stands) together with 124 no. secure bicycle spaces within 5 no. bike stores.

The proposed development shall be served via a new vehicular access point from the L5062. Upgrade works are proposed to the vehicular access point from the R405 onto the L5062 to facilitate the proposed development and to provide for improved access and egress for the overall development. New pedestrian and cyclist access points will be provided on to the R405 from the proposed development site.

The associated site and infrastructural works include provision for water services; foul and surface water drainage and connections; attenuation proposals; permeable paving; all landscaping works; boundary treatment; internal roads and footpaths; waste storage areas and electrical services and all associated site development works.





Figure 2. Site layout plan

The proposed development site is located within the 'Liffey and Dublin Bay' Water Framework Directive (WFD) catchment (Code: 09) and the Liffey_SC_070 sub-catchment (Code: 09). This catchment includes the area drained by the River Liffey and by all streams entering tidal water between Sea Mount and Sorrento Point, Co. Dublin, draining a total area of 1,616km².

The River Liffey (flowing in a northeast direction) is located approximately 750 m to the northwest of the proposed development site. Loughlinstown River (flowing in a southwest direction) is located approximately 200 m to the southwest of the proposed development site. The EPA has classed the water quality of the River Liffey as 'Good' from a monitoring station located near Primrose Hill bridge, and 'Not at Risk' of failing to meet its WFD objectives. The Shinkeen and Hazelhatch Streams flow from the south east through the Commons and Simmonstown areas of the town respectively.

The Hazelhatch Stream is located 80 m from the proposed development site. Its source is just south of the Grand Canal and it flows through fields until it reaches the R405, of which it is culverted under. It flows through the residential estate, Willow Park, and is culverted under the main Dublin Road (R403) before it joins the River Liffey. Two local drains run along the east and west side of the Hazelhatch Road. Both of these drains discharge into the Hazelhatch Stream.

Information on flood risk at the proposed development site was obtained from the Office of Public Works (OPW) Flood Maps². A review of the Flood Maps indicated that there are no areas designated at risk of flooding within the proposed development site. The proposed development site is identified as being partially within

² https://www.floodinfo.ie/map/floodmaps/ Accessed 06/07/2021



Flood Zone B^3 in the Hazelhatch Further Study (HFS) (JBA, 2022) and is identified as being at risk of flooding during the 0.1% AEP event.

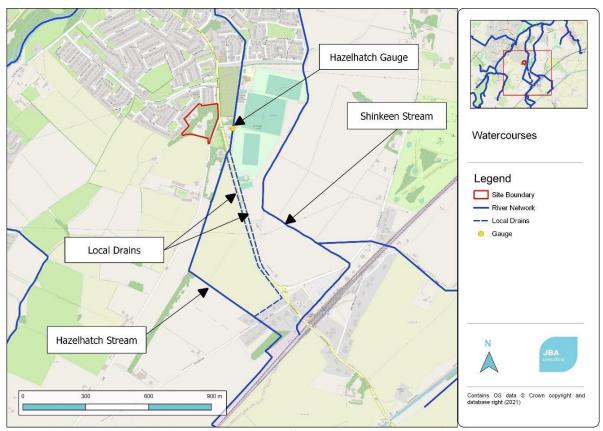


Figure 3. Local watercourses (from FRA report, JBA Consulting)

3.2.1 Construction Phase

The construction elements of the project include;

- Existing buildings will be demolished.
- Existing trees and woodlands will be felled and cleared.
- Roads, carparking and footpaths/cycle paths will be constructed.
- 137 no. residential units and a creche will be constructed.
- The adjoining Hazelhatch road will be widened and the junction between Simmonstown Road and Hazelhatch Road will be reconfigured
- New storm water and foul water systems with attenuation and pumping infrastructure will be
 established. These will connect to the existing municipal network. The proposed foul sewer will be fully
 separated from the proposed storm water drainage.

 $^{^3}$ Moderate probability of flooding, between 1% and 0.1% from rivers and between 0.5% and 0.1% from coastal/ tidal.



3.2.2 Operational Phase

Surface Water Drainage;

Surface water runoff generated from the proposed development will be routed through a series of Sustainable Urban Drainage System (SuDS) elements, including:

- Extensive green roofs
- Permeable surfacing
- Irrigation tree pits
- Swales
- Bioretention Areas
- Infiltration trenches

These elements will promote runoff interception, detention and infiltration at source before runoff reaches the underground attenuation system.

