Residential Development

Monacnapa, Blarney, Cork

Environmental Impact Assessment Screening

Doherty Environmental Consultants Ltd

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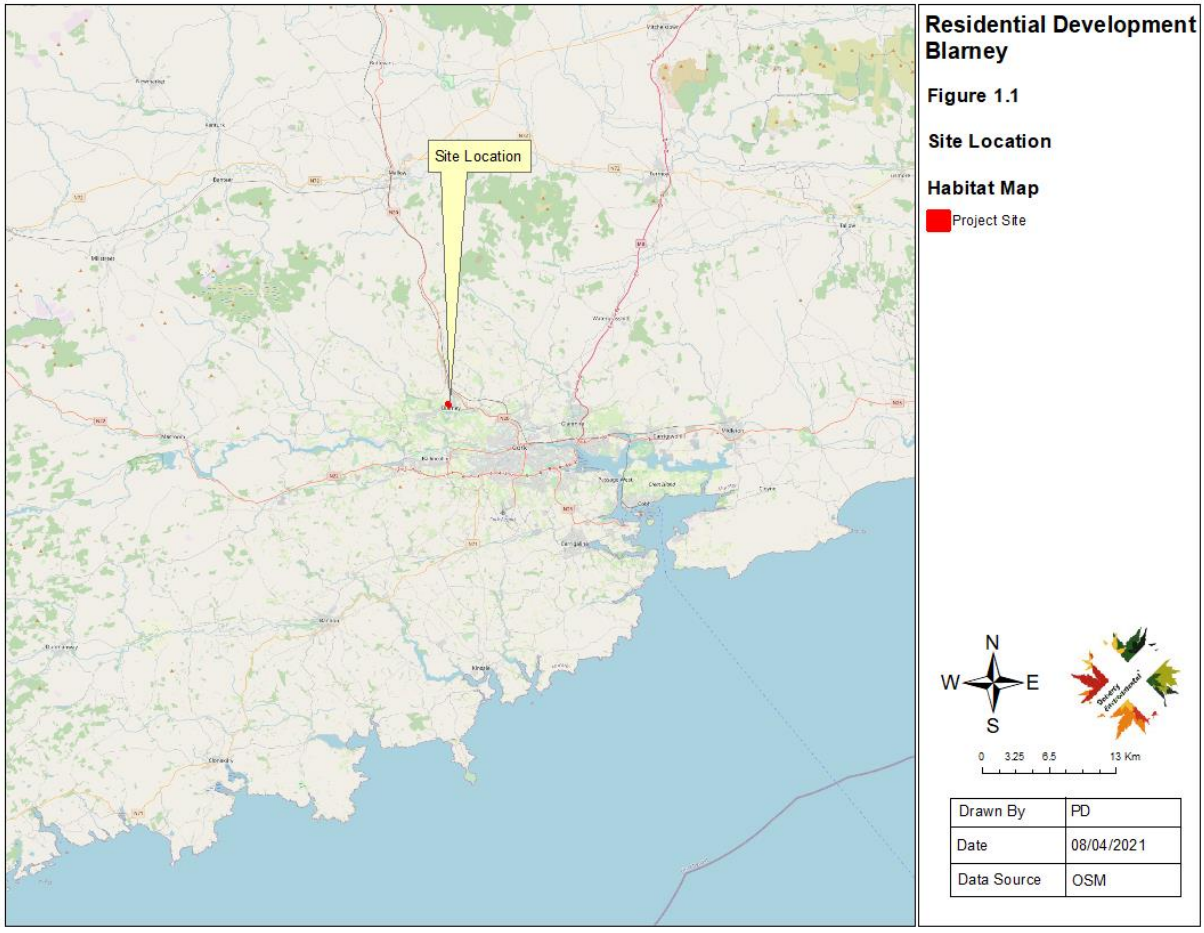
1.0 INTRODUCTION

Doherty Environmental Consultants (DEC) Ltd. have been commissioned by Mr Eoin Sheehan to undertake an Environmental Impact Assessment Screening Report for a proposed Strategic Housing Development at Monacnapa, Blarney, Cork (see Figure 1.1 for location).

The findings of the EIA Screening assessment for the proposed strategic housing development (i.e. the project) are presented in this report.



1.1 PURPOSE OF THIS REPORT

This EIA screening report contains necessary information to enable the competent authority, in this case An Bord Pleanála, to undertake an EIA screening assessment and determine whether an EIA is required for the project. The findings of the EIA screening assessment are presented

in this report and will inform the determination by An Bord Pleanála for the proposed development, (to be referred to throughout this report as "the project").

The purpose of this Report is to determine whether or not the project is likely to have significant effects on the environment and, as such, requires an EIA to be carried out and an EIAR to be prepared. This Report provides an overview of the project (section 3), the existing baseline environment (section 4) and then assesses the potential environmental impacts (Section 5) posed by the proposed project.

