

PRICEINED: 2005/2024

Appropriate Assessment Screening Report and Natura Impact Statement

Proposed Large Scale Residential Development at Oakfield Road, Co. Sligo.



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DOCUMENT DETAILS



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Development at Oakfield Road, Co. Sligo.

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and Natura Impact Statement

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1.

INTRODUCTION

Background 1.1

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Screening for Appropriate Assessment is required under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive). Where it cannot be excluded that a project or plan, either alone or in combination with other projects or plans, would have a significant effect on a European Site then same shall be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives. The current project is not directly connected with, or necessary for, the management of any European Site. Consequently, the project has been subject to the Appropriate Assessment Screening process.

This Natura Impact Statement (NIS) has been prepared in accordance with the European Commission's Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2021) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018) as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010) and the Appropriate Assessment Screening for Development Management. Office of the Planning Regulator, Dublin 7, Ireland OPR (2021).

Statement of Authority 1.2

A walkover survey was carried out by Rachel Minogue (BSc., Env) and Fiona Killeen (BSc., Env) on the 24/01/2023, by Rachel Minogue (BSc., Env) and Bronagh Boylan (BSc., Env) on the 17/04/2023, by Rachel Minogue (BSc., Env) and Kate Greaney (BSc., MSc) on the 17/05/2023, by Rachel Minogue (BSc., Env) and Tom Peters (BSc Env., MSc) on the 08/11/2023 and by Rachel Minogue (BSc., Env) and Tom Peters (BSc., MSc) on the 08/11/2023. A dedicated Bat Survey was carried out by Rachel Minogue (BSc., Env) and Kate Greaney (BSc., MSc) on the 17/05/2023. This report has been prepared by Rachel Minogue (BSc., Env). RM is an ecologist with MKO with relevant academic qualifications in Environmental Science. This report has been reviewed by Colin Murphy (B.Sc., Ecology., MSc). Colin is an experienced project ecologist and has over 4 years' professional consultancy experience.

Structure and Format of this NIS. 1.3

- Section 2 provides a full description of all elements of the proposed development.
- In Section 3, the characteristics of the receiving environment are fully described.
- In Section 4, a Stage 1 Screening is undertaken to identify any European Sites upon which there is a potential for a likely significant effect to occur either individually or in combination with other plans and projects as a result of the proposed development.
- Section 5 provides a detailed consideration of the Screened in European Sites and identifies the relevant qualifying features and how they may be affected in light of their conservation objectives.
- Section 6 provides an assessment of the potential for adverse effects on the identified European Sites as a result of the proposed development and in the absence of mitigation. This section also prescribes mitigation to robustly block any identified pathways for impact for effect.



- Section 7 provides an assessment of residual effects taking into consideration the proposed mitigation.
- In Section 8, the potential in combination effects of the proposed development on European Sites, when considered in combination with other plans and projects were assessed.
- A concluding statement is provided in Section 9.

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2. DESCRIPTION OF PROPOSED DEVELOPMENT

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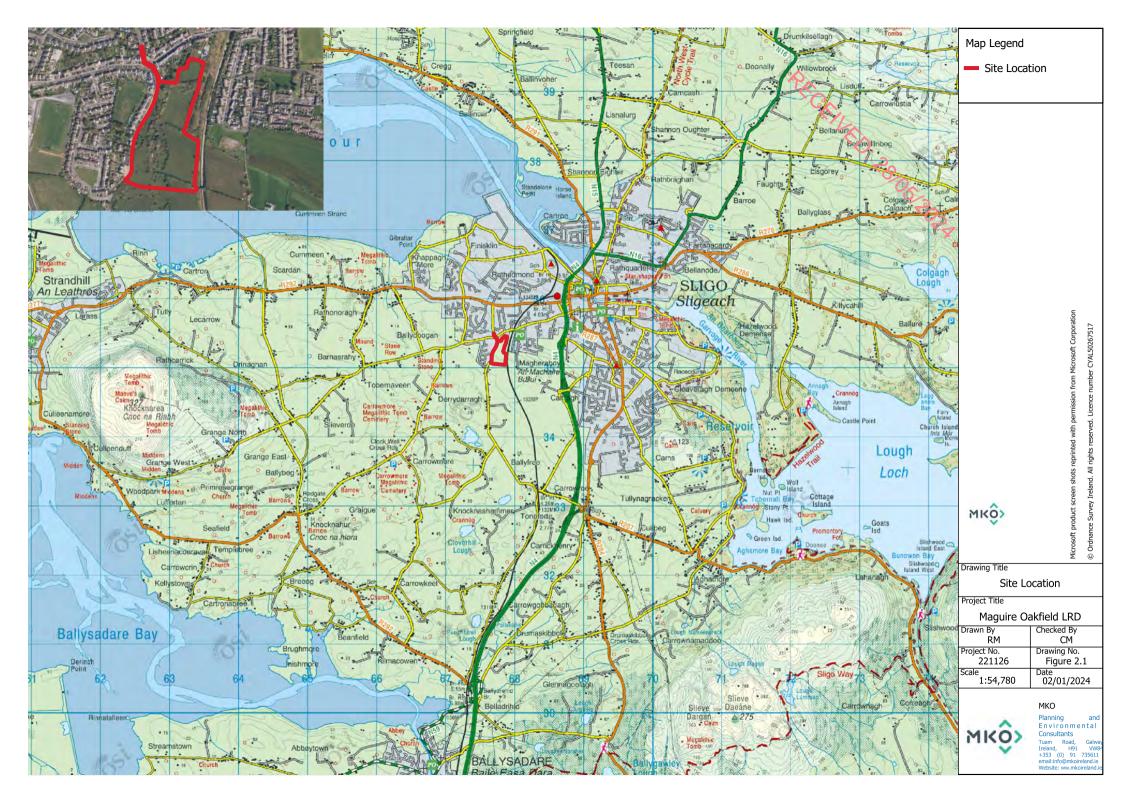
2.1 Site Location

The site of the proposed development is located 1.3km southwest of Sligo Town (Grid Reference: G 67841 35305). The site of the Proposed Development is a greenfield site, comprised of improved agricultural habitats and disturbed ground, covering an area of approx 6.17ha. To the east of the development site is an existing residential estate; Maugheraboy Estate and an existing railway line. To the west of the development site is another existing residential estate, Oakfield Park. To the south of the development site is an agricultural field. The Proposed Development site is located approx 1.3km south of Cummeen Strand/ Drumcliff Bay (Sligo Bay) SAC and Cummeen Strand SPA, and approx 1.4km south/west of Lough Gill SAC.

The site can be accessed to the south via the West Distributor Road R869 and to the west by Oakfield Road L3601, both of which are connected via the Magheraboy Roundabout to the southwest of the site. To the north of the site is Magherboy Road L3507.

The Site Location is shown on Figure 2.1.

The Proposed Site Layout drawing PL-004 is submitted as part of this application.





Characteristics of the Proposed Development

2.2.1

Development Description

Novot Holdings Ltd., intend to apply for permission for development on a site which extends to the Califbo on lands located on the Oakfield Road, Sligo, Co. Sligo.

- 1. Construction of 207 no. residential units comprising:
 - 21 no. 1-bedroom apartments,
 - 37 no. 2 bedroom apartments,
 - 4 no. 2 bedroom terrace houses,
 - 99 no. 3 bedroom terrace houses,
 - 4 no. 3 bedroom semi-detached houses.
 - 42 no. 4 bedroom semi-detached houses.
- 2. Provision of a creche facility including a secure external play area.
- Provision of all associated surface water and foul drainage services and connections with all associated site works and ancillary services.
- 4. Pedestrian, cycle, and vehicular access/egress, and internal pedestrian and cycle access/egress along Oakfield Road.
- Provision of public open space, communal open space, private open space, site landscaping, public lighting, refuse storage, car parking, bicycle parking, boundary treatments, and all associated site development works.

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2.2.2 Foul Water Drainage Design

It is proposed to direct the foul sewer from the development to the north-eastern boundary of the site to the existing foul sewer network traversing the site. The proposed foul sewer will discharge under gravity to the existing foul network. As part of the design process, it is proposed to divert sections of the existing foul network to cater for the proposed development.

The drainage systems including all pipe sizes and gradients have been designed using Flow Drainage Design Software. The pipework to the drainage system has been designed to provide for six times the dry weather flow (DWF) in accordance with the recommendations of the Greater Dublin Strategic Drainage Study (GDSDS). It is proposed that all foul water pipes will be in accordance with Section 3.13 of the Irish Water Code of Practise. The maximum pipe diameter is to be 600mm which is used to connect to the existing 600mm foul water pipe as part of the foul water pipe diversion. All other pipe diameters will be of diameters 150mm or 225mm. All pipes will be laid with a maximum and minimum gradient such that all velocities fall within the limits of 0.75 and 2.5m/sec as set out in the Uisce Éireann Code of Practice for Wastewater Infrastructure.

The foul drainage for the entire development will be collected throughout the site in the foul pipe network and will then discharge by gravity to the north-eastern boundary of the site, to connect to the existing foul sewer network by traversing the site.

Refer to Drawing No. 6943-JOD-XX-ZZ-DR-C-703-001 available in the Civils Design Report submitted as part of this application for details on the proposed Foul Drainage Network.

For full details on the proposed Foul Water Drainage Design for the Proposed Development refer to the Civils Design Report submitted as part of this application.

2.2.2.1 Occupancy Figures & Wastewater Flow Rates

The wastewater flow rate for the proposed development is calculated as follows in accordance with the recommendations obtained from Appendix C of the Uisce Éireann Code of Practice for Wastewater Infrastructure. Therefore, a wastewater flow rate of 150 litres/person/day was assumed.

The total hydraulic load for the proposed development is 155,250 Litres per day and the proposed PE is 1035. The proposed development will create an additional average daily amount of 2.246 litres / second on the existing public foul system. The proposed foul network was sized to accommodate 6 times the dry weather flow, 11.230 litres / second.

A confirmation of feasibility from Uisce Eireann has been received for 177 dwelling units and has been deemed feasible subject to upgrades. The upgrades include the resealing of problem joints and manholes on the existing foul sewer pipe that traverses the proposed development and the provision of a path for the existing water course. The water course is proposed to be conveyed via culvert. A new pre connection application has been submitted to Uisce Éireann for the revised dwelling unit count of 207. The increase in units should not alter the validity of the pre connection application as the foul water system for the 207 dwelling units have been designed to Uisce Éireann Codes of Practice for Wastewater Infrastructure, in particular complying with the minimum pipe diameters and gradients stated in Section 3.6 of the Uisce Éireann Codes of Practice for Wastewater Infrastructure.

A confirmation of feasibility from Uisce Éireann is submitted as part of this application.

2.2.3 **Storm Water Drainage Design**

It is proposed to discharge the storm water generated on the southern section of the development through a petrol interceptor to an appropriately sized attenuation tank, then to discharge to the proposed culvert system at manhole S02. It is proposed to discharge the storm water generated on the



northern section of the development through a petrol interceptor to an appropriately sized attenuation tank, then to discharge to the proposed culvert system at manhole S01.1. Both attenuation tanks are to be located within the public amenity areas. The storm water generated from the development will discharge under gravity.

The storm water drainage system has been designed to cater for the proposed dwelling unit areas of hardstanding (including roofs, footways, roadways, and car parking). The proposed storm network will consist of two storm water system: a north and south system. The north storm water system will discharge surface water run-off via gravity into an appropriately sized attenuation system located in the public northern amenity area. It will then discharge from the attenuation system to the proposed culvert at manhole S01.1 at half of the greenfield run off rate for the proposed site area. The south storm water system will discharge surface water run-off via gravity into an appropriately sized attenuation system located in the public southern amenity area. It will then discharge from the attenuation system to the proposed culvert at manhole S02 at half of the greenfield run off rate for the proposed site area. It is proposed that all storm water generated by the site will discharge by gravity, passing through a Class 1 Klargester Bypass Separator or equal and similar approved before entering the attenuation system, as shown on Drawing No. 6943-JOD-XX-ZZ-DR-C-703-001 available in the Civils Design Report submitted as part of this application.

It is proposed to construct a culvert running from east to northwest through the proposed site. This culvert will be sized to cater for the catchment areas to the south, east and southeast of the proposed site, for a total area of 49.13 Ha in addition to the area of the proposed site. The storm water from the proposed development will also discharge to the culvert. This culvert will leave the proposed development from the northwest, then be continued north towards the existing manhole in Larkhill Road.

For full details on the proposed Storm Water Drainage Design for the proposed development refer to the Civils Design Report submitted as part of this application.

2.2.3.1 Storm Water Drainage Design

The storm drainage for the entire development has been designed in accordance with the Greater Dublin Strategic Drainage Study (GDSDS). The storm water drainage design has been designed to cater for surface water from hard surfaces in the proposed development including roadways, footpaths, and the proposed buildings.

The following parameters form the basis of the design:

- The surface water run-off is calculated using the Modified Rational Method (Wallingford Procedure)- Q=2.78 x Cv x Cr x I x A- Where:
 - Q= rate of run-off, I/s
 - Cv= Volumetric Run-off Coefficient
 - Cr= Routing Coefficient
 - I= Intensity of Rainfall, mm/hr
 - A= impermeable Area, hectares
- A design return period of 100 years has been adopted for the sewer network in accordance with good design practice.
- The rainfall intensity is based on rainfall data for Oakfield.
- Minimum self-cleansing velocity of 0.75 m/s.
- Q-bar discharge rate shall be equal to the existing run-off rate.
- The principles of SuDS to be adopted for the surface water drainage.

The following permeability factors were adopted in accordance with good design practice:



- Macadam Roadways= 0.45
- Roof areas= 0.85
- Concrete areas= 0.85

Site Drainage 2.2.3.2

PRICHNED. 2010 Storm water run-off from the hardstanding, parking bays and footpaths will be collected by precast concrete gullies including lockable cast iron grating and frames connected to a piped system. Surface water run-off from roof areas will be collected via downpipe connections to the main network.

Gullies are positioned in accordance with the 'Recommendations for Site Development Works'. Gullies are provided at a minimum rate of one gully per 200m².

The total storm water run-off calculated is based on the impermeable area of the site:

- Total impermeable area = 24,280m².
- Total run-off for the site = 7.73 I/s (1 year design storm).

Attenuation Design 2.2.4

It is proposed to install the northern attenuation tank after storm manhole S01.3, and the southern attenuation tank after storm manhole S02.2 as shown in Drawing No. 6943-JOD-XX-ZZ-DR-C-703-001 available in the Civils Design Report submitted as part of this application. The proposed northern attenuation tank is proposed to have a storage volume of 707m3. The proposed southern attenuation tank is proposed to have a storage volume of 620m3. The attenuation tank is proposed to be constructed using a GRAF EcoBloc maxx system.

Hydro-Brake flow control devices are proposed to be installed at the outlets of north and south attenuation tank, at storm manholes S01.2 and S02.1 respectively. The flow control at manhole S01.2 is proposed to have a design depth of 0.50m and a design flow of 3.7 l/s. The flow control at manhole S02.1 is proposed to have a design depth of 0.50m and a design flow of 3.9 l/s

For the northern attenuation systems, a class 1 bypass petrol interceptor capable of serving a drainage area greater than 12,510m2 is required to be installed upstream of the attenuation system as per Drawing No. 6943-JOD-XX-ZZ-DR-C-703-001 available in the Civils Design Report submitted as part of this application. A Klargester Bypass Separator NSBE025 or equal and similar approved is proposed.

For the southern attenuation systems, a class 1 bypass petrol interceptor capable of serving a drainage area greater than 11,770m2 is required to be installed upstream of the attenuation system as per Drawing No. 6943-JOD-XX-ZZ-DR-C-703-001 available in the Civils Design Report submitted as part of this application. A Klargester Bypass Separator NSBE025 or equal and similar approved is proposed.

For full details on the proposed Attenuation Design for the proposed development refer to the Civils Design Report submitted as part of this application.

Sustainable Urban Drainage System (SuDS) Principles 2.2.5

The key SuDS principles that influence the planning and design process, enabling SuDS to mimic natural drainage are:

- Storing runoff and releasing it slowly.
- Harvesting and using the rain close to where it falls.
- Allowing water to soak into the ground (infiltration).
- Slowly transporting (conveying) water on the surface.



- Filtering out pollutants.
- Allowing sediments to settle out by controlling the flow of the water.

The proposed drainage scheme takes into account a number of the above listed principles through the following measures:

- Proposing localised soakaways to the rear of dwellings of the proposed development to allow the contact into the ground.
- Providing public open space green areas allowing rainfall to naturally percolate into the ground.
- Strategic placing of gullies to keep road surface gradients as gentle as possible to cater for the slow transporting of water on the surface.
- Proposing class 1 petrol/oil interceptors to remove pollutants from the system.

For full details on the proposed SuDS Design for the proposed development refer to the Civils Design Report submitted as part of this application.

Culvert Design 2.2.6

It is proposed to construct a culvert running from east to northwest through the proposed site to allow for the natural surface water flows of the existing greenfield areas to be maintained through the proposed development. This proposed culvert will be sized to cater for the catchment areas to the south, east and southeast of the proposed site, for a total area of 49.13 Ha. The storm water from the proposed development will also discharge to the proposed culvert. This proposed culvert will leave the proposed development from the northwest, then be continued north towards the existing manhole in Larkhill Road.

The proposed culvert has been sized to accommodate the combined greenfield runoff rate of the 100year rainfall event of all the above areas. All manholes for the proposed culvert will include silt traps to allow for the removal of silt and debris from the system.

For full details on the proposed Culvert Design for the proposed development refer to the Civils Design Report submitted as part of this application.

Watermain Design 2.2.7

The water main has been designed in accordance with the Uisce Éireann Code of Practice for Water Infrastructure. A 180mm OD PE100 connection is proposed to be made to the existing watermain located in Oakfield Road to the western boundary of the proposed site. 110mm OD PE100 connections are proposed to be made from the proposed 180mm OD watermain to serve each area of the proposed development. A 25mm PE connection will be made to each dwelling/unit.

Hydrants will be positioned within the site such that:

- The distance from each building is not less than 6m or more than 46m,
- The distance from a hydrant to a vehicle access road or hard-standing area for fire appliances is not more than 30m,
- They are distributed around the perimeter of the buildings, having regard for the provision of access for fire appliances (As per Building Regulations 2006 Technical Guidance Document B).

The hydrants will be capable of delivering a minimum of 8 litres per day second through any single hydrant as per Water UK- National Guidance Document on the Provisions of Water for Fire Fighting.



In accordance with Uisce Éireann standards a bulk water meter, logging device (Larson Type) and sluice valves are proposed to be installed at the connection point into the proposed site. All water mains are to be commissioned and pressure tested to Uisce Éireann Standards. The typical connection details and meter details are shown in the Uisce Éireann Water Infrastructure Standard Details.

A confirmation of feasibility from Uisce Éireann has been received for 177 dwelling units and has been deemed feasible without infrastructure upgrades by Uisec Éireann, as shown in Appendix E. A revised pre connection application has been submitted to Uisce Éireann for the revised dwelling unit count of 207. The increase in units should not alter the validity of the pre connection application as the range of dwelling units for the use of a 180mm OD PE pipe is 100 to 300 units, as per Section 3.7.1 of the Uisce Éireann Code of Practice for Water Infrastructure.

Refer to Drawing No. 6943-JOD-XX-ZZ-DR-C-703-006 available in the Civils Design Report submitted as part of this application for details on the proposed watermain site layout plan.

For full details on the proposed Watermain Design for the proposed development refer to the Civils Design Report submitted as part of this application.

A confirmation of feasibility from Uisce Éireann is submitted as part of this application.



2.3 Construction and Environmental Management Plan (CEMP)

The Construction and Environmental Management Plan (CEMP) has been prepared to support this planning application and is summarised in the subsequent sections 2.3.1- 2.3.5.

2.3.1 Construction Management

The appointed contractors for the construction of the proposed development will be required to comply with this CEMP and any revisions made to this document throughout the construction phase.

The proposed anticipated construction methodology is summarised under the following main headings:

- Site Establishment
- Perimeter Hoarding
- Site Excavation
- Proposed Site Roads
- Services and Utilities
- Residential Unit Construction
- Landscaping Works

2.3.1.1 Site Excavation

Soil Stripping and temporary stockpiling of soils and subsoils will be required around the site as the proposed development progresses. While these works occur, the following will apply:

- The area where excavations are planned will be surveyed and all existing services will be identified
- All relevant bodies i.e., ESB, Gas Networks Ireland, Eir, Sligo County Council etc. will be contacted and all drawings for all existing services sought.
- All plant operators and general operatives will be inducted and informed as to the location of any services.
- All plant operators and general operatives will be inducted and informed as to the identification of invasive species.
- A tracked 360-degree excavator will be used to strip the topsoil, and a dumper will be used to move the excavated materials to the temporary stockpile location.
- All excavated material will be reused for future landscaping works or for backfill of excavations.
- All stockpiles will be damped down or covered in a sheet of polythene, as required, which
 will prevent the creation of nuisance dust, and will also prevent sediment runoff in times of
 heavy precipitation.
- Silt filtration in the form of silt fencing or silt bags will be used as appropriate to prevent contamination of any watercourses in the vicinity of the site.
- Trenches will be backfilled as soon as possible after excavation. When practically possible, excavation depths and volumes will be kept to a minimum.

2.3.1.2 Services and Utilities

Any underground services encountered during the works will be surveyed for level and where possible will be left in place. If there is a requirement to move the service, then the appropriate body (ESB, Gas Networks Ireland, etc.) will be contacted, and the appropriate procedure put in place. Back fill around



any utility services will be with dead sand/pea shingle where appropriate. All works will be in compliance with required specifications.

It is proposed to direct the foul sewer from the development to the north-eastern boundary of the site, to the existing foul sewer network traversing the site. The proposed foul sewer will discharge under gravity to the existing foul network. As part of the design process, it is proposed to divert a section of the existing foul network to cater for the development.

It is proposed to discharge the storm water generated from the development into two separate soakaway systems located in the public amenity areas to the north and south of the development. The storm water generated from the development will discharge under gravity, passing through a petrol interceptor before entering an appropriately sized soakaway, located within the public amenity areas to the north and south of the development.

The installation of services and connections to the residential units will be carried out as follows:

- The area where excavations are planned will be surveyed and all existing services will be identified.
- All relevant bodies i.e., ESB, Gas Networks Ireland, Eir, Sligo County Council etc. will be contacted and all drawings for all existing services sought.
- A traffic management plan will be produced if required for connection works to the existing service network.
- A road opening licence will be obtained where required for connection to existing services.
- All plant operators and general operatives will be inducted and informed as to the location of any services.
- A tracked 360-degree excavator or similar will be used to excavate the trench to the required dimensions.
- All excavated material will be removed to an authorised waste recovery facility or, if suitable, stockpiled and reused for backfilling and landscaping where appropriate.
- Once the trench has been excavated the ducting/pipework will then be placed in the trench as per specification.
- Once the service ducts/pipework has been installed couplers will be fitted as required and capped to prevent any dirt etc. entering the ducts/pipes.
- The as built location of the ducting/pipework will be surveyed using a total station/GPS.
- Backfill material will be carefully placed so as not to displace the ducting/pipework within the trench.
- The appropriate warning/marker tape will be installed above the ducts/pipes at the appropriate depths.
- The surface will be reinstated as per original specification or to the requirements of the site layout/Local Authority as appropriate.