The interception of the first flush runoff (capturing first 5mm or more of every rainfall event) will be provided in a series of SUDS devices upstream of the attenuation storage. Surface water attenuation incorporating interception, attenuation and temporary flood storage volume in the underground storage tank is proposed for this development.

The roofs on all apartment blocks (excluding lift shafts, AOVs, M&E equipment and balconies) are covered with an extensive green roof. The runoff from the roofs of all houses and creche will be directed to the subbase of the permeable paving. The subbase of the permeable surfacing, green roof planting and substrate, irrigation tree pits, bioretention areas and swales are designed to intercept storm water runoff from all hardstanding surfaces on site.

All runoff from the roads and footpaths will be directed to SuDS tree pits, bio-retention areas, swales or permeable paving before it will be allowed into underground storm water drainage network. Surface water from the proposed development site will be discharged to an existing surface water outfall pipe located to the north of the proposed development site.

Foul Sewer;

The proposed foul sewer, fully separated from the proposed storm water drainage, is designed for sewage and wastewater collection from the proposed 137 No. of dwellings and creche.

The proposed foul sewer, which will be fully separated from the proposed storm water drainage, will discharge to the proposed foul pumping station. The effluent from the foul pumping station will then be pumped to a new discharge manhole constructed in Simmonstown Park from where it will discharge by gravity to the existing foul sewer network in Simmonstown Park (This sewer is a part of Irish Water assets), estate approximately 450m to the north of the proposed development site. The existing foul sewer network is linked to Leixlip WWTP.

Potable water;

The proposed water supply will be provided through a new 200ø watermain connection to the existing watermain located in Shinkeen Road approximately 400m to the north of the proposed development site. A bulk water meter will be provided on the new watermain connection. A number of hydrants for firefighting and loop flushing purposes are proposed on-site on the new watermain.



3.3 Characteristics of the Project

The proposal is described below and has been confirmed with the project engineer.

, , ,
The site is 2.1ha consisting of residential dwelling, out-buildings and landscaped gardens and woodlands
There will be no land-take from any Natura 2000 site
Existing buildings will be demolished
Existing trees and woodlands will be felled and cleared
Roads, carparking and footpaths/cycle paths will be constructed
137 no. residential units and a creche will be constructed
The adjoining Hazelhatch Road will be widened and the junction between Simmonstown Road and Hazelhatch Road will be reconfigured
The site will be landscaped to include retention of some existing trees and new planting
New foul and stormwater systems will be constructed which will include on- site attenuation and storage. The stormwater will outflow to the existing surface water outfall pipe located to the north of the proposed development site.
The proposed foul sewer is fully separated from the proposed storm water drainage. The proposed foul sewer will discharge to the proposed foul pumping station. The effluent from foul pumping station will then be pumped to a new discharge manhole constructed in Simmonstown Park from where it will discharge by gravity to the existing foul sewer network in Simmonstown Park estate approximately 450m to the north of the proposed development site.
Typical resources will include plant and machinery; Hydraulic excavators Mobile cranes Dumpers Concrete saw cutting Volvo dump trucks Ready-mix concrete trucks Pump unit for ready-mix concrete Vibrating rollers HGV – 20 foot trailers HGV – 40 foot trailers Telescopic site handlers Road sweeping equipment Welding gear Elevation platforms



	temporary lights, water pumps, concrete vibrators Materials Concrete, sub-structures, Ground Floor, Timber Floors. Steel reinforcement used in concrete. Structural steelwork used for equipment support, roof structure, hand railings. Partitions incorporating studwork and panelled walls. Secondary steel work. Masonry concrete block work. Stone fill	
	Personnel of up to 200 people	
Description of timescale for the various activities that will take place as a result of implementation (including likely start and finish date)	Typically these types of developments will take c. 3.5 years to construct and become operational	
Description of wastes arising and other residues (including quantities) and their disposal	development site will be discharged to an existing surface water outfall pipe	
Identification of wastes arising and other residues (including quantities) that may be of particular concern in the context of the Natura 2000 network	Foul water discharges.	
Description of any additional services required to implement the project or plan, their location and means of construction	A temporary site compound will be situated in the south-eastern section of the site (958 sqm). Operational public lighting.	



3.4 Identification of Other Projects or Plans or Activities

The plans relevant to this proposal are the Kildare County Development Plan (2017-2023) and the Celbridge Local Area Plan (2017-2023).