2.3.2 **Environmental Management**

2.3.2.1 **Protecting Water Quality**

The site of the proposed development does not contain any EPA mapped watercourses and no watercourses with perceptible flow were noted within the site. There is evidence of historical land drains within the site but as noted above, no perceptible water flow was observed during ecological survey walkovers. The nearest mapped watercourse is the River Knappagh (Sligo) (EPA Code: 35K42) located 154m to the northwest of the proposed development site, which flows in a north-westerly direction before discharging into the Garavogue Estuary. The Garavogue Estuary is located 1.4km north of the proposed development site. An unnamed/unmarked culverted stream is present to the east



of the site, flowing in a northerly direction along the existing rail track, outside of the proposed development boundary.

Prior to the commencement of any subsequent construction activities, the necessary mitigation measures will be put in place to ensure that no silt laden water runoff generated at the site will flow to nearby watercourses thus ensuring the protection of surface water during the works. This will involve confirming the location of all existing services and delineating between drainage systems. Surface waters will be managed to ensure the prevention of run off from areas where excavation occur does not result in silt laden water entering the existing storm water network. Stockpiled material will be covered with polyethylene sheet and if deemed necessary will be surrounded by silt fencing where there is a risk of run-off during prolonged periods of rainfall.

Waters will not be discharged directly to any existing surface water sewers or drains. Particular emphasis will also be placed on hazardous materials entering the surface water management system as well as spill or leaks of fuel oils. Section 4 provides an Emergency Response Plan for dealing with spillages which may result in adverse environmental effects.

Excavation works have the potential to encounter sub-surface waters and ground water. In the event of encountering groundwaters during excavation, waters will be pumped from the excavation and discharged through a pipe with a silt bag attached on to an area of overland vegetation within the site boundary. A series of silt fences will also be utilised around the area where the water will be discharged, if necessary.

Surface and storm water generated during the operational phase will be captured by the proposed drainage network within the confines of the site boundary.

2.3.2.2 Prevention Pollution Control Measures

The proposed development site does not contain any EPA mapped watercourses and no watercourses with perceptible flow were identified within the site. There is evidence of historical land drains within the site but as noted above, no perceptible water flow was observed during ecological survey walkovers. The following measures will be put in place to prevent the transportation of silt laden water or pollutants from entering any of the wider environments including watercourses/drains within or near the site:

- Any requirement for temporary fills or stockpiles will be damped down or covered with
 polyethylene sheeting as required to avoid sediment release associated with heavy rainfall.
- Excavations will be carried out using a suitably sized excavator and, in all circumstances, excavation depths and volumes will be minimised.
- Excavated spoil will be stockpiled and contained entirely within the confines of the site boundaries. Depending on the nature of the excavated material, the stockpiles of excavated materials will be sealed with a digger bucket to reduce the potential for sediment runoff. These areas will be surrounded with silt fencing, if deemed necessary to prevent runoff.
- Works shall not take place at periods of high rainfall and shall be scaled back if heavy rain
 is forecast.
- Any excess construction material shall be removed from the area and sent to an authorized waste recovery facility.
- Spill kits shall be available in each item of plant required.
- In the event of encountering groundwaters during excavation, groundwater will be pumped out of the excavation using a pump equipped with a silt bag on the discharge pipe, if necessary, to capture any silty material prior to subsequent natural percolation to ground. The area surrounding the silt bag will be surrounded by silt fencing if deemed necessary.
- All diesel or petrol pumps required onsite will be operated within bunded units.
- As construction advances there may be a small requirement to collect and treat surface
 water within the site. This will be completed using perimeter swales at low points around
 the construction areas, and if required water will be pumped from the swales into silt bags



- prior to overland discharge allowing water to percolate naturally to ground. Overland discharge, if required, will be located within the confines of the site boundary.
- The minimum number of soil/subsoils and bedrock material should be removed from site. Soil may be reused for landscaping elsewhere on the site.

2.3.2.3 Cement Based Products Control Measures

The complete washing out of concrete trucks will not be permitted at the site. Suppliers will be directed back to their own facility to complete the washout process. However, a washout area for chute cleaning will be provided at various locations in close proximity to the concrete pour locations.

The following mitigation measures are proposed to avoid release of cement leachate from the site:

- No batching of wet-cement products will occur on site.
- Ready-mixed supply of wet concrete products and where possible, emplacement of precast elements, will take place. Where possible pre-cast elements for culverts and concrete works will be used.
- No washing out of any plant used in concrete transport or concreting operations will be allowed on-site.
- Where concrete is delivered on site, only chute cleaning will be permitted, using the smallest volume of water possible. No discharge of cement contaminated waters to the construction phase drainage system or directly to any artificial drain or watercourse will be allowed.
- Use weather forecasting to plan dry days for pouring concrete.
- Ensure pour site is free of standing water and plastic covers will be ready in case of sudden rainfall event.

2.3.2.4 Refuelling, Fuel and Hazardous Materials Storage

The following measures are proposed to avoid release of hydrocarbons at the site:

- Storage/refuelling will be located in and carried out in a designated area of the construction site, located a suitable distance from excavation works. This area should be underlain by concrete hard standing, and tanks should be inspected for leaks regularly. Spill kits should be supplied at these stations and staff should be trained in their use and in spill control. Drainage from these areas shall be diverted for collection and not discharged into waterbodies without treatment and other best management practices.
- Fuels, lubricants, and hydraulic fluids for equipment used on the site will be carefully
 handled to avoid spillage, properly secured against unauthorised access or vandalism, and
 provided with spill containment.
- Minimal refuelling or maintenance of construction vehicles or plant will take place on site.
 Off-site refuelling will occur at a controlled fuelling station.
- On-site refuelling will take place by direct refuelling from the delivery truck or from fuel stored within a bunded fuel tank. Mobile measures such as drip trays and fuel absorbent mats will be used during all refuelling operations.
- Vehicles will never be left unattended during refuelling. Only dedicated trained and competent personnel will carry out refuelling operations and plant refuelling procedures shall be detailed in the contractor's method statements.
- The small volume of fuels, lubricants and hydraulic fluids that will be stored at the site will be placed within an appropriately bunded storage area within the boundaries of the proposed development sites.



- Storage bunds/trays, if required will be constructed of an impermeable membrane (HDPC Plastic) and will have the adequate capacity to contain the volume of the liquids contained therein, if a leak/spillage does occur from one of the storage vessels.
- The storage area will contain a small bund lined with an impermeable membrane in order to prevent any contamination of the surrounding soils and vegetation.
- All site plant will be inspected at the beginning of each day prior to use. Defective plant shall not be used until the defect is satisfactorily fixed. All major repair and maintenance operations will take place off site.
- Potential impacts caused by spillages etc. during the construction phase will be reduced by keeping spill kits and other appropriate equipment on-site.
- Spill kits will be used to deal with any accidental spillage in and outside the refuelling area.
 Spill control measures as outlined fully in the CEMP accompanying this application will be adhered to.
- Harmful materials shall be stores on site for use in connection with the construction works
 only. These materials shall be stored in a controlled manner.

2.3.2.5 **Spill Control Measures**

It is not proposed to store any large volumes of oils/fuels for the purpose of refuelling on the site as refuelling of large plant equipment will be carried out directly from the fuel supplier's delivery truck at a designated refuelling location on site. Where fuel is required to be stored for smaller plant and equipment, it will be in a bunded fuel tank will be stored within the confines of the site boundary. It will be positioned on an impermeable surface and will be equipped with a spill kit. This bunded fuel tank will be used for smaller plant and equipment i.e., site dumpers and teleporters. Onsite plant (excavator) will be refuelled by an external contractor who will call to site as required. Road vehicles will not be refuelled at the site.

In the event of minor spills and leaks from road vehicles and the onsite excavator, the following steps provide the procedure to be followed in the event of any significant spill or leak.

- Stop the source of the spill and raise the alarm to alert people working in the vicinity of any potential dangers.
- If applicable, eliminate any sources of ignition in the immediate vicinity of the incident.
- Contain the spill using the spill control materials, track mats or other material as required. Do not spread or flush away the spill.
- If possible, cover or bund off any vulnerable areas where appropriate such as drains or watercourses.
- If possible, clean up as much as possible using the spill control materials.
- Contain any used spill control material and dispose of used materials appropriately using a fully licensed waste contractor with the appropriate permits so that further contamination is limited.
- Notify the Environmental Manager immediately giving information on the location, type, and extent of the spill so that they can take appropriate action and further investigate the incident to ensure it has been contained adequately.
- External consultants will inspect the site and ensure the necessary measures are in place to contain and clean up the spill and prevent further spillage from occurring.
- The Environmental Manager will notify the appropriate regulatory body such as Sligo County Council if deemed necessary.

2.3.2.6 **Dust Control**

Construction dust can be generated from many on-site activities such as excavation and backfilling. The extent of dust generation will depend on the type of activity undertaken, the location, the nature of the dust, i.e., soil, sand, etc and the weather. In addition, dust dispersion is influenced by external factors



such as wind speed and direction and/or, periods of dry weather. Construction traffic movements also have the potential to generate dust as they travel along the approach road. The measures below will NED. 28/05/2024 also prevent construction debris arising on the public road network.

Proposed means to control dust include:

- Any site roads with the potential to give rise to dust will be regularly watered, as appropriate, during dry and/or windy conditions.
- The designated public roads outside the site and along the main transport routes to the site will be regularly inspected by Site Management for cleanliness and cleaned as necessary.
- Material handling systems and material storage areas will be designed and laid out to minimise exposure to wind.
- Water misting or bowsers will operate on-site as required to mitigate dust in dry weather conditions.
- The transport of soils or other material, which has significant potential to generate dust, will be undertaken in tarpaulin-covered vehicles where necessary.
- All construction related traffic will have speed restrictions on un-surfaced roads to 15 kph.
- Daily inspection of construction sites to examine dust measures and their effectiveness.
- When necessary, sections of the approach road will be swept using a truck mounted vacuum sweeper.

Noise & Vibration Control 2.3.2.7

The operation of plant and machinery, including construction vehicles, is a source of potential noise impacts. Noise levels shall be kept below those levels specified in the National Roads Authority – "Guidelines for the Treatment of Noise and Vibration in National Roads Schemes" or such further limits as imposed by Sligo County Council. The proposed development shall comply with BS 5228 "Noise Control on Construction and open sites Part 1: Code of practice for basic information and procedures for noise control." During the works, any plant introduced to the site will not be excessively noisy. Exhaust and silencer systems on plant will be maintained in a satisfactory condition and operating correctly at all times. Defective silencers will be immediately replaced.

Proposed measures to control noise include:

- Construction equipment for use outdoors shall comply with the European Communities Regulations - Noise Emission by Equipment for Use Outdoors - SI 241 - 2006.
- Diesel generators will be enclosed in sound proofed containers to minimise the potential for noise impacts.
- Plant and machinery with low inherent potential for generation of noise and/or vibration will be selected. All construction plant and equipment to be used on-site will be modern equipment and will comply with the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations;
- Plant with the potential of generating noise or vibration will be placed as far away from sensitive properties as permitted by site constraints.
- If work activities have the potential to result in vibration, the appointed contractor shall source vibration monitoring equipment immediately from a specialist company who specialise in monitoring equipment.
- Regular maintenance of plant will be carried out in order to minimise noise emissions. Particular attention will be paid to the lubrication of bearings and the integrity of silencers;
- All vehicles and mechanical plant will be fitted with effective exhaust silencers and maintained in good working order for the duration of the works;



- Compressors will be of the "sound reduced" models fitted with properly lined and sealed
 acoustic covers which will be kept closed whenever the machines are in use and all
 ancillary pneumatic tools shall be fitted with suitable silencers;
- Machines which are used intermittently will be shut down during those periods when they
 are not in use;
- Training will be provided by the Site Management to drivers to ensure smooth machinery operation/driving, and to minimise unnecessary noise generation.

It is recommended that drivers of heavy goods vehicles (HGVs) associated with the development extend due care and courtesy to other road users. Excessive use of and unnecessary engine revving will be avoided.

The proposed construction working hours will be 08:00 - 18:00 Monday to Saturday. Construction will not take place at the site on Sundays or Public Holidays.

Deviation from these times will only be allowed in exceptional circumstances where written approval has been received from the planning authority and when other relevant third parties i.e., nearby homeowners have been notified and have agreed to works taking place during such time periods.

2.3.3 Invasive Species Management

Should invasive species listed under Regulations 49 and 50 of the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011) be encountered on site, within the proposed development boundary during the construction phase, an invasive species management plan will be prepared. The treatment and control of invasive alien species will follow guidelines issued by the National Roads Authority – The Management of Noxious Weeds and Nonnative Invasive Plant Species on National Roads (NRA 2010) and the Environment Agency (2013) – The Knotweed Code of Practice: Managing Japanese Knotweed on Development Sites (Version 3, amended in 2013).

2.3.4 Construction Waste Management Plan

An Outline of a Construction Waste Management Plan prepared by Jennings O'Donovan, details the demolition, waste management, mitigation measures and security for the proposed development, and is included as part of this planning application.

2.3.5 **Environmental Manager**

The main contractor appointed to carry out the works on site will be required to provide a level of supervision on site in the form of an Environmental Manager who will also fulfil the role of Waste Manager. Due to the scale of activity proposed for the site, this role can be adopted by a Site Manager/Foreman as part of their duties. In general, this Environmental Manager will maintain responsibility for monitoring the works and Contractors/Sub-contractors from an environmental perspective. The Environmental Manager will act as the regulatory interface on environmental matters by reporting directly to the client and liaising with Sligo County Council and other statutory bodies as required. The Site Environmental Manager will report to the Site Supervisor/Construction Manager. The duties of the appointed Environmental Manager are summarised as follows:

- Maintain and update as required the Construction Phase CEMP and supporting environmental documentation and review/approval of contractor method statements.
- Undertake inspections and reviews to ensure the works are carried out in compliance with the CEMP.



- Monitor the implementation of the CEMP, particularly all proposed/required Environmental Monitoring
- Generate environmental reports as required to show environmental data rends and incidents and ensure environmental records are maintained throughout the construction
- Advise site management/contractor/sub-contractors on:
- ite management/contractor/sub-contractors on:

 Prevention of environmental pollution and improvement to existing working to the contractors on:
 - Changes in legislation and legal requirements affecting the environment.
 - Suitability and use of plant, equipment, and materials to prevent pollution.
 - Environmentally sound methods of working and systems to identify environmental hazards.
- Ensure proper mitigation measures are initiated and adhered to during the construction phase.
- Liaise with Project Team and present the findings of site audits/inspections that are completed.
- Ensure adequate arrangements are in place for site personnel to identify potential environmental incidents.
- Ensure that details of environmental incidents are communicated in a timely manner to the relevant regulatory authorities, initially by phone and followed up as soon as is practicable by email.
- Support the investigation of incidents of significant, potential, or actual environmental damage, and ensure corrective actions are carried out, recommend means to prevent recurrence and communicate incident findings to relevant parties.
- Identify environmental training requirements and arrange relevant training for all levels of site-based staff/workers.
- Fulfil the role of Waste Manager and implement the objectives of the Waste Management Plan.

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Ecological Survey Methodologies 3.1

Ecological Multidisciplinary Walkover Surveys 3.1.1

Multidisciplinary Ecological Walkover Surveys were conducted by Rachel Minogue (BSc., Env) and Fiona Killeen (BSc., Env) on the 24/01/2023, by Rachel Minogue (BSc., Env) and Bronagh Boylan (BSc., Env) on the 17/04/2023, by Rachel Minogue (BSc., Env) and Kate Greaney (BSc., MSc) on the 17/05/2023 and by Rachel Minogue (BSc., Env and Tom Peters (BSc., MSc) on the 08/11/2023. The multi-disciplinary ecological walkover surveys were undertaken in accordance with NRA Guidelines on Ecological Surveying Techniques for Protected Flora and Fauna on National Road Schemes (NRA, 2009). The surveys provided baseline data on the ecology of the study area and assessed whether furthermore detailed habitat or species-specific ecological surveys were required. The multi-disciplinary ecological walkover surveys comprehensively covered the entire study area.

Habitats were identified in accordance with the Heritage Council's 'Guide to Habitats in Ireland' (Fossitt, 2000). Habitat mapping was undertaken with regard to guidance set out in 'Best Practice Guidance for Habitat Survey and Mapping' (Smith et al., 2011).

Plant nomenclature for vascular plants follows 'New Flora of the British Isles' (Stace, 2010), while mosses and liverworts nomenclature follow 'Mosses and Liverworts of Britain and Ireland - a field guide' (British Bryological Society, 2010).

The walkover surveys were designed to detect the presence, or suitable habitat for a range of protected faunal species that may occur in the vicinity of the proposed development.

During the multidisciplinary surveys, a search for Invasive Alien Species (IAS), with a focus on those listed under the Third Schedule of the European Communities Regulations 2011 (S.I. 477 of 2011), was also conducted.



Results of Baseline Ecological Surveys

3.2.1

Dedicated habitat surveys of the area within and in the vicinity of the proposed development were undertaken on the 24/01/2023 by Rachel Minogue (BSc., Env) and Fiona Killeen (BSc., Env), by Rachel Minogue (BSc., Env) and Bronagh Boylan (BSc., Env) on the 17/04/2023, by Rachel Minogue (BSc., Env) and Kate Greaney (BSc., MSc) on the 17/05/2023 and by Rachel Minogue (BSc., Env and Tom Peters (BSc., MSc) on the 08/11/2023.. The habitats recorded during the site visit are described below and a habitat map is provided in Figure 3.1.

Table 3-1 Habitats recorded within the proposed development site.

Habitat	Code
Improved Agricultural Grassland	GA1
Recolonising Bare Ground	ED3
Spoil and Bare Ground	ED2
Drainage Ditch	FW4
Hedgerow	WL1
Scrub	WS1
Wet Grassland	GS4
Buildings and Artificial Surfaces	BL3

The main habitats recorded within the boundary of the proposed development site are classified as Improved Agricultural Grassland (GA1), Scrub (WS1), Recolonising Bare Ground (ED3), Drainage Ditch (FW4), Spoil and Bare Ground (ED2), Wet Grassland (GS4), Buildings and Artificial Surfaces (BL3), and Hedgerow (WL1).

The most dominant habitat recorded on the site of the proposed development is Improved Agricultural Grassland (GA1). The grassland is intensively managed, via grazing which was evident on the day of the site surveys, with the presence of domestic cattle and poaching of the land (Plate 3.1). The sward is short, and uniform in appearance (Plate 3.1), with low species diversity. This habitat is dominated by grass species, including Perennial Rye Grass (Lolium perenne) and Yorkshire Fog (Holcus lanatus) Other species recorded within this habitat include Red Clover (Trifolium pratense), Ragwort (Jacobaea vulgaris), Daisy (Bellis perennis), Dandelion (Taraxacum vulgaria), Creeping Buttercup (Ranunculus repens), Meadow Buttercup (Ranunculus acris) and Ribwort Plantain (Plantago lanceolata).

Wet grassland (GS4) is present to the eastern and central parcels of the site within the proposed development boundary, dominated by Soft Rush (Juncus effusus) and Yellow Iris (Iris pseudacorus) (Plate 3.2). Further, a species rich Wet Grassland (GS4) area was recorded to the southern parcel of the site, outside of the proposed development boundary. The species recorded within this area were diverse and have a high biodiversity value. Species recorded include Meadow Sweet (Filipendula ulmaria), St John's Wort (Hypericum perforatum), Marsh Horsetail Tail (Equisetum palustre), Blunt flowered rush (Juncus obtusiflorus), Willowherb (Chamaenerion angustifolium), Jointed rush (Juncus articulates), Water mint (Mentha aquatica), Creeping Buttercup (Ranunculus repens), Marsh Bedstraw (Galium palustre), Pointed Spear Moss (Calliergonella cuspidate), Soft Rush (Juncus effusus), Silver weed (Potentilla anserina), Ribwort Plantain (Plantago lanceolata), Red clover (Trifolium pratense), Perennial rye grass (Lolium perenne), Deer grass (Trichophorum cespitosum), Yorkshire fog (Holcus lanatus), Crested dog tail (Cynosurus cristatus), Ragged robin (Silene flos-cuculi), Clevers (Galium aparine), Devils bit scabious (Succisa pratensis), Bog asphodel (Narthecium ossifragum), Marsh thistle (Cirsium palustre), Tall thyme moss (Plagiomnium elatum), Hart's tongue Thyme moss (Plagiomnium undulatum), and Cuckoo flower (Cardamine pratensis). (Plates 3.3).



A mosaic habitat dominated by Scrub (WS1) with small patches of Recolonising Bare Ground (ED3) is present to the central and western parcels of the site, with smaller fragments of this habitat to the northern parcel of the site (Plates 3.4-3.5). The scrub habitat is dominated by Bramble (Rubus fructicosus) and is present to the western parcel and northern parcel of the site. Shrub species such as Blackthorn (Prunus spinosa), Hawthorn (Crataegus monogyna), Goat's Willow (Salix caprea) and Holly (*Ilex aquifolium*) are abundantly present throughout the scrub habitat. The ground flora recolonising the bare ground with areas of exposed gravel include species of Nettle (*Urtica dioica*), Creeping Buttercup (Ranunculus repens), Germander Speedwell (Veronica chamaedrys), Ragwort (Jacobaea vulgaris), Dandelion (Taraxacum vulgaria), Horsetail (Hippuris vulgaris), Creeping Thistle (Cirsium arvense), Tansy (Tanacetum vulgare), Bush Vetch (Vicia sepium), Red Clover (Trifolium Pratense), and Hawkweed (Hieracium hibernicum). Various invasive species were also recorded within this mosaic habitat, including Butterfly Bush (Buddleja davidii), Wall Cotoneaster (Cotoneaster horizontalis), and European Honeysuckle (Lonicera periclymenum), all of which are second schedule, medium impact invasive species, as per the National Biodiversity Data Centre (NBDC) prioritisation risk assessment. Transitional Scrub (WS1) dominated by Bramble (Rubus fructicosus) is present to the front hedgerow habitats. Further Scrub (WS1) dominated by Bramble (Rubus fructicosus) is present to the northwest margin of the site.

Hedgerows (WL1) with individual trees were recorded to the centre of the site between agricultural field boundaries, and to the north, south, east, and west boundaries of the proposed development site (Plates 3.6-3.8). Species recorded within the hedgerow habitats include Sycamore (Acer pseudoplatanus), Ash (Fraxinus excelsior), Holly (Ilex aquifolium), Blackthorn (Prunus spinosa), Hawthorn (Crataegus monogyna), Field Elm (Ulmus minor), Gooseberry (Ribes grossularia), Goat's Willow (Salix caprea), Elder (Sambucus nigra), Sweet Cherry (Prunus avium), Bramble (Rubus fructicosus), and Ivy (Hedera Hibernica). The ground flora is composed of species including Nettle (Urtica dioica), Creeping Buttercup (Ranunculus repens), Dog Rose (Rosa canina), Germander Speedwell (Veronica chamaedrys), Broadleaved-Willowherb (Epilobium montanum), Bitter Dock (Rumex obtusifolius), Cow Parsnip (Anthriscus sylvestris), Lords and Ladies (Arum maculatum), and Bedstraw (Galium boreale).

Spoil and Bare Ground (ED2) consisting of exposed material i.e., gravel and heaps of rubble are present to the western and northern parcels of the proposed development site **(Plate 3.9)**, within the mosaic habitat of Scrub/Recolonising Bare Ground.

A **Drainage ditch (FW4)** is present within the internal hedgerow habitat to the centre of the site, in proximity to the eastern boundary within the proposed development site **(Plate 3.10)**. This drainage ditch was either dry or had standing water present during the ecological surveys carried out on the proposed development site. Further, no perceptible flow was recorded within this drainage ditch during any of the ecological walkover surveys carried out on the site. This drainage ditch does not provide hydrological connectivity to any watercourse within the vicinity of the proposed development site.

Buildings and Artificial Surfaces (BL3) are present in the form of roads, including Oakfield Road L3601, roundabouts, and pathways to the northwest corner of the proposed development site, as shown on **Figure 3.1.**



Map Legend

Site Location

Improved Agricultural Grassland (GA1)

Scrub/Recolonising Bare Ground (WS1/ED3)

Spoil and Bare Ground (ED2)

Net Grassland (GS4) ■

Buildings and Artifical Surfaces (BL3)

Drainage Ditch (FW4)

Hedgerow (WL1)

Scrub (WS1)

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Drawing Title

Habitats Present Within the Proposed Development Site

Maguire Oakfield LRD

	Drawn By	Checked By
	RM	CM
	Project No.	Drawing No.
i	221126	Figure 3.1
	Scale 1:2,593.179	Date 02/01/2024

MKO



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Plate 3-1 Improved Agricultural Grassland (GA1) habitat with a short, homogenous sward to the east of the site, with poaching by domestic cattle evident.



Plate 3-2 Wet Grassland (GS4) dominated by Soft Rush (Juncus effusus) present to the eastern parcel of the site.





Plate 3-3 Species rich **Wet Grassland (GS4)** recorded to the southern parcel of the site, outside of the proposed development boundary, with a high biodiversity value and high species diversity.



Plate 3-4 A mosaic habitat dominated by **Scrub (WS1)** with small patch of **Recolonising Bare Ground (ED3**) with exposed stone present to the western parcel with species of Bramble (Rubus fructicosus), Blackthorn (Prunus spinosa), Hawthorn (Crataegus monogyna), and Sycamore (Acer pseudoplatanus).





Plate 3-5 A mosaic habitat dominated by Scrub (WS1) with small patch of Recolonising Bare Ground (ED3) with exposed stone present to the western parcel with species of Bramble (Rubus fructicosus), Hawthorn (Crataegus monogyna), and Sycamore (Acer pseudoplatanus).), and invasive Wall Cotoneaster (Cotoneaster horizontalis), a second schedule, medium impact invasive species, as per the National Biodiversity Data Centre (NBDC) prioritisation risk assessment.



Plate 3-6 Internal agricultural field boundary **Hedgerow (WL1)** present to the southern section of the site, with species of Ash (Fraxinus excelsior), Holly (Ilex aquifolium), Blackthorn (Prunus spinosa), Hawthorn (Crataegus monogyna), Field Elm (Ulmus minor), Gooseberry (Ribes grossularia), Goat's Willow (Salix caprea), and Ivy (Hedera Hibernica).





Plate 3-7 **Hedgerow (WL1)** present to the northeast margin of the site, with species of Ash (Fraxinus excelsior), Hawthorn (Crataegus monogyna), Holly (Ilex aquifolium), Ivy (Hedera hibernica), and Bramble (Rubus fructicosus).



Plate 3-8 **Hedgerow (WL1)** present to the eastern margin of the site, dominated by Hawthorn (Crataegus monogyna), Bramble (Rubus fructicosus), and Ash (Fraxinus excelsior).





Plate 3-9 Spoil and Bare Ground (ED2) consisting of exposed material present to the western parcel of the proposed development site.



Plate 3-10 **Drainage Ditch (FW4)** without flowing water, present to the centre of the site. This drainage ditch does not provide hydrological connectivity to any watercourse within the vicinity of the proposed development site.



STAGE 1 – APPROPRIATE ASSESSMENT SCREENING

Identification of Relevant European Sites

The following methodology was used to establish any European Sites upon which there is a potential for a likely significant effect to occur either individually or in combination with other plans and projects as a result of the proposed development:

- Initially the most up to date GIS spatial datasets for European designated sites and water catchments were downloaded from the NPWS website (www.npws.ie) and the EPA website (www.epa.ie) on the 16/05/2024.
- All European Sites that could potentially be affected were identified using a source-pathway receptor model. To provide context for the assessment, European Sites surrounding the development site are shown on Figure 4-1. Information on these sites according to the site-specific conservation objectives is provided in Table 4-1. Sites that were further away from the proposed development were also considered and no complete source-pathway-receptor chain for significant effect was identified for any other European Sites.
- The catchment mapping was used to establish or discount potential hydrological connectivity between the site of the proposed development and any European Sites. The hydrological catchments are also shown in **Figure 4-1**.
- In relation to Special Protection Areas, in the absence of any specific European or Irish guidance in relation to such sites, the Scottish Natural Heritage (SNH) Guidance, 'Assessing Connectivity with Special Protection Areas (SPA)' (2016) was consulted. This document provides guidance in relation to the identification of connectivity between proposed development and Special Protection Areas. The guidance takes into consideration the distances species may travel beyond the boundary of their SPAs and provides information on dispersal and foraging ranges of bird species which are frequently encountered when considering plans and projects.
- **Table 4.1** provides details of all relevant European Sites as identified in the preceding steps and assesses the potential for likely significant effects on each.
- The assessment considers any likely direct or indirect impacts of the proposed development, both alone and in combination with other plans and projects, on European Sites by virtue of criteria including the following: size and scale, land-take, distance from the European Site or key features of the site, resource requirements, emissions, excavation requirements, transportation requirements and duration of construction, operation and decommissioning were considered in this assessment.
- The site synopses and conservation objectives of these sites, as per the NPWS website (www.npws.ie), were consulted and reviewed at the time of preparing this report 16/05/2024.
- Where potential pathways for Likely Significant Effect are identified, the site is included within the Likely Zone of Impact and further assessment is required within the NIS.
- The potential for the proposed development to result in cumulative impacts on any European Sites in combination with other plans and projects was considered in the assessment that is presented in **Table 4-1**. Plans and projects considered include those that are listed in **Appendix 1**.

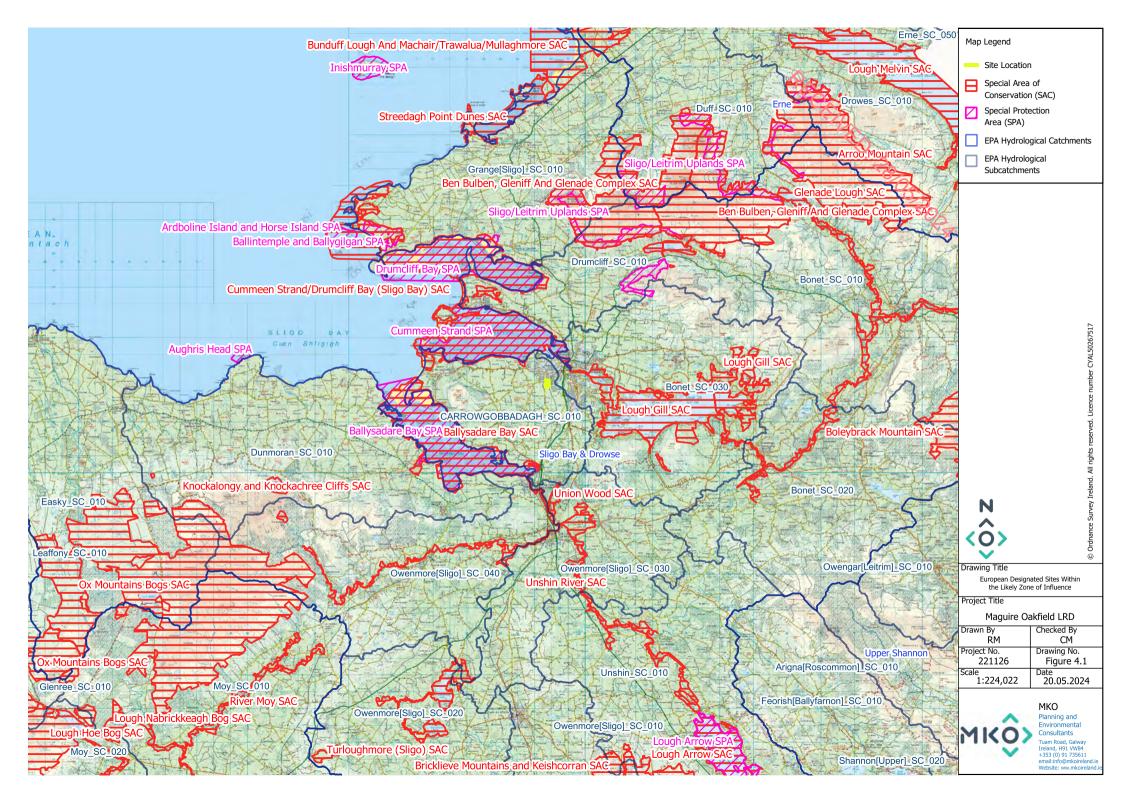




Table 4-1 Identification of European Sites within the Likely Zone of Impact			
Designated Sites and distance from proposed development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024	Conservation Objectives	Likely Zone of Impact Determination
Special Area of Conservation			
Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC [000627] Distance: 1.3km	 [1014] Marsh Snail (Vertigo angustior) [1095] Sea Lamprey (Petromyzon marinus) [1099] River Lamprey (Lampetra fluviatilis) [1130] Estuaries [1140] Mudflats and sandflats not covered by seawater at low tide. [1365] Harbour seal (Phoca vitulina) [2110] Embryonic shifting dunes [2120] Shifting dunes along the shoreline with (Ammophila arenaria) (white dunes) [2130] Fixed coastal dunes with herbaceous vegetation (grey dunes) [5130] Juniperus communis formations on heaths or calcareous grasslands 	Detailed conservation objectives for this site, (Version 1, September 2013), were reviewed as part of the assessment and are available at www.npws.ie	The proposed development is located outside the boundary of this SAC and as such there is no potential for direct effect. The proposed development site is located within the Sligo Bay Catchment, and the Carrowgobbadagh Sub-catchment. The site is located in the Carrowmore west ground waterbody, in an area of high groundwater vulnerability (as per EPA maps). There are no mapped EPA watercourses recorded within the proposed development site as per EPA Maps. However, there is evidence of historic watercourses that traverse the proposed development site. Further, during the Ecological Surveys carried out, no watercourses with perceptible flow were identified on the site and as such, there is no direct hydrological connectivity via the proposed development site and this SAC. The proposed development site is located approx 1.3km south of the Garavogue Estuary, which is designated as part of Cummeen Strand/ Drumcliff Bay (Sligo Bay) SAC. The construction phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site. Further, the proposed stormwater system will connect to an existing manhole to the northwest of the site. The operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via untreated stormwater entering the existing system and potentially entering the SAC through existing storm water infrastructure. Therefore, this may result in adverse impacts to the aquatic or



Designated Sites and distance from proposed development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024	Conservation Objectives	Likely Zone of Impact Determination
	• [7220] Petrifying springs with tufa formation (Cratoneurion)		groundwater influenced QI habitats and species associated with this SAC, in the absence of mitigation. As such, taking a precautionary approach, due to the proximity of the proposed development site to the Garavogue Estuary and this SAC (1.3km), potential pathways for indirect effects on aquatic/groundwater dependent Qualifying Interests (QIs) associated with this SAC was identified during the construction and operational phases of the proposed development, in the form of deterioration of water quality resulting from potential hydrological connectivity via groundwater and stormwater and supporting habitats for aquatic fauna. A complete source pathway receptor chain was identified and in the absence of mitigation, there is potential for the proposed development to result in likely significant effects on this European Site Therefore, the European Site is located within the Likely Zone of Impact and is considered further in this Screening assessment.
Lough Gill SAC [001976] Distance: 1.4km	 [1092] White-clawed Crayfish (Austropotamobius pallipes) [1095] Sea Lamprey (Petromyzon marinus) [1096] Brook Lamprey (Lampetra planeri) [1099] River Lamprey (Lampetra fluviatilis) [1106] Salmon (Salmo salar) [1355] Otter (Lutra lutra) 	Detailed conservation objectives for this site, (Version 1, 15 December 2021), were reviewed as part of the assessment and are available at www.npws.ie	The proposed development is located outside the boundary of this SAC and as such there is no potential for direct effect. The proposed development site is located within the Sligo Bay Catchment, and the Carrowgobbadagh Sub-catchment. The site is located in the Carrowmore west ground waterbody, in an area of high groundwater vulnerability (as per EPA maps). There are no mapped EPA watercourses recorded within the proposed development site as per EPA Maps. However, there is evidence of historic watercourses that traverse the proposed development site, present to the south of the site flowing north through the proposed development site. Further, during the Ecological Surveys carried out, no watercourses with perceptible flow



			*//
Designated Sites and distance from proposed development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024	Conservation Objectives	Likely Zone of Impact Determination were identified on the site and as such, there is no direct hydrological
	 [3150] Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [6210] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [91A0] Old sessile oak woods with Ilex and Blechnum in the British Isles [91E0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) 		connectivity via the proposed development site and this SAC. The proposed development site is located approx 1.4km south/ west of the Garavogue Estuary, which is designated as part of Lough Gill SAC. The construction phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site. Further, the proposed stormwater system will connect to an existing manhole to the northwest of the site. The operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via untreated stormwater entering the existing system and potentially entering the SAC through existing storm water infrastructure. Therefore, this may result in adverse impacts to the aquatic migratory QI species within the SAC which migrate through the Garavogue Estuary, in the absence of mitigation. As such, taking a precautionary approach, due to the proximity of the proposed development site to the Garavogue Estuary and this SAC (1.4km), a potential pathway for indirect effects on the aquatic migratory Qualifying Interests (QIs) associated with this SAC was identified during the construction and operational phases of the proposed development, in the form of deterioration of water quality resulting from potential hydrological connectivity via groundwater and stormwater, and supporting habitats for aquatic migratory QI species and habitats. A complete source pathway receptor chain was identified and in the absence of mitigation, there is potential for the proposed development to result in likely significant effects on this European Site. Therefore, the European Site is located



Designated Sites and distance from proposed development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024	Conservation Objectives	Likely Zone of Impact Determination
			within the Likely Zone of Impact and is considered further in this Screening assessment.
Ballysadare Bay SAC [000622] Distance: 4.4km	[1014] Narrow-mouthed whorl snail (Vertigo angustior) [1130] Estuaries [1140] Mudflats and sandflats not covered by seawater at low tide. [1365] Harbour seal (Phoca vitulina) [2110] Embryonic shifting dunes [2120] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2130] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2190] Humid dune slacks	Detailed conservation objectives for this site, (Version 1, November 2013), were reviewed as part of the assessment and are available at www.npws.ie.	The proposed development is located outside the boundary of this SAC and as such there is no potential for direct effect. There is potential hydrological connectivity via the proposed development site and this SAC which is located in Sligo Bay via the Garavogue estuary. However, due to the buffering distance of approx. 4.4km from the proposed development boundary to this SAC, and the assimilative capacity of the ocean, there is no potential for significant indirect effects during the construction of the proposed works on this designated European site. As such, no source-pathway-receptor chain for impact was identified between the site of the proposed development and the habitats and species for which this site has been designated. Potential for direct or indirect impact on the European Site can be excluded. No pathway for significant effect on this European Designated Site was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects and the site is not within the Likely Zone of Impact and is not considered further in this Screening assessment
Unshin River SAC [001898] Distance: 5.6km	 [1106] Salmon (Salmo salar) [1355] Otter (Lutra lutra) [3260] Water courses of 	Detailed conservation objectives for this site, (Version 1, 15 December 2021), were reviewed as part of the assessment and are	The proposed development is located outside the boundary of this SAC and as such there is no potential for direct effects. The proposed development area is located approx. 5.6km north of Unshin
	plain to montane levels with the <i>Ranunculion</i>	available at www.npws.ie	River SAC. No source-pathway-receptor chain for impact was identified between the site of the proposed development and the habitats and species for



Designated Sites and distance from proposed development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024	Conservation Objectives	Likely Zone of Impact Determination
	fluitantis and Callitricho-Batrachion vegetation • [6210] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) • [6410] Molinia meadows on calcareous, peaty, or clayey-silt-laden soils (Molinion caeruleae) • [91E0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) *		which this site has been designated. Potential for direct or indirect impact on the European Site can be excluded. No pathway for significant effect on this European Designated Site was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects and the site is not within the Likely Zone of Impact and is not considered further in this Screening assessment
Union Wood SAC [000638] Distance:5.7km	• [91A0] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles.	Detailed conservation objectives for this site, (Version 1, 11 January 2021), were reviewed as part of the assessment and are available at www.npws.ie	The proposed development is located outside the boundary of this SAC and as such there is no potential for direct effects. The proposed development area is located approx. 5.7km north of Union Wood SAC. No source-pathway-receptor chain for impact was identified between the site of the proposed development and the habitats and species for which this site has been designated. Potential for direct or indirect impact on the European Site can be excluded.



Designated Sites and distance from proposed development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024	Conservation Objectives	Likely Zone of Impact Determination
Ben Bulben, Gleniff and Glenade Complex SAC [000623] Distance: 8.2km	Illustration [1013] Geyer's Whorl Snail (Vertigo geyeri) Illustration [1355] Otter (Lutra lutra) Illustration [1356] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation Illustration [1010] Northern Atlantic wet heaths with Erica tetralix Illustration [1010] Alpine and Boreal heaths Illustration [1010] Juniperus communis formations on heaths or calcareous grasslands Illustration [1010] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) Illustration [1010]	Detailed conservation objectives for this site, (Version 1,21 December 2021), were reviewed as part of the assessment and are available at www.npws.ie	No pathway for significant effect on this European Designated Site was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects and the site is not within the Likely Zone of Impact and is not considered further in this Screening assessment The proposed development is located outside the boundary of this SAC and as such there is no potential for direct effects. The proposed development area is located approx.8.2km southwest of Ben Bulben, Gleniff and Glenade Complex SAC. No source-pathway-receptor chain for impact was identified between the site of the proposed development and the habitats and species for which this site has been designated. Potential for direct or indirect impact on the European Site can be excluded. No pathway for significant effect on this European Designated Site was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects and the site is not within the Likely Zone of Impact and is not considered further in this Screening assessment



Designated Sites and distance from proposed development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024	Conservation Objectives	Likely Zone of Impact Determination	D. 78/05/202
	substrates in mountain areas (and submountain areas, in Continental Europe) * • [6430] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels • [7130] Blanket bogs (* if active bog) • [7140] Transition mires and quaking bogs • [7220] Petrifying springs with tufa formation (Cratoneurion)* • [7230] Alkaline fens • [8110] Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani). • [8120] Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii) • [8210] Calcareous rocky slopes with chasmophytic vegetation			



Designated Sites and distance from proposed development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024	Conservation Objectives	Likely Zone of Impact Determination
Streedagh Point Dunes SAC [001680] Distance: 14.2km	 [1014] Narrow-mouthed Whorl Snail (Vertigo angustior) [1140] Mudflats and sandflats not covered by seawater at low tide. [1220] Perennial vegetation of stony banks [1330] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1410] Mediterranean salt meadows (Juncetalia maritimi) [2120] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2130] Fixed coastal dunes with herbaceous vegetation (grey dunes) 	Detailed conservation objectives for this site, (Version 1, 19 March 2015), were reviewed as part of the assessment and are available at www.npws.ie	The proposed development is located outside the boundary of this SAC and as such there is no potential for direct effect. The proposed development site is located approx. 14.2km southeast of Streedagh Point Dunes SAC. No source-pathway-receptor chain for impact was identified between the site of the proposed development and the habitats/species for which this site has been designated. Potential for direct or indirect impact on the European Site can be excluded. No pathway for significant effect on this European Designated Site was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects and the site is not within the Likely Zone of Impact and is not considered further in this Screening assessment
Special Protection Area (SPA)			
Cummeen Strand SPA [004035]	• [A046] Light-bellied Brent Goose (<i>Branta bernicla</i> <i>hrota</i>)	Detailed conservation objectives for this site, (Version 1, September 2013), were reviewed	The proposed development is located outside the boundary of this SPA and as such there is no potential for direct effect.