Celbridge is a predominantly residential area, with commerce, tourism, light industry, and agriculture being the main activities in and around the town. The Celbridge LAP outlines strategic locations for new roads and road improvements, key development areas for new residential and community developments and strategic locations for new water connections across the River Liffey. Such developments will be subject to environmental assessment as stated in the LAP.

As well as one off housing projects, and extensions and alterations to private dwellings granted planning permission in the vicinity of this proposed Glencarrig Celbridge development include three other strategic housing developments;

- SHD 201802 251 residential units,
- SHD 201809 467 residential units,
- SHD 201901 372 residential units.

A number of other non-SHD housing developments have been granted in the area or are in the planning process.

The Celbridge Local Area Plan (2017-2023) lists a number of 'Key Development Areas' (KDA) in Celbridge. Of relevance to this proposed development is 'KDA no. 5 Simmonstown: New Residential Area', which is located adjacent to the proposed development site. The lands measure approximately 35 ha in area and are currently in agricultural use. The vision for the KDA is described as "A residential area including a primary school that consolidates the southern environs of Celbridge, establishes an attractive edge to the town and provides for improved access to the Hazelhatch Road and train station". Any future development in KDA 5 Simmonstown shall be subject to a Masterplan, prepared prior to the commencement of any development.



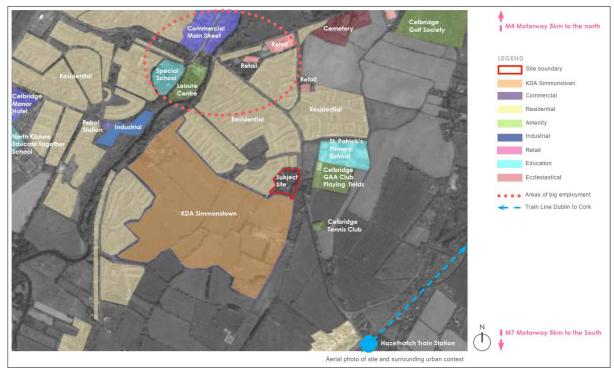


Figure 4. Location of Key Development Area (KDA) No. 5 at Simmonstown

3.5 Identification of Natura 2000 Sites

3.5.1 Zone of Impact Influence

National guidance recommends that a list is compiled of all Natura 2000 sites within what is described as a 'likely zone of impact of [a] plan or project' (DoEHLG, 2009, p.32) which may, or ultimately may not, be impacted by the project. The zone of impact is the area over which ecological features may be subject to significant effects as a result of the proposed development and associated activities (CIEEM, 2018). The zone of impact will vary with different ecological features, depending on their sensitivities to an environmental change. In the case of plans it is recommended that this zone extends out for a distance of 15 km. In line with the precautionary principle, during the preparation of this report, Natura 2000 sites that lie outside 15km that may be significantly impacted as a result of the proposed works were also considered. The locations of these in relation to the subject site are shown on a map in Figure 5. Designated SACs and SPAs within the zone of potential significant impact influence of the proposal site, including their proximity are shown in **Table 1** below.

Table 1. Natura 2000 Sites within zone of influence

Designated	Site Code	Proximity of Site to Nearest Point of	Hydrological/Ecological
Site		Designated Site	Connection? (Yes/No)
Rye Water Valley/Carton SAC	001398	5km N	The Rye Water River joins the Liffey River c.5km downstream of the site, at Leixlip. While water discharges from the site will ultimately discharge to the Liffey River, there is no direct connection between the site and this SAC.



Designated Site	Site Code	Proximity of Site to Nearest Point of Designated Site	Hydrological/Ecological Connection? (Yes/No)
Glenasmole Valley SAC	001209	13km SE	No
Red Bog Kildare SAC	000397	15km S	No
Poulaphouca Reservoir SPA	004063	17km SE	No

3.5.2 Characteristics of Natura 2000 Sites

Table 2 lists the qualifying features of conservation interest for the Natura 2000 sites that lie within the zone of impact of the subject site. Information pertaining to the Natura 2000 sites is from site synopses, conservation objectives and other information available on www.npws.ie.

Table 2. Natura 2000 sites with qualifying features of conservation interest.