Designated Sites and distance from proposed development	Qualifying Interests/Special Conservation Interests for which the European site has been designated	Conservation Objectives	Likely Zone of Impact Determination
	(Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024		STORE THE PROPERTY OF THE PROP
Distance: 1.3km	 [A130] Oystercatcher (Haematopus ostralegus) [A162] Redshank (Tringa totanus) [A999] Wetland and Waterbirds 	as part of the assessment and are available at www.npws.ie	The proposed development site is located within the Sligo Bay Catchment, and the Carrowgobbadagh Sub-catchment. The site is located in the Carrowmore west ground waterbody, in an area of high groundwater vulnerability (as per EPA maps). There are no mapped EPA watercourses recorded within the proposed development site as per EPA Maps. However, there is evidence of historic watercourses that traverse the proposed development site, present to the south of the site flowing north through the proposed development site. Further, during the Ecological Surveys carried out, no watercourses with perceptible flow were identified on the site and as such, there is no direct hydrological connectivity via the proposed development site and this SPA. Further, the proposed development site is located approx 1.3km south of the Garavogue Estuary, which is designated as part of Cummeen Strand SPA. The construction phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site. Further, the proposed stormwater system will connect to an existing manhole to the northwest of the site. The operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via untreated stormwater entering the existing system and potentially entering the SPA through existing storm water infrastructure. This may result in adverse impacts to the supporting aquatic and wetland habitats for SCI Species within the SPA, in the absence of mitigation. As such, taking a precautionary approach, a potential pathway for indirect effects on the SCI species and habitats associated with this site was identified in the form of deterioration of water quality resulting from potential hydrological



Designated Sites and distance from proposed development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024	Conservation Objectives	Likely Zone of Impact Determination
			connectivity via groundwater and stormwater and supporting wetland habitats for the listed SCI species. Further, the grassland habitat within the proposed development site may potentially provide suitable foraging habitat for the SCI Species: Light-bellied Brent Goose (Branta bernicla hrota), and Oystercatcher (Haematopus ostralegus) listed as SCI species for this SPA. Further, during the wintering bird surveys carried out, no Light bellied Brent Geese (Branta bernicla hrota) or Oystercatcher (Haematopus ostralegus) were recorded utilizing the habitats within or adjacent to the site. Given the widespread occurrence of this common habitat in the wider locality, the loss of this habitat within the proposed development site would not have a significant effect on these SCI species. Further, the proposed development site does not provide any supporting wetland habitats i.e., mudflats, estuaries, or inlets for the Redshank (Tringa totanus), As such, due to the buffering distance of approx. 1.3km from the project footprint to this SPA, due to the development site being buffered from the SPA by Sligo Town, tree line and hedgerow habitat, and the results of the dedicated bird surveys undertaken by MKO, there is no potential for ex situ disturbance or displacement related impacts on the SCI species for which Cummeen Strand SPA is designated for during the construction and operation of the proposed project. A complete source pathway receptor chain was identified and in the absence of mitigation, there is potential for the proposed development to result in likely significant effects on this European Site Therefore, the European Site is located



Designated Sites and distance from proposed development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024	Conservation Objectives	Likely Zone of Impact Determination
			within the Likely Zone of Impact and is considered further in this Screening assessment.
Ballysadare Bay SPA [004129] Distance: 4.4km	 [A046] Light-bellied Brent Goose (Branta bernicla hrota) [A141] Grey Plover (Pluvialis squatarola) [A149] Dunlin Calidris (alpina alpina) [A157] Bar-tailed Godwit (Limosa lapponica) [A162] Redshank (Tringa totanus) [A999] Wetland and Waterbirds 	Detailed conservation objectives for this site, (Version 1, October 2013), were reviewed as part of the assessment and are available at www.npws.ie	The proposed development is located outside the boundary of this SPA and as such there is no potential for direct effect. The proposed development site is located 4.4km northeast of this SPA. This site lies within the core foraging range of 5-8km for the Light-bellied Brent Goose (Branta bernicla hrota) (SNH 2016). Light-bellied Brent Geese may potentially use agricultural grassland for foraging during the winter. However, during the wintering bird survey carried out, no Light bellied Brent Geese (Branta bernicla hrota) or any other listed SCI Species, were recorded utilizing the habitats within or adjacent to the site. Given the widespread occurrence of this common habitat in the wider locality, the loss of this habitat within the proposed development site would not have a significant effect on this species. As such, due to the absence of a complete source-pathway receptor chain, the buffering distance of approx. 4.4km from the project footprint to this SPA, there is no potential for ex situ disturbance or displacement related impacts on the SCI species during the construction and operation of the proposed project. No pathway for significant effect on this European Designated Site was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects and the site is not within the Likely Zone of Impact and is not considered further in this Screening assessment.



Designated Sites and distance from proposed development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024	Conservation Objectives	Likely Zone of Impact Determination
Drumcliff Bay SPA [004013] Distance: 5.4km	 [A144] Sanderling (Calidris alba) [A157] Bar-tailed Godwit (Limosa lapponica) [A999] Wetland and Waterbirds 	Detailed conservation objectives for this site, (Version 1, September 2013), were reviewed as part of the assessment and are available at www.npws.ie	The proposed development is located outside the boundary of this SPA and as such there is no potential for direct effect. Due to the absence of a complete source-pathway receptor chain, the buffering distance of approx. 5.4km from the project footprint to this SPA, there is no potential for ex situ disturbance or displacement related impacts on the SCI species during the construction and operation of the proposed project. Further, there is no suitable foraging or roosting habitat for the listed SCI species of this SPA within the proposed development site, therefore the potential for habitat loss can also be ruled out. No pathway for significant effect on this European Designated Site was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects and the site is not within the Likely Zone of Impact and is not considered further in this Screening assessment
Sligo/Leitrim uplands SPA [004187] Distance: 6.7km	[A103] Peregrine (Falco peregrinus) [A346] Chough (Pyrrhocorax pyrrhocorax)	Detailed conservation objectives for this site, (Version 1, November 2022), were reviewed as part of the assessment and are available at www.npws.ie This site has a generic conservation objective: "To maintain or restore the favourable conservation condition of the bird species listed as	The proposed development is located outside the boundary of this SPA and as such there is no potential for direct effect. The proposed development site is located approx. 6.7km southwest of this SPA. This site does not lie within the core foraging range of 3km for the Peregrine (Falco peregrinus) (SNH 2016). Further, due to the absence of a complete source-pathway receptor chain, the buffering distance of approx. 6.7km from the project footprint to this SPA, there is no potential for ex situ disturbance or displacement related impacts on the SCI species during the construction of the proposed project.



Designated Sites and	Qualifying Interests/Special	Conservation Objectives	Likely Zone of Impact Determination
distance from proposed development	Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024	Constitution Objectives	
		Special Conservation Interests for this SPA'. NPWS (2022) Conservation objectives for Sligo/Leitrim Uplands SPA [004187]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	No pathway for significant effect on this European Designated Site was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects and the site is not within the Likely Zone of Impact and is not considered further in this Screening assessment
Ballintemple and Ballygilgan SPA [004234] Distance: 8.5km	• [A045] Barnacle Goose (Branta leucopsis)	Detailed conservation objectives for this site, (Version 1, November 2022), were reviewed as part of the assessment and are available at www.npws.ie This site has a generic conservation objective: "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA".	The proposed development is located outside the boundary of this SPA and as such there is no potential for direct effect. The proposed development site is located approx. 8.5km southeast of this SPA. This site lies within the core foraging range of 15km for the Barnacle goose (Branta leucopsis) (SNH 2016). Barnacle geese (Branta leucopsis) may potentially use agricultural grassland for foraging during the winter. However, during the wintering bird survey carried out, no Barnacle Geese (Branta leucopsis) were recorded utilizing the habitats within or adjacent to the site. Given the widespread occurrence of this common habitat in the wider locality, the loss of this habitat within the proposed development site would not have a significant effect on this species.
		NPWS (2022) Conservation objectives for Ballintemple and Ballygilgan SPA [004234]. First	As such, due to the absence of a complete source-pathway receptor chain, and the buffering distance of approx. 8.5km from the project footprint to this SPA, there is no potential for ex situ disturbance or displacement related impacts to



Designated Sites and distance from proposed development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024	Conservation Objectives	Likely Zone of Impact Determination
		Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage	the Barnacle Goose (Branta leucopsis) during the construction and operation of the proposed project. No pathway for significant effect on this European Designated Site was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects and the site is not within the Likely Zone of Impact and is not considered further in this Screening assessment
Ardboline Island and Horse Island SPA [004135] Distance: 14.2km	[A017] Cormorant (Phalacrocorax carbo) [A045] Barnacle Goose (Branta leucopsis)	Detailed conservation objectives for this site, (Version 1, 12 November 2022), were reviewed as part of the assessment and are available at www.npws.ie This site has a generic conservation objective: 'To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA". NPWS (2022) Conservation objectives for Ardboline Island and Horse Island SPA [004135]. First Order Site-specific Conservation Objectives Version	The proposed development is located outside the boundary of this SPA and as such there is no potential for direct effect. The proposed development site is located approx. 14.2km southeast of this SPA. This site lies within the core foraging range of 15km for the Barnacle goose (<i>Branta leucopsis</i>) (SNH 2016). Barnacle geese (<i>Branta leucopsis</i>) may potentially use agricultural grassland for foraging during the winter. However, during the wintering bird survey carried out, no Barnacle Geese (<i>Branta leucopsis</i>) were recorded utilizing the habitats within or adjacent to the site. Given the widespread occurrence of this common habitat in the wider locality, the loss of this habitat within the proposed development site would not have a significant effect on this species. Further, due to the absence of a complete source-pathway receptor chain, and the buffering distance of approx. 14.2km from the project footprint to this SPA, there is no potential for ex situ disturbance or displacement related impacts on the Cormorant (<i>Phalacrocorax carbo</i>) and the Barnacle Goose (<i>Branta leucopsis</i>) during the construction and operation of the proposed project.



Designated Sites and distance from proposed development	Qualifying Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 16/05/2024	Conservation Objectives	Likely Zone of Impact Determination
		1.0. Department of Housing, Local Government and Heritage	No pathway for significant effect on this European Designated Site was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects and the site is not within the Likely Zone of Impact and is not considered further in this Screening assessment



Stage 1 Appropriate Assessment Screening Conclusion

It cannot be excluded beyond reasonable scientific doubt, in view of best scientific knowledge, on the basis of objective information and in light of the conservation objectives of the relevant European sites, that the proposed development, individually or in combination with other plans and projects, would be likely to have a significant effect on the on the following European Sites:

- Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC [000627]
- Lough Gill SAC [001976]
- Cummeen Strand SPA [004035]

As a result, an Appropriate Assessment is required, and a Natura Impact Statement shall be prepared in respect of the proposed development.



STAGE 2- NATURA IMPACT STATEMENT (NIS)

The potential for likely significant effects on the following European Sites in the absence of mitigation, individually or cumulatively with other plans or projects, was identified in the preceding

- Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC [000627]
- Lough Gill SAC [001976]
- Cummeen Strand SPA [004035]

The following sections consider each European Site individually to:

- 1. Determine which individual qualifying features have the potential to be adversely affected by the proposed development.
- 2. Provide information with regard to the Conservation Objectives and site-specific pressures and threats for those qualifying features that have the potential to be adversely affected.
- 3. Provide the results of any additional survey work that was necessary to inform an impact assessment.



Identification of relevant Qualifying Features and Desk Study

5.1.1 Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC [000627]

The potential for impacts on this SAC were identified in **Section 4.1** above. The identified pathways for effect include the following:

• The construction and operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary, which is designated as part of this SAC, via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site and via untreated stormwater entering the existing system and potentially entering the SAC through existing storm water infrastructure, adversely impacting the aquatic or groundwater influenced QI habitats and species within the SAC, in the absence of mitigation.

Table 5.1 below lists the qualifying features of this European Site and determines, in the light of their Conservation Objectives, whether there is any complete source-pathway-receptor chain, by which adverse effects may occur.



Identification of Individual Qualifying Features with the Potential to be Affected.

Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, September 2013), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
Estuaries [1130]	To maintain the favourable conservation condition of Estuaries in Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC	Due to the proximity of the development site to Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC (1.3km), a potential pathway for indirect effects on the following marine QI habitat: Estuaries was identified in the form of deterioration of water quality and supporting habitats for aquatic fauna. The proposed development site is located approx 1.3km south of the Garavogue Estuary, which is designated as part of Cummeen Strand/ Drumcliff Bay (Sligo Bay) SAC. As such, the construction and operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site and via untreated stormwater entering the existing system and potentially entering the SAC through existing storm water infrastructure. This may result in adverse impacts to the water quality/ habitat quality and supporting habitats for aquatic fauna in this QI habitat: Estuaries within the SAC, in the absence of mitigation. A complete source-pathway-receptor chain for adverse effects on this habitat was identified and it is assessed further in this NIS.	Y
Mudflats and sandflats not covered by seawater at low tide [1140]	To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC	Due to the proximity of the development site to Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC (1.3km), a potential pathway for indirect effects on the following marine QI habitat: Mudflats and sandflats not covered by seawater at low tide was identified in the form of deterioration of water quality and supporting habitats for aquatic fauna.	Y



Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, September 2013), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
		The proposed development site is located approx 1.3km south of the Garavogue Estuary, which is designated as part of Cummeen Strand/ Drumcliff Bay (Sligo Bay) SAC. As such, the construction and operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site and via untreated stormwater entering the existing system and potentially entering the SAC through existing storm water infrastructure. This may result in adverse impacts to the water quality/ habitat quality and supporting habitats for aquatic fauna in this QI habitat: Mudflats and sandflats not covered by seawater at low tide, within the SAC, in the absence of mitigation. A complete source-pathway-receptor chain for adverse effects on this habitat was identified and it is assessed further in this NIS.	
Embryonic shifting dunes [2110]	To maintain the favourable conservation condition of Embryonic shifting dunes in Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC	The proposed development site is located 1.3km south of Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC. As per Map 6 of the Site-Specific Conservation Document, this terrestrial QI habitat Embryonic shifting dunes is mapped approx 7.5km northwest of the proposed development site. As such, indirect impacts on the following terrestrial QI habitat: Embryonic shifting dunes can be ruled out due to the terrestrial nature of the habitat, the buffering distance of approx. 7.5km from the proposed development area, as per Map 6 of the Conservation Objectives document, and the absence of a complete source-pathway-receptor chain.	N



Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, September 2013), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
		No complete source- pathway- receptor chain for any effect on this habitat as a result of the proposed development was identified. No further assessment is required.	
Shifting dunes along the shoreline with <i>Ammophila</i> arenaria (white dunes) [2120]	To restore the favourable conservation condition of Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes') in Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC	The proposed development site is located 1.3km south of Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC. As per Map 6 of the Site-Specific Conservation Document, this terrestrial QI habitat Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) is mapped approx 6.7km west/ northwest of the proposed development site. As such, indirect impacts on the following terrestrial QI habitat: Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) can be ruled out due to the terrestrial nature of the habitat, the buffering distance of 6.7km from the proposed development area, as per Map 6 of the Conservation Objectives document, and the absence of a complete source-pathway-receptor chain. No complete source-pathway- receptor chain for any effect on this habitat as a result of the proposed development was identified. No further assessment is required.	N
Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	To restore the favourable conservation condition of Fixed coastal dunes with herbaceous	The proposed development site is located 1.3km south of Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC.	N
	vegetation ('grey dunes') in Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC	As per Map 6 of the Site-Specific Conservation Document, this terrestrial QI habitat Fixed coastal dunes with herbaceous vegetation (grey dunes) is mapped approx 6.8km west/northwest of the proposed development site.	



Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, September 2013), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
	1.	As such, indirect impacts on the following terrestrial QI habitat: Fixed coastal dunes with herbaceous vegetation (grey dunes) can be ruled out due to the terrestrial nature of the habitat, the buffering distance of approx. 6.8km from the proposed development area, as per Map 6 of the Conservation Objectives document, and the absence of a complete source-pathway-receptor chain: No complete source- pathway- receptor chain for any effect on this habitat as a result of the proposed development was identified. No further assessment is required.	
Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]	To maintain the favourable conservation condition of Petrifying springs with tufa formation (<i>Cratoneurion</i>) in Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC	According to the NPWS Conservation Objectives document for Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC, there is one known location of this QI Habitat: Petrifying springs with tufa formation (<i>Cratoneurion</i>) within this SAC as per Map 7, approx. 3.7km northwest of the proposed development site. The area of this QI habitat at Ballincar is recorded as 150m² along 200m of cliff. However, further areas of this habitat may occur within this SAC. This QI habitat relies on permanent irrigation from upwelling groundwater sources. As such, taking an extremely precautionary approach, due to the potential for further areas of this habitat to occur within this SAC, the proximity of the mapped area of this QI habitat (3.7km) to the proposed development site, and this QI habitat's reliance on groundwater irrigation sources, a potential pathway for indirect effects was identified in the form of deterioration of water quality in the Garavogue Estuary during the construction phase of the proposed development via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site. This may result in adverse impacts to the	Y
		water quality/ habitat quality and supporting habitats for aquatic fauna in this QI habitat: Petrifying springs with tufa formation (<i>Cratoneurion</i>) within the SAC, in the absence of mitigation.	



Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, September 2013), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
		A complete source-pathway-receptor chain for adverse effects on this habitat was identified and it is assessed further in this NIS.	
Petromyzon marinus (Sea Lamprey) [1095]	To restore the favourable conservation condition of Sea Lamprey in Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC	Due to the proximity of the development site to Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC (1.3km), a potential pathway for indirect effects on the following aquatic migratory QI species: Petromyzon marinus (Sea Lamprey) were identified in the form of deterioration of water quality and supporting habitats for aquatic fauna. The construction and operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site and via untreated stormwater entering the existing system and potentially entering the SAC through existing storm water infrastructure. This may result in adverse impacts to the water quality/ habitat quality and supporting habitats for this aquatic migratory species: Petromyzon marinus (Sea Lamprey): within the SAC, in the absence of mitigation. A complete source-pathway-receptor chain for adverse effects on this species was identified and it is assessed further in this NIS.	Y
Lampetra fluviatilis (River Lamprey) [1099]	To maintain the favourable conservation condition of River Lamprey in Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC	Due to the proximity of the development site to Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC (1.3km), a potential pathway for indirect effects on the following aquatic migratory species: <i>Lampetra fluviatilis</i> (River Lamprey) were identified in the form of deterioration of water quality and supporting habitats for aquatic fauna.	Y



Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, September 2013), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
		The construction and operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site and via untreated stormwater entering the existing system and potentially entering the SAC through existing storm water infrastructure. This may result in adverse impacts to the water quality/ habitat quality and supporting habitats for this aquatic migratory species: <i>Lampetra fluviatilis</i> (River Lamprey), within the SAC, in the absence of mitigation. A complete source-pathway-receptor chain for adverse effects on this species was identified and it is assessed further in this NIS.	
Phoca vitulina (Harbour Seal) [1365]	To maintain the favourable conservation condition of Harbour Seal in Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC	Due to the proximity of the development site to Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC (1.3km), a potential pathway for indirect effects on the following aquatic species: <i>Phoca vitulina</i> (Harbour Seal) were identified in the form of deterioration of water quality and supporting habitats for aquatic fauna, and ex-situ disturbance related impacts. The construction and operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site and via untreated stormwater entering the existing system and potentially entering the SAC through existing storm water infrastructure. This may result in adverse impacts to the water quality/ habitat quality and supporting habitats for this aquatic species: <i>Phoca vitulina</i> (Harbour Seal) within the SAC, in the absence of mitigation.	Y



Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, September 2013), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
		A complete source-pathway-receptor chain for adverse effects on this species was identified and it is assessed further in this NIS.	
Juniperus communis formations on heaths or calcareous grasslands [5130]	To restore the favourable conservation condition of <i>Juniperus communis f</i> ormations on heaths or calcareous grasslands in Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC	The proposed development site is located 1.3km south of Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC. As per Map 7 of the Site-Specific Conservation Document, this terrestrial QI habitat <i>Juniperus communis</i> formations on heaths or calcareous grasslands is mapped approx 6.8km northwest of the proposed development site. As such, indirect impacts on the following terrestrial QI habitat: <i>Juniperus communis</i> formations on heaths or calcareous grasslands. can be ruled out due to the terrestrial nature of the habitat, the buffering distance of approx. 6.8km from the proposed development area, as per Map 7 of the Conservation Objectives document, and the absence of a complete source-pathway-receptor chain: No complete source-pathway- receptor chain for any effect on this habitat as a result of the proposed development was identified. No further assessment is required	N
Vertigo angustior (Narrow- mouthed Whorl Snail) [1014	To maintain the favourable conservation condition of Narrow- mouthed Whorl Snail in Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC	According to the NPWS Conservation Objectives document for Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC, there is one known location of this QI Species within this SAC as per Map 7, approx.6.7km west of the proposed development site. The optimal habitat for this species is defined as fixed dune, species-rich grassland dominated by red fescue (<i>Festuca rubra</i>), with sparse marram grass (<i>Ammophila arenaria</i>), lady's bedstraw (<i>Galium verum</i>), eyebright (<i>Euphrasia sp.</i>), mouseear-hawkweed (<i>Pilosella officinarum</i>) and other low growing herbs, with a vegetation height of 10-30cm, as per CO document (NPWS 2013).	N



Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, September 2013), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
		As such, there is no optimal habitat type within the proposed development boundary for this QI species, and as such the proposed development site is in no way connected to this habitat. Therefore, indirect impacts on this QI species can be ruled out due to the absence of suitable habitat within the proposed development area and the absence of a complete source-pathway-receptor chain: No complete source- pathway- receptor chain for any effect on this species as a result of the proposed development was identified. No further assessment is required	



5.1.2 Site Specific Pressures and Threats

As per the Natura 2000 Data Form, the site-specific threats, pressures, and activities with potential to impact on the European Site were reviewed and considered in relation to the Proposed Development. These are provided in **Table 5.2** below.

Table 5-2 Site-specific threats, pressures, and activities of Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC

Negative	Negative Impacts		
Rank	Threats and	Pressures	
Н	F01.01	intensive fish farming, intensification	
L	E03.03	disposal of inert materials	
L	G02.08	'Camping and caravans	
L	G05.01	Trampling, overuse,	
L	J01.01	burning down	
L	J02.11.01	Dumping, depositing of dredged deposits	
L	J02.12.01	sea defence or coast protection works, tidal barrages	
M	A02.01	agricultural intensification	
M	D03	shipping lanes, ports, marine constructions	
M	D03.01	port areas	
M	E01.03	Dispersed habitation	
M	G01.02	walking, horse-riding, and non-motorised vehicles	
M	G01.03.02	off-road motorized driving	
M	G02.01	'Golf course	
M	101	invasive non-native species	

A pathway for impact with regard to the site-specific threats/pressure Invasive non-native species (101) and Dispersed habitation (E01.03) were identified.



Species Specific Information

Estuaries [1130] 5.1.3.1

Description from SSCO document

PRICENED. 28/05/2024 According to the site-specific conservation objectives document (NPWS, 2013), the habitat area was estimated as 1258ha using OSi data and the defined Transitional Water Body area under the Water Framework Directive. The community extent was sourced based on intertidal surveys undertaken in 2007 and 2010 (ASU, 2007, 2012) and subtidal survey in 2010 (Aquafact, 2011).

According to the Article 17 reporting (NPWS, 2019) most of the pressures on estuaries come from various sources of pollution, including domestic wastewater, agriculture, and marine aquaculture. Alien invasive species such as the naturalised Pacific oyster (Magallana gigas) are also recognised as a significant pressure. The overall status of the habitat in the most recent 2019 assessment is favourable and stable. The status in 2013 was also favourable, while in 2007 the overall status of the habitat was unfavourable. As such, the overall trend of the habitat has changed from unfavourable to favourable and stable in the most recent assessment (NPWS 2019).

Targets and Attributes

Attribute	Target
	The permanent habitat area is stable or increasing, subject
Habitat area	to natural processes.
	Maintain the extent of the Zostera-dominated community
Community extent	and the Mytilidae-dominated community complex, subject
•	to natural processes.
	Conserve the high quality of the Zostera-dominated
Community structure: Zostera density	community, subject to natural processes
	Conserve the high quality of the Mytilidae-dominated
Community structure: Mytilus edulis density	community complex, subject to natural processes
	Conserve the following community types in a natural
Community distribution	condition: Intertidal fine sand with Peringia ulvae and
•	Pygospio elegans community complex; Estuarine mixed
	sediment to sandy mud with Hediste diversicolorand
	oligochaetes community complex; Fine sand with Angulus
	spp. and Nephtys spp. community complex; Sand to
	mixed sediment with amphipods community; Intertidal
	reef community.

Mudflats and Sandflats not Covered by Seawater at Low Tide 5.1.3.2 [1140]

Description from SSCO document

According to the site-specific conservation objectives document (NPWS, 2013), the habitat area within the SAC was estimated using OSi data as 2288ha. The community extent was sourced based on intertidal surveys undertaken in 2007 and 2010 (ASU, 2007, 2012).

According to the Article 17 reporting (NPWS, 2019), the overall status of the habitat in the most recent 2019 assessment is unfavourable and declining. In the 2013 assessment the habitat was assessed as inadequate, and improving, while in 2007 the habitat was assessed as inadequate. The change in trend from improving to deteriorating is due to a genuine decline in the habitat since 2013. This was caused partly by pollution from agricultural, forestry and wastewater sources, as well as impacts associated with marine aquaculture, particularly the Pacific oyster (Magallana gigas).



Targets and Attributes

Table 5-4 Targets and attributes of Mudflats and Sandflats [1140]

Table 5-4 Targets and autibutes of Mudnats and Sandhats	
Attribute	Target
Habitat area	The permanent habitat area is stable or increasing, subject to natural processes.
Community extent	Maintain the extent of the <i>Zostera</i> -dominated community and the <i>Mytilidae</i> -dominated community complex, subject to natural processes.
Community structure: Zostera density	Conserve the high quality of the Zostera-dominated community, subject to natural processes
Community structure: Mytilus edulis density	Conserve the high quality of the <i>Mytilida</i> e-dominated community complex, subject to natural processes
Community distribution	Conserve the following community types in a natural condition: Intertidal fine sand with <i>Peringia ulvae</i> and <i>Pygospio elegans</i> community complex; Estuarine mixed sediment to sandy mud with <i>Hediste diversicolor</i> and oligochaetes community complex; Fine sand with <i>Angulus</i> spp. and <i>Nephtys</i> spp. community complex;
	No more than 5% cover or under control
Vegetation composition: scrub/trees	

5.1.3.3 Petrifying Springs with Tufa Formation (Cratoneurion) [7220]

Description from SSCO document

According to the site-specific conservation objectives document (NPWS, 2013), the area of this habitat at Ballincar is recorded as 150m2 along c.200m of cliff (internal NPWS files). The SSCO document states that further unsurveyed areas maybe present within this SAC.

This habitat occurs along a seepage line in low (generally less than 10m in height) clay sea cliffs near Ballincar (internal NPWS files). Lyons and Kelly (2013) recognise three main subtypes of spring. This site falls into the coastal springs subtype (the other two being woodland springs and inland non-wooded springs). The hydrological regime is currently unknown at this site. Petrifying springs rely on permanent irrigation, usually from upwelling groundwater sources or seepage sources. This site appears to be fed from water seeping through clay sea cliffs.

According to the Article 17 reporting (NPWS, 2019), the overall status of this habitat in 2019 is assessed as inadequate and declining, which is a decline from inadequate and stable in the 2013 report. The trend is assessed as deteriorating (reported as stable in 2013,), which is due to improved knowledge, and decline is considered to have been on-going since before the last assessment.

Targets and Attributes

Table 5-5 Targets and attributes of Petrifying springs with tufa formation (Cratoneurion) [7220]

Attribute	Target
Habitat area	Area stable or increasing, subject to natural processes.
	No decline.
Habitat distribution	
	Maintain appropriate hydrological regimes.
Hydrological regime: height of water table; water	
flow	



5.1.3.4 Petromyzon marinus (Sea Lamprey) [1095]

Description from SSCO document

According to the site-specific conservation objectives document (NPWS, 2013), this SAC only covers marine/estuarine habitat, and it is not anticipated that it contains suitable spawning or nursery habitat. Migrating adult lamprey pass through the site en route to/from the Garavogue River, which flows out of Lough Gill. Lough Gill SAC (site code: 1976), which is adjacent to this SAC, encompasses the freshwater elements of sea lamprey habitat. Potential barriers for migrating lamprey include anthropogenic physical barriers and chemical barriers e.g., oxygen depletion or discharge of noxious pollutants.

According to the Article 17 reporting (NPWS, 2019), the overall conservation status of *P. marinus* has remained unchanged since the previous reporting period (2013) and is assessed as bad. The range is assessed as bad as it is more than 10% below the favourable reference range. The population is assessed as bad as it is estimated to be more than 25% below the favourable reference population. The habitat is assessed as inadequate as the area is not considered large enough to ensure the future long-term viability of sea lamprey. This assessment has changed since the previous reporting period and is based on new data and best expert judgement.

Targets and Attributes

Table 5-6 Targets and attributes for Sea Lamprey (Petromyzon marinus) [1095]

Attribute	Target
Distribution: extent of anadromy	No barriers for migratory life stages of lamprey moving from freshwater to marine habitats and vice versa

5.1.3.5 Lampetra fluviatilis (River Lamprey) [1099]

Description from SSCO document

According to the site-specific conservation objectives document (NPWS, 2013), this SAC only covers marine/estuarine habitat, and it is not anticipated that it contains suitable spawning or nursery habitat. Migrating adult lamprey pass through the site en route to/from the Garavogue River, which flows out of Lough Gill. Lough Gill SAC (site code: 1976), which is adjacent to this SAC, encompasses the freshwater elements of river lamprey habitat. Potential barriers for migrating lamprey include anthropogenic physical barriers and chemical barriers e.g., oxygen depletion or discharge of noxious pollutants.

According to the Article 17 reporting (NPWS, 2019), 'Given the large area of habitat availability and the likelihood that, in certain flow conditions, river lamprey is able to ascend many of the significant weirs on Irish rivers, it is possible that, in reality, they have a favourable conservation status. The inability to distinguish between L. fluviatilis and L. planeri larvae, however, and the challenges associated with sampling for adult river lamprey, means that an evaluation of their actual range and population size cannot be undertaken and status is assessed as unknown for the current reporting period'.



Targets and Attributes

largets and Attributes				
Table 5-7 Targets and attributes for River Lamprey (Lampetra fluviatilis) [1099]				
	C			
Attribute	Target			
	♡ .			
Distribution: extent of anadromy	No barriers for migratory life stages of lamprey moving from			
	freshwater to marine habitats and vice versa			

Phoca vitulina (Harbour Seal) [1365] 5.1.3.6

Description from SSCO document

According to the site-specific Conservation objectives supporting document-Marine habitats and species (NPWS, 2013), Harbour seals in Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC occupy both aquatic habitats and intertidal shorelines that become exposed during the tidal cycle. The species is present at the site throughout the year during all aspects of its annual life cycle which includes breeding (May to July approx.), moulting (August to September approx.) and non-breeding foraging and resting phases (October to April). Comparatively limited information is available for this site from the moult period in the annual cycle spanning the months of August and September. In acknowledging the limited understanding of aquatic habitat use by the species within the site it should be noted that all suitable aquatic habitat is considered relevant to the species range and ecological requirements at the site and is therefore of potential use by harbour seals.

Current information on locations selected by harbour seals in Cummeen Strand/Drumcliff Bay SAC during the breeding season is comparatively limited. Current sites are broadly within the following areas: sandbank areas south of Lissadell Strand and Ballygilgan Strand.

Current information on resting locations selected by harbour seals in Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC outside the breeding season is comparatively limited. Current sites are broadly in the following areas: sandbanks to the north of Rosses Point, south of Ballygilgan Strand and Lissadell Strand.

According to the Article 17 reporting (NPWS, 2019), based on the assessments for range, population, habitat and future prospects parameters, the overall conclusion is that the conservation status of harbour seal in Ireland is considered favourable and stable in 2019. This overall result and the results for the three assessment parameters are the same as in the previous two Article 17 assessments (i.e., favourable). Further, evidence from population estimation surveys carried out since the Directive came into force indicates that the all-age population of harbour seals (within the Natura 2000 network designated for the species in Ireland) has remained relatively stable.

Targets and Attributes

Table 5-8 Targets and Attributes of the Harbour Seal [1365]

Attribute	Target
Access to suitable habitat	Species range within the site should not be restricted by artificial barriers to site use.
Breeding behaviour	Conserve the breeding sites in a natural condition.
Moulting behaviour	Conserve the moult haul-out sites in a natural condition.



5.1.4 **Lough Gill SAC [001976]**

The potential for impacts on this SAC were identified in **Section 4.1** above. The identified pathways for effect include the following:

• The construction and operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary, which is designated as part of this SAC, via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site and via untreated stormwater entering the existing system and potentially entering the SAC through existing storm water infrastructure, adversely impacting the aquatic QI species which migrate through the Garavogue Estuary during their life cycle, in the absence of mitigation.

Table 5.9 below lists the qualifying features of this European Site and determines, in the light of their Conservation Objectives, whether there is any complete source-pathway-receptor chain, by which adverse effects may occur



Table 5-9 Assessment of Qualifying features of Lough Gill SAC potentially affected.			
Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, 15 December 2021), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/I
Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150]	To restore the favourable conservation condition of Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation in Lough Gill SAC	The proposed development area is located 1.4km east of Lough Gill SAC. As per Map 3 of the Site-Specific Conservation Objectives Document, this QI habitat Natural eutrophic lakes with <i>Magnopotamion or Hydrocharition</i> - type vegetation is mapped approx 4.4km upstream from the proposed development site, within Lough Gill. Further, there is no hydrological connectivity via the proposed development site to this QI Habitat via the Garavogue Estuary. As such, indirect impacts on the following QI habitat: Natural eutrophic lakes with <i>Magnopotamion or Hydrocharition</i> - type vegetation, can be ruled out due the absence of a hydrological connectivity via the proposed development site and this upstream freshwater QI habitat, the buffering distance of approx. 4.4km from the proposed development area as per Map 3 of the CO document, and the absence of a complete source-pathway-receptor chain. No complete source- pathway- receptor chain for any effect on this habitat as a result of the proposed development was identified. No further assessment is required	N
Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210]	To restore the favourable conservation condition of Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (*	The proposed development area is located 1.4km east of Lough Gill SAC. As per Map 4 of the Site-Specific Conservation Objectives Document, this terrestrial QI habitat: Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) is mapped approx 7.4km southeast from the proposed development site.	N



Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, 15 December 2021), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
	important orchid sites) in Lough Gill SAC	As such, indirect impacts on the following terrestrial QI habitat: Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) can be ruled out due to the terrestrial nature of the habitat, the buffering distance of approx. 7.4km from the proposed development site as per Map 4 of the CO document, and the absence of a complete source-pathway-receptor chain. No complete source- pathway- receptor chain for any effect on this habitat as a result of the proposed development was identified. No further assessment is required	
Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]	To restore the favourable conservation condition of Old sessile oak woods with <i>Ilex and Blechnum</i> in the British Isles in Lough Gill SAC	The proposed development area is located 1.4km east of Lough Gill SAC. As per Map 5 of the Site-Specific Conservation Objectives Document, this terrestrial QI habitat: Old sessile oak woods with <i>Ilex and Blechnum</i> in the British Isles are mapped approx 3km southeast from the proposed development site. As such, indirect impacts on the following terrestrial QI habitat: Old sessile oak woods with <i>Ilex and Blechnum</i> in the British Isles, can be ruled out due to the terrestrial nature of the habitat, the buffering distance of approx. 3km from the proposed development area as per Map 5 of the CO document, and the absence of a complete source-pathway-receptor chain. No complete source- pathway- receptor chain for any effect on this habitat as a result of the proposed development was identified. No further assessment is required	N



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Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, 15 December 2021), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	To restore the favourable conservation condition of Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) * in Lough Gill SAC	The proposed development area is located 1.4km east of Lough Gill SAC. As per Map 5 of the Site-Specific Conservation Objectives Document, this QI habitat: Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) is mapped approx 3km upstream from the proposed development site. Further, there is no hydrological connectivity via the proposed development site to this QI Habitat via the Garavogue Estuary. As such, indirect impacts on the following QI habitat: Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae), can be ruled out due the absence of a hydrological connectivity via the proposed development site and this habitat, the buffering distance of approx 3km from the proposed development area as per Map 5 of the CO document, and the absence of a complete source-pathway-receptor chain. No complete source- pathway- receptor chain for any effect on this habitat as a result of the proposed development was identified. No further assessment is required	N
Austropotamobius pallipes (White-clawed Crayfish) [1092]	To maintain the favourable conservation condition of White-clawed Crayfish (<i>Austropotamobius pallipes</i>) in Lough Gill SAC,	The proposed development area is located 1.4km east of Lough Gill SAC. As per map 6 in the Site-Specific Conservation Objective Document, the closest mapped record of this freshwater QI Species: <i>Austropotamobius pallipes</i> (White-clawed Crayfish) is approx 13km upstream of the proposed development site. The CO Document states the main population of this QI Species is in the Bonet River. Records indicate it is present on the main	N



Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, 15 December 2021), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
		channel of the Bonet from Dromahair upstream to Glenade Lough (which is in an adjoining SAC). It is also found on the Shanvaus and Owenmore rivers and in Doon Lough. As such, indirect impacts on the following QI species: Austropotamobius pallipes (White-clawed Crayfish) can be ruled out due the absence of a hydrological connectivity via the proposed development site and the supporting habitat for this freshwater QI species, the buffering distance of 13km from the proposed development area as per Map 6 of the CO document, and the absence of a complete source-pathway-receptor chain. No complete source-pathway-receptor chain for any effect on this species as a result of the proposed development was identified. No further assessment is required.	
Petromyzon marinus (Sea Lamprey) [1095]	To restore the favourable conservation condition of Sea Lamprey (Petromyzon marinus) in Lough Gill SAC	The proposed development area is located 1.4km east of Lough Gill SAC. The construction and operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site and via untreated stormwater entering the existing system and potentially entering the SAC through existing storm water infrastructure. As such, taking a precautionary approach, a potential pathway for indirect effects on this migratory QI species <i>Petromyzon marinus</i> (Sea Lamprey), which migrate through the Garavogue Estuary during their life cycle was	Y



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Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, 15 December 2021), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
Lampetra planeri (Brook Lamprey) [1096]	To restore the favourable conservation condition of Brook Lamprey (<i>Lampetra planeri</i>) in Lough Gill SAC	identified in the form of deterioration of water quality resulting from pollution to groundwaters and stormwaters, adversely impacting the water quality/ habitat quality, and supporting habitat (Garavogue Estuary) for this migratory aquatic fauna. A complete source-pathway-receptor chain for adverse effects on this species was identified and it is assessed further in this NIS. The proposed development area is located 1.4km east of Lough Gill SAC. Indirect impacts on the following freshwater QI species: Lampetra planeri (Brook Lamprey) can be ruled out due the absence of a hydrological connectivity via the proposed development site and the supporting habitat for this freshwater QI Species, the freshwater nature of this QI Species, and the buffering distance of 1.4km from the proposed development area and the absence of a complete source-pathway-receptor chain.	N
Lampetra fluviatilis (River Lamprey) [1099]	To restore the favourable conservation condition of River Lamprey (<i>Lampetra fluviatilis</i>) in Lough Gill SAC,	No complete source- pathway- receptor chain for any effect on this species as a result of the proposed development was identified. No further assessment is required The proposed development area is located 1.4km east of Lough Gill SAC. The construction and operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site, and via untreated stormwater	Y



Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, 15 December 2021), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
		entering the existing system and potentially entering the SAC through existing storm water infrastructure. Taking a precautionary approach, a potential pathway for indirect effects on this migratory QI species Lampetra fluviatilis (River Lamprey) which migrate through the Garavogue Estuary during their life cycle was identified in the form of deterioration of water quality resulting from pollution to groundwaters and stormwaters, adversely impacting the water quality/ habitat quality, and supporting habitat (Garavogue Estuary) for this migratory aquatic fauna. A complete source-pathway-receptor chain for adverse effects on this species was identified and it is assessed further in this NIS	
Salmo salar (Salmon) [1106]	To restore the favourable conservation condition of Atlantic Salmon (Salmo salar) in Lough Gill SAC	The proposed development area is located 1.4km east of Lough Gill SAC. The construction and operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site, and via untreated stormwater entering the existing system and potentially entering the SAC through existing storm water infrastructure. Taking a precautionary approach, a potential pathway for indirect effects on this migratory QI species <i>Salmo salar</i> (Salmon) which migrate through the Garavogue Estuary during their life cycle was identified in the form of deterioration of water quality resulting from pollution to groundwaters and	Y



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Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, 15 December 2021), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
		stormwaters, adversely impacting the water quality/ habitat quality, and supporting habitat (Garavogue Estuary) for this migratory aquatic fauna. A complete source-pathway-receptor chain for adverse effects on this species was identified and it is assessed further in this NIS	
Lutra lutra (Otter) [1355]	To maintain the favourable conservation condition of Otter (<i>Lutra lutra</i>) in Lough Gill SAC	The proposed development area is located 1.4km east of Lough Gill SAC. The construction and operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site. Taking a precautionary approach, a potential pathway for indirect effects on this QI species <i>Lutra lutra</i> (Otter) was identified in the form of deterioration of water quality resulting from pollution to groundwaters via the percolation of polluting materials through the bedrock underlying the site, and via untreated stormwater entering the existing system and potentially entering the SAC through existing storm water infrastructure., adversely impacting the water quality/ habitat quality, and supporting habitats for this aquatic fauna. Further, due to the distance (1.4km) and the lack of supporting habitats present on the site of proposed development, there is no potential for increased disturbance or displacement of the Otter associated with the proposed development.	Y



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Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, 15 December 2021), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
		A complete source-pathway-receptor chain for adverse effects on this species was identified and it is assessed further in this NIS.	



Site specific pressures and threats

As per the Natura 2000 Data Form, the site-specific threats, pressures, and activities with potential to effect on the SAC were reviewed and considered in relation to the proposed development. These are provided in **Table 5.10** below.

Table 5-10 Site-specific threats, pressures, and activities of Lough Gill SAC

Negative In	Negative Impacts			
Rank	Threats and Pressures			
High	E01.01	'Continuous urbanisation		
Low	В	Sylviculture, forestry		
Low	E03.03	disposal of inert materials		
Low	G01.01.01	motorized nautical sports		
Low	J02.05.02	'Modifying structures of inland water courses		
Low	J02.10	management of aquatic and bank vegetation for drainage purposes		
Medium	A10.01	removal of hedges and copses or scrub		
Medium	B06	grazing in forests/ woodland		
Medium	D01.01	paths, tracks, cycling tracks		
Medium	E01.03	E01.03 dispersed habitation		
Medium	101 invasive non-native species			

A pathway for impact with regard to the site-specific threat/pressure Invasive non-native species (101) Dispersed habitation (E01.03), and removal of hedges and copses and scrub (A10.01) was identified.



5.1.6 Species Specific information

There are no site-specific conservation objectives available for this SAC. According to the NPWS site synopsis, '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'. According to the standard data form, the lake and its associated rivers support an important population of Salmo salar. Otters are well established on this site as an Annex II species.

5.1.6.1 Petromyzon marinus (Sea Lamprey) [1095]

According to the Article 17 reporting (NPWS, 2019), the overall conservation status of Sea lamprey (*P. marinus*) has remained unchanged since the previous reporting period and is assessed as bad. The range is assessed as bad as it is more than 10% below the favourable reference range. The population is assessed as bad as it is estimated to be more than 25% below the favourable reference population. The habitat is assessed as inadequate as the area is not considered large enough to ensure the future long-term viability of sea lamprey. This assessment has changed since the previous reporting period and is based on new data and best expert judgement.

Targets and Attributes

Table 5-11 Targets and attributes associated with nominated site-specific conservation objectives for Sea Lamprey (Petromyzon marinus) [1095]

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Attribute	Target
Distribution: extent of anadromy	Greater than 75% of main stem length of rivers accessible from estuary
Annual run size	Annual run size should reflect that expected under near-natural conditions
Larval lamprey in fine sediment	Larval lampreys present in SAC catchment
Extent and distribution of spawning and nursery habitat	No decline in extent and distribution of spawning and nursery beds

5.1.6.2 Lampetra fluviatilis (River Lamprey) [1099]

According to the Article 17 reporting (NPWS, 2019) with reference to river lamprey, 'Given the large area of habitat availability and the likelihood that, in certain flow conditions, river lamprey is able to ascend many of the significant weirs on Irish rivers, it is possible that, in reality, they have a favourable conservation status. The inability to distinguish between L. fluviatilis and L. planeri larvae, however, and the challenges associated with sampling for adult river lamprey, means that an evaluation of their actual range and population size cannot be undertaken and status is assessed as unknown for the current reporting period'.



Targets and Attributes

Table 5-12 Targets and attributes associated with nominated site-specific conservation objectives for River Lamprey (Lampetra fluviatilis) [1096]

	<u> </u>
Attribute	Target
Distribution	Access to all water courses down to firsst order streams
Distrubution in suitable habitat	Not less than 50% of sample sites with suitable habitat positive for larval brook/river lamprey
Population structure of larvae	At least three age/size classes of larval brook/river lamprey present
Larval lamprey density in fine sediment	Mean density of brook/river larval lamprey in sites with suitable habitat at least 5/m ²
Extent and distribution of spawning and nursery habitat	No decline in extent and distribution of spawning and nursery bed

5.1.6.3 **Salmo salar (Salmon) [1106]**

According to the Article 17 reporting (NPWS, 2019) with reference to Salmon, 'There is no evidence of a decline in range since the directive came into force. The current range is considered sufficient for the long-term survival of the species. Therefore, range has been assessed as favourable. Increasing trends have been noted in salmon population size in the last 5 years. However, the current population estimate is 78% of the favourable reference population. Therefore, population has been assessed as inadequate. There is sufficient available habitat and ongoing pressures linked with habitat quality are not considered to be compromising the viability of the species. Therefore, habitat for the species has been assessed as favourable. Population estimates are unlikely to reach favourable status in the next 12 years. Therefore, future prospects have been assessed as inadequate. The overall conservation status has been assessed as inadequate with a stable trend. Although a short-term negative trend is reported for this species, the trend has reversed in the last 5 years. Therefore, an overall stable trend is reported.