Natura 2000 Site	Qualifying features of Special Conservation Interest	
Rye Water Valley/Carton SAC	[1014] Vertigo angustior [1016] Vertigo moulinsiana [7220] * Petrifying springs with tufa formation (Cratoneurion)	
Glenasmole Valley SAC	[6210] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) [6410] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [7220] Petrifying springs with tufa formation (Cratoneurion)	
Red Bog Kildare SAC	[7140] Transition mires and quaking bogs	
Poulaphouca Reservoir SPA	[A043] Greylag Goose (Anser anser) [A183] Lesser Black-backed Gull (Larus fuscus)	

3.5.3 Conservation Objectives

According to the Habitats Directive, the *conservation status of a natural habitat* will be taken as 'favourable' within its biogeographic range when:

- its natural range and areas 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 as defined below.

According to the Habitats Directive, the conservation status of a species means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as 'favourable' within its biogeographic range when:

- 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 is neither being reduced nor is 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.

Generic conservation objectives only were available for the Rye Water Valley/Carton SAC, Glenasmole Valley SAC, and Poulaphouca Reservoir SPA. Site specific conservation objectives were available for Red Bog Kildare SAC.

These have been accessed on the 14/10/2021. No management plan is available for these sites. All conservation objectives together with other designated site information are available on http://www.npws.ie/protectedsites/.

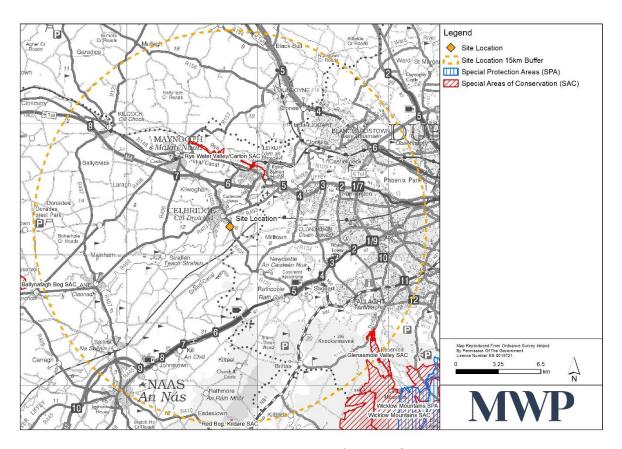


Figure 5. Natura 2000 sites within zone of impact

3.6 Identification of Potential Impacts

Potential likely ecological impacts arising from the project are identified in this section.

Description of elements of the project likely to give rise to potential ecological impacts.	Excavations and earthworks Associated increased noise and activity Construction phase and operation phase emissions of water
Describe any likely direct, indirect or secondary ecological impacts of the project (either alone or in combination	



with other plans or projects) by virtue of:

Size and scale;

Land-take:

Distance from Natura 2000 Site or key features of the Site;

Resource requirements;

Emissions;

Excavation requirements;

Transportation requirements;

Duration of construction, operation etc.;

Other.

Land-take

There will be no land take from any SAC/SPA

Distance from Natura 2000 sites or key features of the site

Site is located c.5km south-east of the closest SAC. The SAC is in a separate sub-catchment to the site.

Resource requirements

Fuel/oil

Water

Lighting

Cement

Personnel

Emissions

Water

Noise

Light

Excavation requirements

The areas of the site which are currently above the required levels shall be excavated using machinery to remove the topsoil, subsoil and underlying bedrock as necessary.

The materials removed from the cut areas shall where possible be used to provide the fill to raise the height of lower areas on site.

Any excess materials which are surplus to the fill requirements will be removed from the proposed development site, to an appropriate licensed facility.

<u>Transportation requirements</u>

Deliveries of materials will be timed to avoid causing traffic congestion and disruption.

Duration of construction and operation

Typically 3.5 years for construction

Operation permanent



3.7 Assessment of Significance of Potential Impacts

This section considers the list of sites identified in Section 3.5, above, together with the potential ecological impacts identified in the previous section and determines whether the project is likely to have significant effects on a European site. When assessing impact, European sites are only considered relevant where a credible or tangible source-pathway-receptor link exists between the proposed development and a protected species or habitat type. In order for an impact to occur there must be a risk initiated by having a 'source' (e.g. excavation), and an impact pathway between the source and the receptor (e.g. a waterbody which connects the proposal site to the protected species or habitats). An evaluation based on these factors to determine which European sites are the plausible ecological receptors for potential impacts of the proposed works will be conducted in Sections 3.7.1 and 3.7.2 below. The evaluation takes cognisance of the scope, scale, nature and size of the project, its location relative to the European sites listed in Table 1 above, and the degree of connectedness that exists between the project and each European site's potential ecological receptors.