Targets and Attributes

Table 5-13 Targets and attributes associated with nominated site-specific conservation objectives for Salmon (Salmo salar) [1106]

Attribute	Target
Distribution: extent of anadromy	100% of river channels down to second order accessible from estuary
Adult spawning fish	Conservation Limit (CL) for each system consistently exceeded
Salmon fry abundance	Maintain or exceed 0+ fry mean catchment-wide abundance threshold value. Currently set at 17 salmon fry/5 minutes sampling
Out-migrating smolt abundance	No significant decline
Number and distribution of redds	No decline in number and distribution of spawning redds due to anthropogenic causes
Water quality	At least Q4 at all sites sampled by EPA



5.1.6.4 **Lutra lutra (Otter) [1355]**

According to the Article 17 reporting (NPWS, 2019), 'The otter is widespread in Ireland occupying lotic and lentic freshwater systems from headwaters to estuaries, remote mountain lakes to city canals. It is also present along the coast including many offshore islands. Expert judgement was used to assess habitat availability/quality based on overall assessment of riparian, lacustrine and coastal waters, the species' catholic and adaptable diet (Reid et al. 2013c), plus the widespread nature of otters and the apparent population recovery seen over the short term. Given the widespread and adaptable nature of the otter (e.g., Reid et al., 2013a, b), habitat availability/quality is not considered to be or to have been a limiting factor in the species' range. Hence, the underlying trend in habitat is assumed to have remained stable. Overall, the species is assessed as Favourable, and the overall trend is demonstrating an on-going increase'.

Targets and Attributes

Table 5-14 Targets and attributes associated with nominated site-specific conservation objectives for Otter (Lutra lutra)

Table 5-14 Targets and attributes associated w	nin nominated site-specific conservation objectives for Otter (Luira luira)
Attribute	Target
Distribution	No significant decline
Extent of terrestrial habitat	No significant decline. Area mapped and calculated as 193.91ha along riverbanks/ lake shoreline/around ponds
Extent of freshwater (river) habitat	No significant decline. Length mapped and calculated as 80.38km
Extent of freshwater (Lake) habitat	No significant decline. Area mapped and calculated as 353.39ha
Couching sites and holts	No significant decline
Fish biomass avaliable	No significant decline
Barriers to connectivity	No significant increase



5.1.7 **Cummeen Strand SPA [004035]**

The potential for impacts on this SPA were identified in **Section 4.1** above. The identified pathways for effect include the following:

• The construction and operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary, which is designated as part of this SPA, via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site and via untreated stormwater entering the existing system and potentially entering the SPA through existing storm water infrastructure, adversely impacting the water quality/ habitat quality and supporting habitats for SCI Species designated as part of this SPA.

Table 5.15 below lists the qualifying features of this European Site and determines, in the light of their Conservation Objectives, whether there is any complete source-pathway-receptor chain, by which adverse effects may occur.

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Table 5-15 Assessment of Qualifying features of Cu.	mmeen Strand SPA potentially affected.		
Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, 10 September 2013), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
 Light-bellied Brent Goose (Branta bernicla hrota) [A046] Oystercatcher (Haematopus ostralegus) [A130] Redshank (Tringa totanus) [A162] 	To maintain the favourable conservation condition of Light-bellied Brent Goose, Oystercatcher, and Redshank in Cummeen Strand SPA	The proposed development site is located 1.3km south of Cummeen Strand SPA. Taking a precautionary approach, the grassland habitat within the proposed development site may potentially provide suitable foraging habitat for the following SCI Species: Light-bellied Brent Goose (<i>Branta bernicla hrota</i>), and Oystercatcher (<i>Haematopus ostralegus</i>). However, during the wintering bird surveys carried out, no Light bellied Brent Geese (<i>Branta bernicla hrota</i>) or Oystercatcher (<i>Haematopus ostralegus</i>) were recorded utilizing the habitats within or adjacent to the site. Given the widespread occurrence of this common habitat in the wider locality, the loss of this habitat within the proposed development site would not have a significant effect on these SCI species. Further, the proposed development site does not provide any supporting wetland habitats i.e., mudflats, estuaries, or inlets for the Redshank (<i>Tringa totanus</i>), As such, due to the buffering distance of approx. 1.3km from the project footprint to this SPA, due to the development site being buffered from the SPA by Sligo Town, tree line and hedgerow habitat, and the results of the dedicated bird surveys undertaken by MKO, there is no potential for ex situ disturbance or displacement related impacts on the SCI species for which Cummeen Strand SPA is designated for.	N



Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, 10 September 2013), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
		Any potential pathways for indirect effects identified in the form of deterioration of water quality and supporting wetland habitat within this SPA has been assessed below under Wetland and Waterbirds [A999]. No complete source- pathway- receptor chain for any effect on this habitat as a result of the proposed development was identified. No further assessment is required	
Wetland and Waterbirds [A999]	To maintain the favourable conservation condition of wetland habitat in Cummeen Strand SPA	The proposed development site is located 1.3km south of Cummeen Strand SPA. The proposed development site is located approx 1.3km south of the Garavogue Estuary, which is designated as part of Cummeen Strand SPA. As such, the construction and operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site and via untreated stormwater entering the existing system and potentially entering the SPA through existing storm water infrastructure. This may result in adverse impacts to the water quality/ habitat quality and supporting habitats for this SCI species. Following a precautionary principle, a potential pathway for indirect effects on the SCI waterbirds and supporting wetland habitat was identified in the form	Y



Qualifying feature	Conservation Objective Detailed conservation objectives for this site, (Version 1, 10 September 2013), were reviewed as part of the assessment and are available at www.npws.ie	Rationale	Potential for Adverse Effects Y/N
		of deterioration of water quality and supporting wetland habitat for the listed SCI species. A complete source-pathway-receptor chain for adverse effects on this habitat was identified and it is assessed further in this NIS	



5.1.8 Site-Specific Pressures and Threats

As per the Natura 2000 Data Form, the site-specific threats, pressures, and activities with potential to effect on the SPA were reviewed and considered in relation to the proposed development. These are provided in **Table 5-16**.

Table 5-16 Site-specific threats, pressures, and activities of Cummeen Strand SPA

Negative Im	Negative Impacts			
Rank		Threats and Pressures		
Medium	A08	Fertilization		
High	A08	Fertilization		
High	A04	Grazing		
High	F01	Marine and freshwater aquaculture		
High	A04	Grazing		
Medium	E01.03	Dispersed habitation		
Low	G01.02	walking, horse-riding, and non-motorised vehicles		

A pathway for impact with regard to the site-specific threat/pressure *Pollution (H)* and *Urbanised areas, human habitation (E01)* was identified.

5.1.9 Species- Specific Information

5.1.9.1 Wetlands

Description from SSCO document

According to the NPWS Conservation Objectives Supporting document (NPWS, 2013), the wetland habitats contained within Cummeen Strand SPA are identified as of conservation importance for non-breeding (wintering) migratory waterbirds. Therefore, the wetland habitats are considered to be an additional Special Conservation Interest.

According to the site synopsis (NPWS, 2014), 'Cummeen Strand is a large shallow bay stretching from Sligo Town westwards to Coney Island. It is one of three estuarine bays within Sligo Bay and is situated between Drumcliff Bay to the north and Ballysadare Bay to the south. The Garavogue River flows into the bay and forms a permanent channel. At low tide, extensive sand and mud flats are exposed. These support a diverse macro-invertebrate fauna which provides the main food supply for the wintering waterfowl. Invertebrate species such as Lugworm (Arenicola marina), Ragworm (Hediste diversicolor), Cockles (Cerastoderma edule), Sand Mason (Lanice conchilega), Baltic Tellin (Macoma balthica), Spire Shell (Hydrobia ulvae) and Mussels (Mytilus edulis) are frequent. Of particular note is the presence of eelgrass (Zosteranoltii and Z. angustifolia) beds, which provide a valuable food stock for herbivorous wildfowl. The estuarine and intertidal flat habitats are of conservation significance and are listed on Annex I of the E.U. Habitats Directive. Areas of salt marsh fringe the bay in places and provide roosting sites for birds during the high tide periods. Sand dunes occur at Killaspug Point and Coney Island, with a shingle spit at Standalone Point near Sligo Town'.



5.2 Hydrological Desk Study

The EPA web-mapper (https://gis.epa.ie/EPAMaps/) was consulted on the 07/03/2023 and 08/04/2024 regarding the water quality and status of waterbodies that are located downstream of the site of the proposed development.

There are no mapped EPA watercourses recorded within the proposed development site as per EPA Maps. There is evidence of historic watercourses that traverse the proposed development site, present to the south of the site flowing north through the proposed development site. The proposed development has been designed to account for the historic flow path of this watercourse. However, during the Ecological Surveys carried out, no watercourses with perceptible flow were identified on the site.

The proposed development site is located within the Sligo Bay Catchment, and the Carrowgobbadagh sub-catchment. The site is located in the Carrowmore west ground waterbody, in an area of high groundwater vulnerability (as per EPA maps).

The nearest mapped EPA waterbody is the River Knappagh (Sligo) located 17.3m to the northwest of the proposed development site, which flows in a north-westerly direction before discharging into the Garavogue Estuary as per EPA Maps. The Garavogue Estuary is located 1.4km north of the proposed development site. Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC and Cummeen Strand SPA are located 1.3km northwest of the proposed development site. Lough Gill SAC is located 1.4km southeast of the proposed development site. An unnamed/unmarked culverted stream is present to the east of the site, flowing in a northerly direction along the existing rail track, outside of the proposed development boundary.

The River Waterbodies Risk and Transitional Waterbodies Risk on EPA Maps for River Knappagh was under review at the time of preparing this report (07/03/2023/ 08/04/2024). As such this data cannot be reviewed at this time. However, the River Waterbody WDF Status 2016-2023 awarded the River Knappagh a 'Good' Status. The Transitional Waterbody WFD Status 2016-2023 awarded the Garavogue Estuary a 'Moderate 'status.

5.3 Additional Baseline Surveys

5.3.1 Wintering Bird Surveys

A dedicated wintering bird survey was undertaken at the development site (including the wider study area) by Rachel Minogue (BSc., Env) and Fiona Killeen (BSc. Env) on the 24/01/2023 and by Rachel Minogue (BSc., Env) and Tom Peters (BSc., MSc) on the 08/11/2023, to assess the suitability of the proposed development site to support a variety of wintering wildfowl and waders, including the bird species listed as Special Conservation Interests (SCIs) for Cummeen Strand SPA.

The wintering bird surveys were undertaken by appropriately qualified ecologists from MKO. All observations were recorded, and detailed point data was gathered for each species observation, with all bird species denoted using standard British Trust for Ornithology (BTO) codes and with the number of each species recorded next to each registration. The species recorded in the survey were those covered by Irish Wetlands Bird Survey (I-WeBS) counts, i.e., all divers, grebes, cormorant, shag, herons, swans, geese, ducks, rails, crakes, waders, gulls, and kingfisher. In addition to this, all other bird species, including all common and widespread passerines, were also recorded from within the proposed development site.



I-WeBS Survey

The wintering bird surveys undertaken at the proposed development site followed the rish Wetland Bird Survey (I-WeBS) methodology; the simple 'look-see' method, whereby all birds present within a predefined area are counted (Gilbert et al., 2011; Birdwatch Ireland, 2018). The survey was carried out at suitable points within the proposed development site, to have as large as possible a view of the entire site and potential adjacent daytime foraging habitat in the vicinity of the proposed development.

Transects

The proposed development site was scanned from suitable vantage points that gave unobstructed views of potentially suitable habitat and roosting locations for wintering bird species within the study area in advance of walkover survey. Vantage points were taken at multiple locations throughout the site before completing the walked transects to identify if bird species were foraging before completing the walked transect.

Walked transects were undertaken within the site boundary. During the survey species of note were recorded both within and adjacent to the development site. All bird species were denoted using standard British Trust for Ornithology (BTO) codes and with the number of each species recorded next to each registration.

5.3.1.1 Wintering bird Surveys Results

Species recorded during the wintering bird surveys undertaken by Rachel Minogue (BSc., Env) and Fiona Killeen (BSc. Env) on the 24/01/2023 and by Rachel Minogue (BSc., Env) and Tom Peters (BSc., MSc) on the 08/11/2023, and during the other ecological multidisciplinary surveys undertaken are those typical of suburban/ urban environments and are detailed in **Table 5.20 below.** No species associated with the nearby Cummeen Strand SPA [004035] were recorded utilizing the habitats within the proposed development site.

Table 5-17 Bird Species Recorded Within and Adjacent to the Proposed Development Boundary.

		gacent to the 110posed Development Boundary.	
Species	Number	Behaviour	Status
Chaffinch (Fringilla coelebs),	1	Perched on branch	Green
Robins (<i>Erithacus rubecula</i>),	8	Perched on branch	Green
Rooks (Corvus frugilegus)	27	Flying north to southFlying east to westFeeding in Agricultural grassland	Green
Jackdaws (Corvus monedula)	14	Feeding in Agricultural grasslandFlying east to north over site	Green
Pheasant (<i>Phasianus</i> colchicus)	1	Flushed from centre of site	Green
Collared Doves (Streptopelia decaocto)	5	Flying over the west section of the site	Green
Magpie (<i>Pica pica</i>)	15	Perched in branches/ telephone wire.Flying south to north over site	Green
Wood Pigeon (<i>Columba</i> palumbus)	4	Flying north to south over site	Green



		^	
Bullfinch (<i>Pyrrhula pyrrhula</i>)	5	Perched in branches	Green
Pied Wagtail (<i>Motacilla alba</i> yarrellii)	3	Flying east to westPerched in branches	Green.
Blackbird (<i>Turdus merula</i>)	1	Perched in branch	Green
Little Egret (<i>Egretta garzetta</i>)	1	Foraging in agricultural grassland to centre of site	Green
Starling (Sturnus vulgaris)	2	Perched in branch	Amber
Common Gulls (Larus canus)	4	flying from the north to the south of the site	Amber
Herring Gull (<i>Larus</i> argentatus)	13	Flying west to south over site	Amber
Woodcock (<i>Scolopax</i> rusticola)	3	 flushed from the wooded area to the southwest of the site, outside of the proposed development boundary. 	Red
Snipe (Gallinago gallinago)	5	Flushed from the wet grassland to the south of the site, outside of the proposed development boundary	Red



ASSESSMENT OF POTENTIAL EFFECTS & ASSOCIATED MITIGATION

This section of the NIS assesses the potential effects of the proposed development on the identified relevant Qualifying Interests/Special Conservation Interests. This assessment is undertaken in the absence of any mitigation and in respect of the conservation objectives of the European Sites. The Conservation Objectives each of the European Sites assessed were reviewed on the 11/04/2023. The Conservation Objectives for these sites are available at the following locations:

- NPWS (2021) Conservation Objectives: Lough Gill SAC [001976]. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
- NPWS (2013) Conservation Objectives: Cummeen Strand SPA [004035]. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, and the Gaeltacht.
- NPWS (2013) Conservation Objectives: Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC [000627]. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, and the Gaeltacht.

Following the initial impact assessment, mitigation is prescribed where necessary to avoid adverse effects on the Conservation Objectives of the relevant QIs/SCIs.

Potential for Direct Effects on the European Sites

The development site lies entirely outside of the boundary of any European Site and as such there is no potential for direct effects on the Qualifying Interests of Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC and Lough Gill SAC, or the Special Conservation Interests of Cummeen Strand SPA.

There are no Annex I habitats within the proposed development site. Further, no QI habitats associated with Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC, Lough Gill SAC, and Cummeen Strand SPA were identified on the site of the proposed development during the survey undertaken on the site. The main habitats recorded within the boundary of the proposed development site are classified as Improved Agricultural Grassland (GA1), Scrub (WS1), Recolonising Bare Ground (ED3), Drainage Ditch (FW4), Spoil and Bare Ground (ED2), Wet Grassland (GS4), Buildings and Artificial Surfaces (BL3) and Hedgerow (WL1).

Therefore, there is no potential for direct effects on any European Site as a result of the proposed development.



Potential for Indirect Effects on the Egropean CENED. 28/05/2024 **Sites**

Deterioration of Water Quality During the 6.2.1 **Construction Phase**

Following a precautionary approach, the construction phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary which is designated as part of Cummeen Strand/Drumcliff Bay SAC, Lough Gill SAC, and Cummeen Strand SPA, via pollution to groundwaters through the percolation of polluting materials through the bedrock underlying the site.

Therefore, a potential pathway for indirect effects on the groundwater dependent Qualifying Interests (QIs) of Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC, Lough Gill SAC, and the Special Conservation Interests (SCIs) of Cummeen Strand SPA was identified in the form of deterioration of water quality and supporting habitats for aquatic fauna via pollution to groundwaters during the construction phase of the proposed development. This may result in adverse impacts to the groundwater influenced QI/SCI habitats and species for which Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC, Lough Gill SAC, and Cummeen Strand SPA are designated for, in the absence of mitigation.

6.2.1.1 Preventative measures to avoid impact on water quality during the Construction Phase.

To prevent potential pathways for pollution to groundwater, a Construction and Environmental Management (CEMP) has been prepared, as described fully in Section 2.3 of this report. The CEMP measures that have been incorporated into the design of the proposed development and are summarised in the following subsections. An experienced main contractor will be appointed for the civil works for the construction phase. The main contractor for the works will be required to comply with this CEMP and any revisions made to this document. The full CEMP is submitted as part of this application.

The mitigation measures described below in subsections 6.2.1.1.1.- 6.2.1.1.6, ensure that the proposed development does not prevent or obstruct any of the Qualifying Interests (QIs) from reaching favourable conservation status as per Article 1 of the EU Habitats Directive, ensuring that the proposed development does not adversely affect the integrity of any Designated European sites.

6.2.1.1.1 Protecting Water Quality

Prior to the commencement of any subsequent construction activities, the necessary mitigation measures will be put in place to ensure that no silt laden water runoff generated at the site will flow to nearby watercourses thus ensuring the protection of surface water during the works. This will involve confirming the location of all existing services and delineating between drainage systems. Surface waters will be managed to ensure the prevention of run off from areas where excavation occur does not result in silt laden water entering the existing storm water network. Stockpiled material will be covered with polyethylene sheet and if deemed necessary will be surrounded by silt fencing where there is a risk of run-off during prolonged periods of rainfall.

Waters will not be discharged directly to any existing surface water sewers or drains. Particular emphasis will also be placed on hazardous materials entering the surface water management system as well as spill or leaks of fuel oils. Section 4 provides an Emergency Response Plan for dealing with spillages which may result in adverse environmental effects.



Excavation works have the potential to encounter sub-surface waters and ground water. In the event of encountering groundwaters during excavation, waters will be pumped from the excavation and discharged through a pipe with a silt bag attached on to an area of overland vegetation within the site boundary. A series of silt fences will also be utilised around the area where the water will be discharged, if necessary.

boundary. A series of silt tences will also be understood discharged, if necessary.

Surface and storm water generated during the operational phase will be captured by the proposed drainage network within the confines of the site boundary.

6.2.1.1.2 Prevention Pollution Control Measures

The site of the proposed development does not contain any EPA mapped watercourses and no watercourses with perceptible flow were noted within the site. There is evidence of historical land drains within the site but as noted above, no perceptible water flow was observed during ecological survey walkovers. The following measures will be put in place to prevent the transportation of silt laden water or pollutants from entering any of the wider environments including watercourses/drains within or near the site:

- Any requirement for temporary fills or stockpiles will be damped down or covered with
 polyethylene sheeting as required to avoid sediment release associated with heavy rainfall.
- Excavations will be carried out using a suitably sized excavator and, in all circumstances, excavation depths and volumes will be minimised.
- Excavated spoil will be stockpiled and contained entirely within the confines of the site
 boundaries. Depending on the nature of the excavated material, the stockpiles of excavated
 materials will be sealed with a digger bucket to reduce the potential for sediment runoff.
 These areas will be surrounded with silt fencing, if deemed necessary to prevent runoff.
- Works shall not take place at periods of high rainfall and shall be scaled back if heavy rain
 is forecast.
- Any excess construction material shall be removed from the area and sent to an authorized waste recovery facility.
- Spill kits shall be available in each item of plant required.
- In the event of encountering groundwaters during excavation, groundwater will be pumped out of the excavation using a pump equipped with a silt bag on the discharge pipe, if necessary, to capture any silty material prior to subsequent natural percolation to ground. The area surrounding the silt bag will be surrounded by silt fencing if deemed necessary.
- All diesel or petrol pumps required onsite will be operated within bunded units.
- As construction advances there may be a small requirement to collect and treat surface
 water within the site. This will be completed using perimeter swales at low points around
 the construction areas, and if required water will be pumped from the swales into silt bags
 prior to overland discharge allowing water to percolate naturally to ground. Overland
 discharge, if required, will be located within the confines of the site boundary.
- The minimum number of soil/subsoils and bedrock material should be removed from site. Soil may be reused for landscaping elsewhere on the site.

6.2.1.1.3 Cement Based Products Control Measures

The complete washing out of concrete trucks will not be permitted at the site. Suppliers will be directed back to their own facility to complete the washout process. However, a washout area for chute cleaning will be provided at various locations in close proximity to the concrete pour locations.

The following mitigation measures are proposed to avoid release of cement leachate from the site:

• No batching of wet-cement products will occur on site.



- Ready-mixed supply of wet concrete products and where possible, emplacement of precast elements, will take place. Where possible pre-cast elements for curverts and concrete works will be used.
- No washing out of any plant used in concrete transport or concreting operations will be allowed on-site.
- Where concrete is delivered on site, only chute cleaning will be permitted, using the smallest volume of water possible. No discharge of cement contaminated waters to the construction phase drainage system or directly to any artificial drain or watercourse will allowed.
- Use weather forecasting to plan dry days for pouring concrete.
- Ensure pour site is free of standing water and plastic covers will be ready in case of sudden rainfall event.

6.2.1.1.4 Refuelling, Fuel and Hazardous Materials Storage

The following measures are proposed to avoid release of hydrocarbons at the site:

- Storage/refuelling will be located in and carried out in a designated area of the construction
 site, located a suitable distance from excavation works. This area should be underlain by
 concrete hard standing, and tanks should be inspected for leaks regularly. Spill kits should
 be supplied at these stations and staff should be trained in their use and in spill control.
 Drainage from these areas shall be diverted for collection and not discharged into
 waterbodies without treatment and other best management practices.
- Fuels, lubricants and hydraulic fluids for equipment used on the site will be carefully
 handled to avoid spillage, properly secured against unauthorised access or vandalism, and
 provided with spill containment.
- Minimal refuelling or maintenance of construction vehicles or plant will take place on site.
 Off-site refuelling will occur at a controlled fuelling station.
- On-site refuelling will take place by direct refuelling from the delivery truck or from fuel stored within a bunded fuel tank. Mobile measures such as drip trays and fuel absorbent mats will be used during all refuelling operations.
- Vehicles will never be left unattended during refuelling. Only dedicated trained and competent personnel will carry out refuelling operations and plant refuelling procedures shall be detailed in the contractor's method statements.
- The small volume of fuels, lubricants and hydraulic fluids that will be stored at the site will be placed within an appropriately bunded storage area within the boundaries of the proposed development sites.
- Storage bunds/trays, if required will be constructed of an impermeable membrane (HDPC Plastic) and will have the adequate capacity to contain the volume of the liquids contained therein, if a leak/spillage does occur from one of the storage vessels.
- The storage area will contain a small bund lined with an impermeable membrane in order to prevent any contamination of the surrounding soils and vegetation.
- All site plant will be inspected at the beginning of each day prior to use. Defective plant shall not be used until the defect is satisfactorily fixed. All major repair and maintenance operations will take place off site.
- Potential impacts caused by spillages etc. during the construction phase will be reduced by keeping spill kits and other appropriate equipment on-site.
- Spill kits will be used to deal with any accidental spillage in and outside the refuelling area.
 Spill control measures as outlined fully in the CEMP accompanying this application will be adhered to.
- Harmful materials shall be stores on site for use in connection with the construction works only. These materials shall be stored in a controlled manner.

6.2.1.1.5 **Spill Control Measures**



It is not proposed to store any large volumes of oils/fuels for the purpose of refuelling on the site as refuelling of large plant equipment will be carried out directly from the fuel supplier's delivery truck at a designated refuelling location on site. Where fuel is required to be stored for smaller plant and equipment, it will be in a bunded fuel tank will be stored within the confines of the site boundary. It will be positioned on an impermeable surface and will be equipped with a spill kit. This bunded fuel tank will be used for smaller plant and equipment i.e., site dumpers and teleporters. Onsite plant (excavator) will be refuelled by an external contractor who will call to site as required. Road vehicles will not be refuelled at the site.

In the event of minor spills and leaks from road vehicles and the onsite excavator, the following steps provide the procedure to be followed in the event of any significant spill or leak.

- Stop the source of the spill and raise the alarm to alert people working in the vicinity of any potential dangers.
- If applicable, eliminate any sources of ignition in the immediate vicinity of the incident.
- Contain the spill using the spill control materials, track mats or other material as required. Do not spread or flush away the spill.
- If possible, cover or bund off any vulnerable areas where appropriate such as drains or watercourses.
- If possible, clean up as much as possible using the spill control materials.
- Contain any used spill control material and dispose of used materials appropriately using a fully licensed waste contractor with the appropriate permits so that further contamination is limited.
- Notify the Environmental Manager immediately giving information on the location, type and extent of the spill so that they can take appropriate action and further investigate the incident to ensure it has been contained adequately.
- External consultants will inspect the site and ensure the necessary measures are in place to contain and clean up the spill and prevent further spillage from occurring.
- The Environmental Manager will notify the appropriate regulatory body such as Sligo County Council if deemed necessary.

6.2.1.1.6 **Dust Control**

Construction dust can be generated from many on-site activities such as excavation and backfilling. The extent of dust generation will depend on the type of activity undertaken, the location, the nature of the dust, i.e., soil, sand, etc and the weather. In addition, dust dispersion is influenced by external factors such as wind speed and direction and/or, periods of dry weather. Construction traffic movements also have the potential to generate dust as they travel along the approach road. The measures below will also prevent construction debris arising on the public road network.

Proposed means to control dust include:

- Any site roads with the potential to give rise to dust will be regularly watered, as appropriate, during dry and/or windy conditions.
- The designated public roads outside the site and along the main transport routes to the site will be regularly inspected by Site Management for cleanliness and cleaned as necessary.
- Material handling systems and material storage areas will be designed and laid out to minimise exposure to wind.
- Water misting or bowsers will operate on-site as required to mitigate dust in dry weather conditions.
- The transport of soils or other material, which has significant potential to generate dust, will be undertaken in tarpaulin-covered vehicles where necessary.
- All construction related traffic will have speed restrictions on un-surfaced roads to 15 kph.
- Daily inspection of construction sites to examine dust measures and their effectiveness.



When necessary, sections of the approach road will be swept using a truck mounted vacuum sweeper.



6.2.2 **Deterioration of Water Quality During the Operational Phase**

The proposed stormwater system will connect to an existing manhole to the northwest of the site. As such, following the precautionary approach, the operational phase of the proposed development may result in the deterioration of water quality in the Garavogue Estuary which is designated as part of Cummeen Strand/ Drumcliff Bay SAC, Lough Gill SAC, and Cummeen Strand SPA, via untreated stormwater entering the existing system and potentially entering these designated sites through existing storm water infrastructure.

Therefore, a potential pathway for indirect effects on the aquatic dependent Qualifying Interests (QIs) of Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC, Lough Gill SAC, and the Special Conservation Interests (SCIs) of Cummeen Strand SPA was identified in the form of deterioration of water quality and supporting habitats for aquatic fauna via pollution to storm waters during the operational phase of the proposed development. This may result in adverse impacts to the QI/SCI species and habitats for which Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC, Lough Gill SAC, and Cummeen Strand SPA are designated for, in the absence of mitigation.

6.2.2.1 Operational Phase Control Measures and Assessment

To prevent potential pathways for pollution to stormwaters, the drainage design, including the Foul Water and Storm Water Drainage Design, Attenuation Design, Sustainable Urban Drainage System (SuDs) Design, and Culvert Design as described fully in **Section 2.2** of this report, and summarised below in the **subsections 6.2.2.1.1** and **6.2.2.1.2** and the connection into the Irish Water Foul network, ensure that the proposed development does not prevent or obstruct any of the Qualifying Interests (QIs) from reaching favourable conservation status as per Article 1 of the EU Habitats Directive. Following the implementation of the operational drainage design, no significant impact on water quality, and in turn on European Designated Sites will occur.

6.2.2.1.1 Production of Foul Sewage

The operational phase of the proposed development will result in the production of foul waters/sewage.

It is proposed to direct the foul sewer from the development to the north-eastern boundary of the site to the existing foul sewer network traversing the site. The proposed foul sewer will discharge under gravity to the existing foul network. As part of the design process, it is proposed to divert sections of the existing foul network to cater for the proposed development.

The drainage systems including all pipe sizes and gradients have been designed using Flow Drainage Design Software. The pipework to the drainage system has been designed to provide for six times the dry weather flow (DWF) in accordance with the recommendations of the Greater Dublin Strategic Drainage Study (GDSDS). It is proposed that all foul water pipes will be in accordance with Section 3.13 of the Irish Water Code of Practise. The maximum pipe diameter is to be 600mm which is used to connect to the existing 600mm foul water pipe as part of the foul water pipe diversion. All other pipe diameters will be of diameters 150mm or 225mm. All pipes will be laid with a maximum and minimum gradient such that all velocities fall within the limits of 0.75 and 2.5m/sec as set out in the Uisce Éireann Code of Practice for Wastewater Infrastructure.

The foul drainage for the entire development will be collected throughout the site in the foul pipe network and will then discharge by gravity to the north-eastern boundary of the site, to connect to the existing foul sewer network by traversing the site.

Refer to Drawing No. 6943-JOD-XX-ZZ-DR-C-703-001 available in the Civils Design Report submitted as part of this application for details on the proposed Foul Drainage Network.



For full details on the proposed Foul Water Drainage Design for the proposed development refer to the Civils Design Report submitted as part of this application.

A confirmation of feasibility from Uisce Éireann has been received for 177 dwelling units and has been deemed feasible subject to upgrades. The upgrades include the resealing of problem joints and manholes on the existing foul sewer pipe that traverses the proposed development and the provision of a path for the existing water course. The water course is proposed to be conveyed via culvert. A new pre connection application has been submitted to Uisce Éireann for the revised dwelling unit count of 207. The increase in units should not alter the validity of the pre connection application as the foul water system for the 207 dwelling units have been designed to Uisce Éireann Codes of Practice for Wastewater Infrastructure, in particular complying with the minimum pipe diameters and gradients stated in Section 3.6 of the Uisce Éireann Codes of Practice for Wastewater Infrastructure.

A confirmation of feasibility from Uisce Éireann is submitted as part of this application.

6.2.2.1.2 Storm Water Drainage Design

It is proposed to discharge the storm water generated on the southern section of the development through a petrol interceptor to an appropriately sized attenuation tank, then to discharge to the proposed culvert system at manhole S02. It is proposed to discharge the storm water generated on the northern section of the development through a petrol interceptor to an appropriately sized attenuation tank, then to discharge to the proposed culvert system at manhole S01.1. Both attenuation tanks are to be located within the public amenity areas. The storm water generated from the development will discharge under gravity.

The storm water drainage system has been designed to cater for the proposed dwelling unit areas of hardstanding (including roofs, footways, roadways, and car parking). The proposed storm network will consist of two storm water system: a north and south system. The north storm water system will discharge surface water run-off via gravity into an appropriately sized attenuation system located in the public northern amenity area. It will then discharge from the attenuation system to the proposed culvert at manhole S01.1 at half of the greenfield run off rate for the proposed site area. The south storm water system will discharge surface water run-off via gravity into an appropriately sized attenuation system located in the public southern amenity area. It will then discharge from the attenuation system to the proposed culvert at manhole S02 at half of the greenfield run off rate for the proposed site area. It is proposed that all storm water generated by the site will discharge by gravity, passing through a Class 1 Klargester Bypass Separator or equal and similar approved before entering the attenuation system.

It is proposed to construct a culvert running from east to northwest through the proposed site. This culvert will be sized to cater for the catchment areas to the south, east and southeast of the proposed site, for a total area of 49.13 Ha in addition to the area of the proposed site. The storm water from the proposed development will also discharge to the culvert. This culvert will leave the proposed development from the northwest, then be continued north towards the existing manhole in Larkhill Road.

For full details on the proposed Storm Water Drainage Design for the proposed development refer to the Civils Design Report submitted as part of this application.

Refer to Drawing No. 6943-JOD-XX-ZZ-DR-C-703-001 available in the Civils Design Report submitted as part of this application for details on the proposed storm water drainage.



ASSESSMENT OF RESIDUAL ADVERSE EFFECTS

The potential for residual adverse effects on each of the individual relevant Qualifying Features of the Screened in European Sites following the implementation of mitigation, is assessed in this section of the report.

Based on the above, in view of best scientific knowledge, on the basis of objective information, there is no potential for adverse effect on the identified QIs/SCIs and their associated targets and attributes, or on any European Site Potential pathways for effect have been robustly blocked through measures to avoid impacts and the incorporation of best practice/mitigation measures into the project design.

Taking cognisance of measures to avoid impacts and best practice/mitigation measures incorporated into the project design which are considered in the preceding section, the Proposed project will not have an adverse effect on the integrity of any European Site.

The proposed project will not prevent the QIs/SCIs of European Sites from achieving/maintaining favourable conservation status in the future as defined in Article 1 of the EU Habitats Directive. A definition of Favourable Conservation Status is provided below:

'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 within the territory referred to in Article 2; The conservation status will be taken as 'favourable' 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.'

Based on the above, it can be concluded in view of best scientific knowledge, on the basis of objective information that the Proposed project will not adversely affect the Qualifying Interests/Special Conservation Interests associated with any European Site.



ASSESSMENT OF CUMULATIVE CONTROL EFFECTS

A search and review in relation to plans and projects that may have the potential to result in cumulative and/or in-combination impacts on European Sites was conducted. This assessment focuses on the potential for cumulative in-combination effects on the European Sites where potential for adverse effects was identified in **Section 4** of this report. This included a review of online Planning Registers, development plans and other available information and served to identify past and future plans and projects, their activities and their predicted environmental effects. A list of the plans and projects considered is provided in **Appendix 1** of this report.

Assessment material for this in-combination impact assessment was compiled on the relevant developments within the vicinity of the Proposed Development and was verified on the 08/04/2024. The material was gathered through a search of relevant online Planning Registers, reviews of relevant documents, planning application details and planning drawings, and served to identify past and future projects, their activities, and their environmental impacts. All relevant projects were considered in relation to the potential for in-combination effects. All relevant data was reviewed (e.g., individual EISs/EIARs, layouts, drawings etc.) for all relevant projects where available. The plans and projects considered include those listed in **Appendix 1.** These consisted mainly of small-scale domestic developments and upgrades.

The dominant land uses in the area were also considered in the assessment, which included pastoral agriculture.

Following the detailed assessment provided in the preceding sections, it is concluded that, the proposed development will not result in any residual adverse effects on any of the European Sites, their integrity or their conservation objectives when considered on its own. There is therefore no potential for the proposed development to contribute to any cumulative adverse effects on any European Site when considered in-combination with other plans and projects.

In the review of the projects that was undertaken, no connection, that could potentially result in additional or cumulative impacts was identified. Neither was any potential for different (new) impacts resulting from the combination of the various projects and plans in association with the proposed development.

Taking into consideration the reported residual impacts from other plans and projects in the area and the predicted impacts with the current proposal, no residual cumulative impacts have been identified with regard to any European Site.



9. **CONCLUDING STATEMENT**

This NIS has provided an assessment of all potential direct or indirect adverse effects on European Sites.

Where the potential for any adverse effect on any European Site has been identified, the pathway by which any such effect may occur has been robustly blocked through the use of avoidance, appropriate design and mitigation measures as set out within this report and its appendices. The measures ensure that the construction and operation of the proposed development does not adversely affect the integrity of European sites.

Therefore, it can be objectively concluded that the Proposed Development, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site



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ASSESSMENT OF CUMULATIVE EFFECTS Plans The following development plans have been reviewed and taken into consideration as part of this processment. 1.

1.1

assessment:

- Sligo County Development Plan 2017-2023
- Northern & Western Regional Assembly Regional Spatial and Economic Strategy 2020-2032 (RSES)
- Ireland's 4th National Biodiversity Action Plan 2023-2030

The review focused on policies and objectives that relate to Natura 2000 sites and natural heritage. Policies and objectives relating to sustainable land use were also reviewed

Table 8.1 Review of plans

Table 8.1 Review of	plans	
Plan	Key Policies/Issues/Objectives Directly Related to European Sites in The Zone of Influence	Assessment of evelopment compliance with policy
Sligo County Development Plan 2017-2023	Forestry Policies:P-FOR-2 Discourage new forestry development, except for broadleaf, in proposed/candidate and adopted NHAs, SACs and SPAs, in designated Sensitive Rural Landscapes and Visually Vulnerable Areas, along. designated Scenic Routes and in water quality-sensitive areas. (Broadleaf forestry will be open to consideration in these areas and in all proposed and adopted NHAs, SPAs and SACs, will be subject to consultation with the DECLG and shall have regard to any management plans prepared by the Department.)	The Development plan was comprehensively reviewed, with particular reference to Policies and Objectives that relate to the Natura 2000 network and other natural heritage interests. No potential for cumulative impacts when considered in conjunction with the current proposal were identified.
	Tourism Development Policies: P-TOU-1 Promote the development of tourism in a sustainable manner and encourage the provision of a comprehensive range of tourism facilities, subject to location, siting and design criteria, the protection of environmentally sensitive areas and other planning considerations. Development that might be detrimental to scenic and heritage assets, in cSACs, SPAs, proposed NHAs, designated Sensitive Rural Landscapes and Visually Vulnerable Areas, and along designated Scenic Routes will be strictly controlled.	There will be no impact on designated sites as a result of the development. Best practice preventative measures will be implemented to avoid effects on European Sites. There will be no adverse effects on receptors listed as QIs/SCIs of European Sites, as a result of the development.
	Heritage Objectives: P-NH-3 Protect and, where possible, enhance the plant and animal species and their habitats that have been identified under the EU Habitats Directive, EU Birds Directive, the Wildlife Act and the Flora Protection Order.	
	Designated Sites for Nature Conservation Policies: P-DSNC-1 Protect and maintain the favourable conservation status and conservation value of all natural heritage sites designated or proposed for designation in accordance with European and national legislation and agreements. These include Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Natural Heritage Areas (NHAs), Ramsar Sites, Statutory Nature Reserves. In addition, the Council will identify, maintain, and develop non-designated areas of high nature conservation value which serve as linkages or 'steppingstones' between protected sites in accordance with Article 10 of the Habitats Directive.	
	P-DSNC-2 Promote the maintenance and, as appropriate, achievement of 'favourable conservation statuses of habitats and species in association with the NPWS.	

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P-DSNC-3 Carry out an appropriate level of assessment for all development plans, land-use plans and projects that the Council authorizes or proposes to undertake or adopt, to determine the potential for these plans or projects to impact on designated sites, proposed designated sites or associated ecological corridors and linkages in accordance with the Habitats Directive, All appropriate assessments shall be in compliance with the provisions of Part XAB of the Planning and Development Act 2000.

P-DSNC-4 Consider development within, or with the potential to affect, Natural Heritage Areas or proposed Natural Heritage Areas, where it is shown that such development, activities, or works will not have significant negative impacts on such sites or features, or in circumstances where impacts can be appropriately mitigated.

Designated Sites for Nature Conservation Objective- O-DSNC-1 Identify and protect local areas of high nature conservation value and support the management of landscape features which are of major importance for wild fauna and flora in accordance with Article 10 of the Habitats Directive.

Nature conservation outside designated sites - policies

P-NCODS-2 Ensure that development proposals, where relevant, improve the ecological coherence of the Natura 2000 network and encourage the retention and management of landscape features that are of major importance for wild fauna and flora as per Article 10 of the Habitats Directive

P-NCODS-3 Ensure that proposals for development protect and enhance biodiversity, wherever possible, by minimising adverse impacts on existing habitats and by including mitigation and/or compensation measures, as appropriate, which ensure that biodiversity is enhanced.

P-NCODS-4 Apply the precautionary principle in relation to development proposals with potential to impact on County Biodiversity Sites or on local nature conservation interest by requiring an ecological impact assessment (EcIA) to ensure that any proposed development will not affect the integrity and conservation value of the site

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		P.C.C.
Regional Spatial and Economic Strategy 2020- 2032	RPO 5.4 Encourage the prioritisation of Site-Specific Conservation Objectives (SSCO) for all sites of Conservation Value, designated in EU Directive (i.e., SACs, SPAs) to integrate with the development objectives of this Strategy. RPO 5.5 Ensure efficient and sustainable use of all our natural resources, including inland waterways, peatlands, and forests in a manner which ensures a healthy society a clean environment and there is no net contribution to biodiversity loss arising from development supported in this strategy. Conserve and protect designated areas and natural heritage areas. Conserve and protect European sites and their integrity. RPO 5.7 Ensure that all plans, projects, and activities requiring consent arising from the RSES are subject to the relevant environmental assessment requirements including SEA, EIA, and AA as appropriate.	The Development plan was comprehensively reviewed, with particular reference to Policies and Objectives that relate to the Natura 2000 network and other natural heritage interests. No potential for cumulative impacts when considered in conjunction with the current proposal were identified. There will be no impact on designated sites as a result of the development. Best practice preventative measures will be implemented to avoid effects on European Sites. There will be no adverse effects on receptors listed as QIs/SCIs of European Sites, as a result of the development.
Ireland's 4th National Biodiversity Action Plan 2023-2030	Objective 1: Adopt a Whole-of Government, Whole of-Society Approach to Biodiversity. Proposed actions include capacity and resource reviews across Government; determining responsibilities for the expanding biodiversity agenda providing support for communities, citizen scientists and business; and mechanisms for the governance and review of this National Biodiversity Action Plan.	The Development plan was comprehensively reviewed, with particular reference to Policies and Objectives that relate to the Natura 2000 network and other natural heritage interests. No potential for cumulative impacts when considered in conjunction with the current proposal were identified. There will be no impact on designated sites as a result of the development. Best practice preventative measures will be implemented to avoid effects on European Sites. There will be no adverse effects on receptors listed as
	Objective 2: Meet Urgent Conservation and Restoration Needs. Supporting actions will build on existing conservation measures. Efforts to tackle Invasive Alien Species will be elevated. The protected area network will be expanded to include the Marine Protected Areas. The ambition of the EU Biodiversity Strategy will be considered as part of an evolving work programme across Government.	
	Objective 3: Secure Nature's Contribution to People. Actions highlight the relationship between nature and people in Ireland. These include recognising the tangible and intangible values of biodiversity, promoting nature's importance to our culture and heritage, and recognising how biodiversity supports our society and our economy.	QIs/SCIs of European Sites, as a result of the development.
	Objective 4: Enhance the Evidence Base for Action on Biodiversity.	

This objective focuses on biodiversity research needs, as well as the development and strengthening of long-term monitoring programmes that will underpin and strengthen future decision-making. Action will also focus on collaboration to advance ecosystem accounting that will contribute towards natural capital accounts.

Objective 5: Strengthen Ireland's Contribution to International Biodiversity Initiatives.

Collaboration with other countries and across the island of Ireland will play a key role in the realisation of this Objective. Ireland will strengthen its contribution to international biodiversity initiatives and international governance processes, such as the United Nations Convention on Biological Diversity

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1.2 Other Projects

Assessment material for this in-combination impact assessment was compiled on the relevant developments within the vicinity of the Proposed Development and was verified on the 08/04/2024. The material was gathered through a search of relevant online Planning Registers, reviews of relevant documents, planning application details and planning drawings, and served to identify past and future projects, their activities, and their environmental impacts. All relevant projects were considered in relation to the potential for in-combination effects. All relevant data was reviewed (e.g., individual EISs/EIARs, layouts, drawings etc.) for all relevant projects where available. The projects considered include those listed below in Section 7.2. These consisted mainly of small-scale domestic developments and upgrades.