3.7.1 European sites outside the zone of potential impact influence

With regards to the proposed development, it is considered that the works do not include any element that has the potential to significantly alter the conservation objectives for which certain Natura 2000 sites are designated. It is considered that the Natura 2000 sites listed in **Table 3** are outside the zone of potential impact influence of the proposal due to the absence of plausible impact pathways and/or the attenuating effect of the distance intervening. Therefore, it is objectively concluded that significant impacts on these sites are not reasonably foreseeable as a result of the programme of works described at Section 3.2. These sites, which are listed below, along with their distance and the rationale for exclusion, will not be considered further in this document.

Table 3. European Sites excluded from further assessment

European Site	Proximity of subject site to nearest point of designated site (km)	Rationale for exclusion from assessment
Glensasmole Valley SAC 001209	13km SE	No hydrological or ecological connection
Red Bog Kildare SAC 000397	15km S	No hydrological or ecological connection
Poulaphouca Reservoir SPA 004063	17km SE	No hydrological or ecological connection

3.7.2 European sites within the zone of potential impact influence

Of the European sites listed in Section 3.5 above, one is considered to have the potential to be impacted as a result of the proposal. Construction projects generally pose potential threats to Natura 2000 sites through habitat alteration, species disturbance/displacement and/or water quality impacts. This Natura 2000 site is linked to the proposed works via proximity. Therefore, the assessment of significance of potential impacts that follows focuses on this European site.

Table 4. European sites within the zone of potential impact influence

European Site	Proximity of subject site to nearest point of designated site (km)	Rationale for inclusion in assessment
Rye Water Valley/Carton SAC	5km NW	Precautionary principal.



The likelihood of significant effects to a European site from the project was determined based on several indicators including:

- Water quality and resource
- Habitat loss
- Habitat alteration
- Habitat or species fragmentation
- Disturbance and/or displacement of species

The likelihood of significant cumulative/in-combination effects is assessed in Section 3.7.7.

3.7.3 Water Quality

The proposed development site is not ecologically linked to the Rye Water Valley/Carton SAC. The Rye Water Valley/Carton SAC is situated within a separate WFD sub-catchment to the proposed development site. The Rye Water River which is a tributary of the Liffey River joins the Liffey River at Leixlip, c.5km downstream of the proposed development site.

Foul discharges originating from the proposed development site will be directed to the Leixlip WWTP through the municipal sewer network. Treated effluent from this WWTP discharges to the Liffey River, c. 1km downstream of its confluence with the Rye Water River. Storm water will be primarily dealt with on-site through a landscape-based approach to attenuation, which will keep discharges at greenfield rates. Surface water from the proposed development site will be discharged to an existing surface water outfall pipe located to the north of the proposed development site and will ultimately discharge to the Liffey River.

There is no possible ecological connection between the proposed storm and foul water discharges from the housing development, and the Qualifying Interest (QI) habitats or species of the SAC.

It is objectively concluded that significant water quality impacts to the Rye Water Valley/Carton SAC can be excluded.

3.7.4 Habitat Loss and Alteration

Owing to the lack of hydrological and ecological connections between the site and the SAC, there will be no significant loss or alteration of the [7220] * Petrifying springs with tufa formation (*Cratoneurion*) habitat within the boundary of the Rye Water Valley/Carton SAC arising from the proposed development.

It is objectively concluded that significant habitat loss and alteration impacts to the Rye Water Valley/Carton SAC can be excluded.

3.7.5 Disturbance and/or Displacement of Species

Owing to the lack of hydrological and ecological connections between the site and the SAC, there will be no significant disturbance and/or displacement of the [1014] *Vertigo angustior* or the [1016] *Vertigo moulinsiana* populations within the boundary of the Rye Water Valley/Carton SAC arising from the proposed development.



It is objectively concluded that significant species disturbance and/or displacement impacts to the Rye Water Valley/Carton SAC can be excluded.

3.7.6 Habitat or Species Fragmentation

Owing to the lack of hydrological and ecological connections between the site and the SAC, there will be no significant habitat or species fragmentation impacts of the [7220] * Petrifying springs with tufa formation (*Cratoneurion*) habitat, the [1014] *Vertigo angustior* or the [1016] *Vertigo moulinsiana* populations within the boundary of the Rye Water Valley/Carton SAC arising from the proposed development.

It is objectively concluded that significant habitat or species fragmentation impacts to the Rye Water Valley/Carton SAC can be excluded.

3.7.7 Cumulative/In-combination Impacts

County and Local Development Plans have been subject to assessment under the Birds and Habitats Directive, and so will have a range of environmental safeguards in place to prevent significant effects to Natura 2000 sites. The conservation objectives for the Rye Water Valley/Carton SAC list a number of threats and pressures that are affecting the SAC which include both low impact and moderate impact activities. These are;

Threat/pressure	Code	Level
Continuous urbanisation	E01.01	Medium
Modifying structures of inland watercourse	J02.05.02	Medium
Sylviculture, forestry	В	Medium
Fertilisation	A08	Low
Removal of hedges, copses, scrub	A10.01	Low
Grazing	A04	Low
Discontinuous urbanisation	E01.02	Low
Roadways, motorways	D01.02	Low

The proposed development at Glencarrig, Celbridge will not interact cumulatively with any of the threats, pressures or activities listed above. The impacts of the project identified in Section 3.6 will not cause significant in-combination impacts to the SAC with the on-going threats and pressures listed above. The development site is not hydrologically or ecologically connected to the SAC.

Other developments in the area will not be connected to or interact with the proposal site. Therefore, significant cumulative or in-combination effects with these developments can be excluded.

It is objectively concluded that significant cumulative/in-combination impacts to the Rye Water Valley/Carton SAC can be excluded.



3.8 Conclusion of Screening Stage

In conclusion, to determine the potential impacts, if any, of the project on nearby Natura 2000 sites, a screening process for Appropriate Assessment was undertaken. It has been concluded beyond reasonable scientific doubt, based on objective information, and considering the conservation objectives of the relevant European sites, that significant impacts from the project, individually or in combination with other plans and projects, on the following Natura 2000 sites can be excluded:

Rye Water Valley/Carton SAC	001398
Glenasmole Valley SAC	001209
Red Bog Kildare SAC	000397
Poulaphouca Reservoir SPA	004063

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Appendix 1

Finding of No Significant Effects Report



FINDING OF NO SIGNIFICANT EFFECTS MATRIX	
Name of project or plan	Glencarrig Celbridge
Name and location of Natura 2000 sites	Rye Water Valley/Carton SAC Leixlip Co. Kildare
Description of the project	The proposed development will consist of: (a) the demolition (total area approx. 800 sqm) of the existing buildings on site and the existing front boundary treatment; and (b) the construction of a new residential and creche scheme of 137 no. units in a mixture of houses and apartment units ranging from 2 to 5 storeys in height
Is the project or plan directly connected with or necessary to the management of the site?	No
Are there other projects or plans that together with the project or plan being assessed could affect the site	No
THE ASSESSMENT OF SIGNIFICANCE OF EFFECTS	
Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site(s).	No significant impact to Natura 2000 sites arising from the proposed works.
List of agencies consulted: provide contact name and telephone or e- mail address.	N/A
Response to consultation.	N/A
DATA COLLECTED TO CARRY OUT THE ASSESSMENT	
Who carried out the assessment?	Muiréad Kelly, Senior Ecologist with Malachy Walsh and Partners
Sources of data	Refer to references.
Level of assessment completed	Desktop and field-based assessment.



Appendix 2

Stages of Appropriate Assessment



Stage 1 - Screening

This is the first stage of the Appropriate Assessment process and that undertaken to determine the likelihood of significant impacts as a result of a proposed project or plan. It determines need for a full Appropriate Assessment.

If it can be concluded that no significant impacts to Natura 2000 Sites are likely then the assessment can stop here. If not, it must proceed to Stage 2 for furthermore detailed assessment.

Stage 2 - Natura Impact Statement (NIS)

The second stage of the Appropriate Assessment process assesses the impact of the proposal (either alone or in combination with other projects or plans) on the integrity of the Natura 2000 Site with respect to the conservation objectives of the site and its ecological structure and function. This is a much more detailed assessment that Stage 1. A Natura Impact Statement containing a professional scientific examination of the proposal is required and includes any mitigation measure to avoid, reduce or offset negative impacts.

If the outcome of Stage 2 is negative i.e. adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned.

Stage 3 - Assessment of alternative solutions

A detailed assessment must be undertaken to determine whether alternative ways of achieving the objective of the project/plan exists.

Where no alternatives exist the project/plan must proceed to Stage 4.

Stage 4 - Assessment where no alternative solutions exist and where adverse impacts remain

The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a Natura 2000 Site where no less damaging solution exists.