- Permission for a development consisting of (1) construction of a single storey extension to rear and 2 storey extension to the side of existing dwelling house with associated works. (2) Retention of porch constructed to front of existing dwelling house with associated works. (Planning Ref: 19250).
- Permission for a development consisting of permission for retention of the following: 1. Single storey extension to the rear (northwestern elevation) of existing house as constructed. 2. Reconnection to existing site services & 3. Associated site development works. (Planning Ref:202).
- Permission for an extension of the existing dwelling to include: a first-floor extension to the front of the dwelling above the existing single-story projection, demolition of the existing conservatory to the rear of the dwelling and construction of a 2-storey extension to the rear of the dwelling and all associated site works. (Planning Ref: 18393).
- Permission for development consisting of proposed single-storey extension to front of existing dwelling house and all associated landscaping and site works. (Planning Ref: 1956).
- Permission for a development consisting of proposed works to Nazareth House (a Protected Structure RPS No. 24) to provide a Health Care Facility. These works comprise: (a) construction of a three storey extension 1,191 sq.m to the rear of existing building (b) internal refurbishment works over 5,002 sq.m including installation of a first floor in the rear hall 191 sq.m (c) demolition of 3 no. stairs and replacement with new (d) demolition of a one storey extension 451 sq.m and store 25 sq.m in the courtyard to rear (e) demolition of a conservatory 8.5 sq.m on the ground floor of the south wing and replacement with new 6.5 sq.m and (f) all ancillary site works and services which include the provision of 251 car parking spaces, the diversion of overhead services, all landscaping works including the removal of 22 no. trees, planting of 78 new trees and provision of site signage. (Planning Ref: 16417).
- Permission for the development consisting of the installation of 3 no. temporary classrooms and 1 no. special education needs classroom at the existing school including connection to existing on-site services and all associated ancillary works (the proposed works will be carried out within the curtilage of protected structure (RPS no 29 on map sheet no 1012-11). (Planning Ref: 19282).
- Permission for a development consisting of the construction of 88 new dwelling units, comprising of; 55 no. 3 bedroom semi-detached houses, 17 no. 4 bedroom semi-detached houses, 2 no. 4 bedroom detached houses, 4 no. 1 bedroom apartments, 8 no. 2 bedroom apartments, and 2 no. 3 bedroom apartments, together with connection to existing public sewer system, creation of public open space, works to site boundaries, and all other associated site works and services including a pedestrian link to Knappagh Road/Strandhill Road. (Planning Ref:1949).
- Permission for development at this site of 4.5 hectares consisting of 1. Refurbishment works to a protected structure listed as No. 43 Ursuline Convent, Finisklin Road, Finisklin in the Sligo and Environs Development Plan 2010 2016 Record of Protected Structures. The work will include internal modifications to facilitate a change of use from convent to 16 No. Apartments consisting of 4 no. 1 bedroom units, 7 no. 2 bedroom units and 5 no. 3 bedroom units. Works will also include demolition of a later single storey additions to the south of the convent

building, remodellling and landscaping of internal courtyards, elevational upgrade works and provision of a new lift access to all floors. 2. A new 3 storey, 93 bed nursing pome and associated ancillary accommodation and circulation. 3. A total of 75 no. residential units consisting of 16 no. - type A - 3 bed semidetached houses, 13 no - type A1 - 2 bed mid terrace houses, 4 no - type A2 - 3 bed semidetached houses, 4 no - type A3 - 2 bed semidetached houses, 16 no - type B - 3 bed semidetached houses, 9 no - type B1 - 4 bed mid terrace houses, 4 no - type B2 - 4 bed semidetached houses, 3 no - type B3 - 3 bed mid terrace houses, 2 type C - 5 bed detached houses, 4 no-type-D - 4 bed semidetached houses. 4. All surface car parking, landscaping, entrance improvements and all associated site works. 5. Refurbishment works to the existing single storey gate lodge which is a protected structure listed as No. 41 and the school building which is a protected structure listed as No. 42. works include change of use today-centre, demolition of existing single storey extension and construction of extensions circa 270m2 giving a total building area circa 543m2, landscaping and associated site works. (Planning Ref: 19183).

- Permission for a Development consisting of retention of alterations comprised of a) 23 additional carparking spaces at southeast site, and b) alterations to southeast facade of QA2 Building to northeast corner of site (PP 15193 refers), on the site of their existing factory. (Planning Ref: 19305).
- Permission for a development consisting of construction of a single storey link corridor extension to the existing Animal Health Facility. (Planning Ref:1932)
- Permission for adevelopment consisting of the construction of a new link road at the IDA Finisklin Business Park, in the townland of Finisklin, Sligo, Co. Sligo. The works will consist of the construction of a new section of road that will link two existing cul de sacs with all ancillary works including footpaths, street lighting, ducting and drainage. (Planning Ref:2063).
- Permission for a development consisting of (i) The construction of an ESB sub-station, (ii) The construction of an external yard/plant area to the rear of the existing building, (iii) The provision of a bicycle storage shed, (iv) The provision of a smoking hut, (v) Extension to, and completion of access roads to the site, (vi) Demolition of small out-building, (vii) The provision of public lighting on the site, (viii) An underground surface water sewer network including onsite attenuation and petrol/oil interceptor(s) and connections to existing surface water infrastructure, (ix) Corporates signage, (x) 3 no.flagpoles, (xI) 2 no. automated traffic barriers & site fencing/gates, (xii) Elevational changes to existing industrial unit, (xiii) Additional floor space to first floor, (xiv) Porches, and connections to services and all ancillary works. (Planning Ref: 19189).
- Development consisting of the demolition of a cold store extension (217 sqm gross floor area) to the rear of existing mixed use building (1,426 sqm gross floor area) with elevation alterations including a new entrance, reconfigured existing entrance with new canopies over both, new window opes, and new exterior finishes to the mixed use building, site works to include reconfigured surface car park to front and rear of building with proposed total of 42 no. car park spaces and 20 no cycle spaces along with all associated site development and landscaping works.(Planning Ref: 18458).
- Permission for a development consisting of (1) Construct a single-story retail unit, for use as a garden centre, to the northern corner of the existing main 'Brooks' warehouse building with covered horticulture and nursery areas to the rear. (2) Lower boundary wall along Rathedmond Road to the front of the proposed retail unit. (3) Construct a new vehicular entrance onto the Rathemond Road to serve as delievery access to the rear of the new retail unit. (4) Reposition the existing builder's yard entrance and construct a new canopy over the existing security hut serving this entrance, to create additional parking spaces. (5) Install new porch to front entrance of existing retail section at the front of the 'Brooks' main warehouse building. (6) All associated site works. (Planning Ref: 19476).
- Development consisting of 1. Revision of the western site boundary to that previously granted under PL17/221 with an overall increase in site area of 0.53HA 2. Erection of a prefabricated solvent storage shed adjacent to the northern site boundary 3. construction of 2Nr concrete bases and 2Nr waste compactor units to the western elevation of the new extension under construction 4. Carrying out all associated site development works deemed necessary as part of these works. (Planning Ref:18100).

- Development consisting of a new Advance Office Building. Permission is sought for signage, new timber post-and-rail site boundaries, car parking, cycle shelter, bin store, landscaping, gas tanks, underground water storage tank, underground pumping station, ESB substation/switch room and all associated site works. A Natura Impact Assessment has been submitted to the Planning Authority with the Planning Application. (Planning Ref:19117).
- Permission for a development consisting of the completion of an unfinished housing development on a site of 1.176 hectares forming part of the overall estate of Aylesbury Park Knappaghmore, Sligo. The proposed development consisting of 34 no. terraced houses and no. maisonettes, all ancillary site development works, landscaping, and boundary treatments including the provision of public and private open space at Aylesbury Park. Previously granted permission was for PL 17/63 which consisted fo 27 no. houses. A Natura Impact Statement has been submitted. (Planning Ref:19483).
- Permission for a development consisting of (a) demolition of existing dwelling house on site, (b) construction of a dwelling house, proprietary effluent treatment unit and soil polishing filter on site, together with all ancillary site works and services. (Planning Ref:2062).
- Permission for development consisting of (a) make alterations to elevations on existing dwelling house, including window and door alterations to side and rear elevations (b) build a two-storey extension to the side of existing dwelling house, 98 sq.m. (c) upgrade existing wastewater treatment system on site, together with all ancillary site works and services. (Planning Ref:19394).
- Development consisting of the demolition of 2 No prefabricated classrooms, each with a floor area of 58 sq m and permission is also sought for a new free-standing building, part single storey and part two storey to provide 3 No classrooms, a SET room and ancillary rooms with a floor area of 375 sq m and associated site works. Permission is also sought for retention of a prefabricated resource room, floor area 33 sq m previously approved under PL13/182 and retention of a prefabricated classroom, floor area 78 sq m previously approved under PL13/4 where these Planning Permissions were temporary permissions. Permission is also sought for retention of an external store, floor area 21 sq m and a front porch, floor area 7 sq m. (Planning Ref: 19119).
- Permission for a development consisting of the demolition of an existing derelict house, outbuildings, and agricultural building with the contruction of a new 2 Storey dwelling with a single storey annex in lieu. Additionally, the development includes Mechanical Aeration system with a pump and Puraflo module system with distribution area, and a new site entrance and all associated site works. (Planning Ref: 20154).
- Permission for a development consisting of (1) the construction of a new Astro Turf Pitch (2) all associated floodlights and fencing (3) all associated site works. (Planning Ref: 20143).
- Permission for a development consisting of permission for the alterations to the previous planning application Reg. Ref: PL18/275. Proposed altertions include Existing 2 no. Single and 2 no. Double internally illuminated Triple Sided Poster and Menu signs to be replaced with 1 no. Single and 3 no. Double, digital Poster and Menu Signs and 1 no. proposed 15" Digital Screen at the Drive Thru Window and associated site works. (Planning Ref: 19219).
- Development consisting of modifications to the drive-thru arrangements to provide a side by side ordering arrangement: demolition of 6 sq m at the northern elevation reducing the corral and bin store from 30 sq m to 14 sq m and change of use of remaining space to dry storage; extension to existing collection booth/managers office (6.3 sq m) at eastern elevation; modifications to entrance arrangements to southern and western elevation; provision of an outdoor seating area including a canopy area in lieu of the existing outdoor play area; extension of extenal bin storage area by 13 sq m (providing a bin store of 30.4 sq m); 1 No goal post height restrictor; 2 No Customer Order Displays, 3 No. new double digital screen signs; 15" digital display sign to customer collection window; amendments to fascia signage comprising removal of existing illuminated 'Golden Arch' sign to southern elevation and provision of a repositioned illuminated 'Golden Arch' sign (1,540mm x 1,540mm), provision of an illuminated 'Golden Arch' sign to western elevation and provision of a repositioned illuminated 'Golden Arch' sign to western elevation and provision of a repositioned illuminated 'Golden Arch' sign to southern elevation of a repositioned illuminated 'Golden Arch' sign to western elevation and provision of a repositioned illuminated 'Golden Arch' sign (1,540mm); relocation of existing sky sign;

- associated elevational changes; new road markings; speed control measures; protective bollards; directional signage; and all other associated site works. (Planning Ref:208).
- Development consisting of the installation of 3 no. temporary classrooms and 1 no. special education needs classroom at the existing school including connection to existing on-site services and all associated ancillary works (the proposed works will be carried out within the curtilage of protected structure (RPS no 29 on map sheet no 1012-11).(Planning Ref: 19282).
- Development at this site of 0.24 hectares at Swanpoint, including works to the existing quay wall a protected structure in the Sligo County Development Plan 2017-2023 Record of Protected Structures. The development will consist of: a) amendments and completion of unfinished Swanpoint building previously approved under planning ref 0470099 to provide 54 no. hotel bedrooms and circa. 2,946 m2 of office space in place of the previously approved 64 no. apartments and 2 no. retail units, b) retention of as constructed elevations, c) ground and first floor extensions circa. 136 m2 to form part of the proposed office space, d) new 2nd floor link between existing hotel and Swanpoint building circa 37 m2, e) refurbishment of the existing quay wall a protected structure as per the Sligo County Development Plan 2017-2023), f) extension of 2 no. existing staircores and associated link corridors, g) proposed roof top services including heat pumps and solar panels, h) proposed landscape plan and all associated site works. The documents to be submitted as part of this planning application will include a Natura Impact Statement. (Planning Ref: 19446).
- Permission for development consisting of 1. The change of use from bar/restaurant/hotel/nightclub to financial institution. 2. Internal alterations including refurbishment works to the protected structure listed as No. 248, Clarence Hotel, Wine Street, Sligo in the Sligo, and Environs Development Plan 2010 2016 Record of Protected Structures. 3. Elevational alterations and upgrade works. 4. New extension at first floor level circa. 49m2. 5. Proposed new signage to the south and west elevations. 6. External landscaping works including the creation of a new plaza, associated planting, and all associated site works. (Planning Ref:1982).
- Permission for development consisting of A) Amendments to plan and elevations as approved under planning ref: 19/82. B) Change of use of existing annex circa 333m2 from hotel/restaurant use to financial institution. C) and associated site works to a protected structure no. 248 in the Sligo and Environs Development Plan 2010 2016 Record of Protected Structures and NIAH Reg No. 32007020. (Planning Ref: 19399).
- Permission for a development which will comprise the construction of 53 no. new residential units on a 1..19 ha site consisting of: 19 no. 1 bed duplex units 15 no. 2 bed apartments 19 no. 3/4 bed duplex units The works will consist of the creation of a new site access from Circular Road that includes a raised tabletop with a controlled pedestrian crossing, car parking and bicycle parking, foul pumping station and rising main to an existing public foul sewer on Circular Road, sustainable drainage system, street lighting, open space, landscaping and all ancillary site works. (Planning Ref: 2360084).
- Development consisting of the following: a) a total of 26 No. residential units consisting of 16 No. Type A/A1 3 bed semidetached houses, 8 No. Type B/B1 2 bed semidetached houses, 2 No. Type C 2 bed semi-detached houses. b) pedestrian, cycle, and vehicular access/egress with Newtownholmes Road, c) all car parking, landscaping, boundary treatments, pedestrian links, public lighting, service connections and all associated site works. (Planning Ref;22181). 22181
- Development consisting of the following: a) A total of 65 no. residential units consisting of 19 no. Type A 2 bed semi-detached and terraced houses, 10 no. Type B 3 bed semi-detached and terraced houses, 23 no. Type C 3 bed semi-detached, terraced and detached houses, 13 No. Type D 5 bed semi-detached and detached houses b) Pedestrian, cycle and vehicular access/egress with Newtownholmes Road, c) All car parking, landscaping, boundary treatments, pedestrian links, public lighting, service connections and all associated site works. (Planning Ref: 2360056).
- Development consisting of: (1) Construction of 74 no. residential units comprising: 5 no. 1-bed own-door apartments, 19 no. 2-bed own-door apartments, 8 no. 3-bed terrace houses, 14 no. 3-bed semi-detached houses, 2 no. 4-bed terrace houses, 26 no. 4-bed semi-detached houses. (2) Provision of all associated surface water and foul drainage services and

connections with all associated site works and ancillary services. (3) Pedestrian, cycle, and vehicular access/egress with Cairns Road, and pedestrian and cycle access/egress with the adjoining Ardcairn residential estate. (4) Provision of public open space, communal open space, private open space, site landscaping, public lighting, refuse storage, resident and visitor car parking including electric vehicle charging points, bicycle parking, boundary treatments, and all associated site development works. (5) Demolition of existing bungalow dwellinghouse and outbuildings located to the north-east of the development site. (6) This application is accompanied with a Natura Impact Statement (NIS). (Planning Ref:2297).

- Development consisting of erection of a 24m high telecommunications monopole structure together with antennas, dishes and associated Telecommunications equipment all enclosed by security fencing. (Planning Ref:22175).
- Permission for a development consisting of the construction of a 24-metre-high free standing lattice communication structure and its associated antennae communication dishes and ground equipment, with associated ground-mounted equipment cabinets within a 2.4m high palisade fence compound at ESB's Oakfield 38kv Substation, Townland of Oakfield, Co. Sligo. (Planning Ref:19151).
- The construction of 62 no. Social Housing Dwellings of 2 and 3 storey in height consisting of 12 no. 1 bedroom apartments, 36 no. 2 bedroom apartments, 10 no. 3 bedroom duplex apartments, 2 no. 3 bedroom houses and 2 no. 4 bedroom duplex apartments with associated ancillary car parking spaces, 2 new vehicular estate roads accessed from Robbers Lane, junction upgrades at Church Hill/Robbers Lane/Treacy Avenue (Post Office junction), road widening of Robbers Lane adjacent to development site, diversion of and connection to existing foul and surface water network, on site surface water attenuation system, partially culverting existing stream and a new surface water overflow pond. b) The construction of 2 no. Multi Use Games Areas (pitches) and a Children's playpark. All associated landscaping and site development works are included. The site is located at Robbers Lane, Maugheraboy Townland, Sligo. Councils
- Permission for the construction of a proposed spectator stand (area circa. 200 sqm) and all associated site works. (Planning Ref: 2360156).
- Permission for the development consisting of the following: 1. Demolition of existing twostorey house and associated sheds. 2. Construction of a block of 4no. two-storey terraced houses. 3. Provision of a new vehicular access off the L94032 to provide 8no. car parking spaces with associated footpaths and landscaping. 4. Connection to existing foul and surface water drainage and all associated site works. (Planning Ref: 2360126).
- Planning permission for, a) Extension & renovation to existing house to include a small extension to the porch, additional floor area to the rear at ground level and a new bedroom at first floor level, b) The removal of the existing hipped roofs and construct new gable ended roofs, c) Elevational changes to all sides of the house, d) Demolition of small storage shed to the rear of the house, e) Widening of existing vehicular entrance to dwelling. 2. Retention permission of existing domestic shed. 3. And all associated site works at Saint Anthony, Knappagh Beg, Knappagh Road, Sligo, Co. Sligo, F91 R82K. (Planning Ref: 2360075).
- Permission for a development that will comprise the following: A Large-Scale Residential Development of: A total of 127 No. residential units consisting of a) 11 No. Type A– 4 Bed Semi Detached Houses 4 No. Type A1 5 Bed Semi Detached Houses 60 No. Type B/B1 3 Bed Semi Detached/Terraced/Detached Houses 28 No. Type C 2 Bed Apartments 10 No. Type D 2 Bed Semi Detached/Terraced Dormer Houses 4 No. Type E 2 Bed Semi Detached Bungalow Houses 10 No. Type F/F1 4 Bed Detached Houses b) Demolition of 1 no. unfinished vacant house and garage. c) Proposed Creche with associated landscaping and surface car parking, d) On site wastewater pumping station e) All landscaping, boundary treatments, entrance improvements, public lighting, all associated site works and service connections. A Natura Impact Statement is submitted to the Planning Authority with this application. (Planning Ref: 2360226).
- Permission for alterations and extensions to the existing an post Sligo Delivery Service Unit building to include for a new single storey temporary structure (10m x 30m x 5.5m tall) and temporary connecting link corridor (5m x 5m. x 5.5m tall) both located to the rear (northern) elevation of the existing building. The proposed temporary building would be in place for a

- period of between 7 to 10 years and consists of a hard-shell marquee type structure with a double skinned pvc material, fully tensioned roof, and all associated site development works. (Planning Ref: 2360155).
- Permission for change of use from a coal yard to a recycling facility. This includes the demolition of an existing storage building (287m2) and the construction of a proposed recycling facility (1124m2). The proposed development also includes: Construction of a maintenance shed (287m2), 3 no. storage containers (3 x 26.5m2), skip storage areas, 15 no car parking spaces including 1 no. EV charging space and 1 no. accessible parking space, 8 no. truck parking spaces, covered bicycle stand for 5 no. bicycles, 1 no. new weighbridge and associated weighbridge office, security fencing on part of northwestern boundary, connections to all existing services, all ancillary site works. A Natura Impact Statement will be submitted to the planning authority with the planning application. (Planning Ref: 2360189).
- Permission for a development that will consist of alterations to an existing whiskey maturation storage building (permitted under PL15/296) and will include the following works including any associated site development works: 1) Demolition of a section of the existing building to create a fire break and form a standalone whiskey maturation storage building, 2) modifications to the standalone whiskey maturation storage building which will include, a) lowering the existing high-level roof on the eastern side of the building, b) removing the existing brick cladding on the western and southern façades, c) elevational alteration with the addition of new fire escapes and roller shutter doors, d) the addition of external cladding and louvred vents to the exterior walls, 3) the construction of a sprinkler valve house extension (floor area of 4.0 m²) and sprinkler valve house/electrical room extension (floor area of 10.3 m2) to the western elevation, 4) the construction of a sprinkler valve house extension (floor area of 6.0 m²) to the eastern elevation, 5) construct a forklift charging building (floor area of 85.8 m²), 6) provide a sprinkler tank and sprinkler pump house building (floor area of 96.0 m²), 7) deepen sprinkler water and spillage run off retention pond permitted under PL20/180 to increase the retention volume, 8) provision of 2 no. boreholes to supply process water for the existing whiskey production and potable water for staff welfare facilities including pipelines and ancillary works and therefore amendment of Condition no.14 of PL15/296. The proposed development is located on the grounds of Hazelwood House containing two protected structures (RPS No. 292SE and RPS No. 293SE) and will involve the carrying out of works to and within the curtilage of the protected structures. The application will be accompanied by a Natura Impact Statement. (Planning Ref: 2360108).
- Development consisting of the construction of a 1722 sqm single storey extension to its existing factory premises to comprise the following: (a) re-location of existing storage area to the rear (south west) of the proposed extension which will also facilitate an increase in production floor space (b) the construction of a 278 sqm single storey enclosed service link corridor lean-to structure built along the north west elevation of the main building connecting the extension with the existing production spaces (c) 43 sqm extension to existing free standing ESB MV sub/switchroom block (d) extension to the rear (south west) concrete hardstanding, relocation of rear entrance and the provision of additional car parking and associated site services. (Planning Ref: 21403).
- Permission for a development consisting of the following: to construct a single storey extension to side and rear of existing two storey semi-detached dwelling house. (Planning Ref. 2360313).
- Permission for a development that will consist of: 1. The demolition of an existing derelict house. 2. The construction of a new split-level house. 3. The construction of a new sewage treatment plant with raised soil polishing filter. 4. And all ancillary site works at this site, Ballyfree, Sligo, Co Sligo. (Planning Ref: 2360358).
- Permission for the development will comprise of amendments to previously approved planning reference no. 23/60056. The proposed amendments include: a) Proposed amendments to elevational treatment throughout b) Proposed relocation of 5 no. Type D houses previously house no's 54,55,57,60 and 61 to now be located as house no's 43,44,45,46 and 47 to now be located at house no's 54,55,57,60 and 61 d) Proposed alterations to houses no's 1,16,25,33,34,36,37,42,43,50,51,56,57 and 65 to now include a side entrance and associated

- changes. e) Proposed amendments to previously granted boundary treatments and associated site layout changes. (Planning Ref: 2360366).
- Permission for a development consisting of revisions to previously approved planning application ref. no. 22/181. The revisions include the change of house numbers 3 and 14 from 2 bed semi-detached houses to 3 bed semi-detached houses and associated site works. (Planning Ref: 2338).
- Permission for a development consisting of the installation of floodlighting and ball stop netting in the existing all-weather pitch. It will also include an intensification of use to allow the pitch to be used during the evenings and at weekends. The proposed intensification of use will also include permission to rent out the facility. (Planning Ref: 2386).
- Permission for Construction of a 3,662m2 primary care centre including Pharmacy and café area, first floor pedestrian link to Pearse rd., car parking, signage, landscaping, and all associated site works and services. (Planning Ref: 2360018).
- Permission for the development consisting of: 1. The demolition of a portion of the existing industrial units (B & C)(810SQM) to facilitate the construction, in their place, of a new portal frame unit (unit B), similar in height to the main retained unit (A). 2. The re-cladding of the retained industrial unit (A) along with new glazed openings and access doors. The building will be clad with profiled insulated metal cladding. 3. The resurfacing and upgrading of the associated service yard, the access route from Finisklin road and existing car parking to facilitate the new development and the provision of secure and sheltered bicycle parking with additional staff car parking spaces to the rear of the site. 4. All associated site and civil works including rainwater attenuation. (Planning Ref: 2358).
- Proposed Oakfield Road Widening project, which is located to the western boundary of the current development application. To make provision for the Oakfield Road widening project, it is necessary to remove Hedgerow (WL1) habitat to the western margin of the site.