2.0 LEGISLATIVE CONTEXT

Directive 2011/92/EU as amended by Directive 2014/52/EU (the EIA Directive) sets out the requirements for environmental impact assessment ("**EIA**"), including screening for EIA. Projects listed in Annex I of the EIA Directive require a mandatory EIA while projects listed in Annex II require screening to determine whether an EIA is required. The project does not require a mandatory EIA under the provisions of the EIA Directive as it is not a project listed in Annex I.

EIA requirements derive from EU Directive 85/337/EEC (as amended by Directive 97/11/EC, Directive 2014/52/EU and S.I. 454 of 2011; S.I. 464 of 2011; S.I. 456 of 2011; S.I. No. 296 of 2018) on the assessment of the effects of certain public and private projects on the environment. The purpose of this Environmental Impact Assessment Screening Report is to determine whether this proposed development has the potential to result in likely significant effects to the environment.

The prescribed classes of development and thresholds or criteria that trigger the need for an EIA are set out in Schedule 5 of the Planning and Development Regulations, 2001, as amended. A review of the classes of development and thresholds listed in Schedule 5, Part 1 was carried out to determine whether the project falls into any of the development classes that are listed in Part 1 and which require an EIA.

The project does not fall into any of the classes described in Schedule 5, Part 1 of the Planning and Development Regulations, 2001, as amended. The need for an EIA has therefore not been triggered under the requirements of Schedule 5, Part 1 of the Planning and Development Regulations, 2001, as amended.

A review of the classes of development listed in Schedule 5, Part 2 was carried out to determine whether the project falls into any of the development classes that are listed in Part 2 and which require an EIA. The project is representative of an infrastructure project and as such particular attention was given to establishing whether or not the project falls under Part 2, Class 10(b)(i) Infrastructure Projects: construction of more than 500 dwelling units. The project comprises a total of 143 no. residential units and therefore does not fall under Part 2, Class 10(b)(i).

Given that the project will also comprise demolition works associated with the existing garage and boundary walls which are to be removed and lowered in height respectively at 1 Sunberry Drive, attention was also given to establishing whether or not the project falls under Part 2, Class 14 Works of Demolition. The demolition works associated with the project are minor in scale and comprise the demolition of an existing small garage structure and the lowering of a boundary wall which is also small in size. The works involved in the demolition of this structure will be minor and of a short term nature and will not have the potential to result in any significant environmental effects. As such it is concluded that the demolition activities required for the project will not result in significant effects on the environment and as such the requirement for EIA is not triggered under Class 14 from Part 2 of Schedule 5 of the Regulations.

In light of the above it is clear that the proposed development does not fall under any of the thresholds specified in the Regulations and is therefore a "sub-threshold" development project. The purpose of this screening report is to provide information to assist with a determination as to whether or not the project falls under Part 2, Class 15 of Schedule 5. Class 15 requires EIA for any project listed in Part 2 that does not exceed a quantity, area or other limit specified in this Part in respect of the relevant class of development but which would be likely to have a significant effect on the environment, having regard to the criteria set out in Schedule 7.

According to European Commission Guidance (2017[1])

"Screening has to implement the Directive's overall aim, i.e. to determine if a Project listed in Annex II is likely to have significant effects on the environment and, therefore, be made subject to a requirement for Development Consent and an assessment, with regards to its effects on the environment. At the same time, Screening should ensure that an EIA is carried out only for those Projects for which it is thought that a significant impact on the environment is possible, thereby ensuring a more efficient use of both public and private resources. Hence, Screening has to strike the right balance between the above two objectives."

Recent guidelines from the Department of Housing, Planning and Local Government (2018) [2] in relation to EIA screening state:

"3.1. Screening is the initial stage in the EIA process and determines whether or not specified public or private developments are likely to have significant effects on the environment and, as such, require EIA to be carried out prior to a decision on a development consent application being made. A screening determination is a matter of professional judgement, based on objective information relating to the proposed project and its receiving environment. Environmental effects can, in principle, be either positive or negative.

3.2. Screening must consider the whole development. This includes likely significant effects arising from any demolition works which must be carried out in order to facilitate the proposed development. In the case of transboundary developments, screening must consider the likely significant effects arising from the whole project both sides of the boundary. A screening determination that EIA is not required must not undermine the objective of the Directive that

[1] Environmental Impact Assessment of Projects Guidance on Screening (Directive 2011/92/EU as amended by 2014/52/EU). European Commission 2017. Page 23.

[2] Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment

no project likely to have significant effects on the environment, within the meaning of the Directive, should be exempt from assessment."

The Environmental Protection Agency (EPA) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (2017) also provide guidance with respect to the screening of projects for EIA. This guidance noted that "where a project is of a specified type but does not meet, or exceed, the applicable threshold then the likelihood of the project having significant effects on the environment needs to be considered…..This is done by reference to the criteria specified in Annex III of the amended Directive".

Annex III of the EIA Directive (as amended)/Schedule 7 to the Planning and Development Regulations 2001, as amended, lists the criteria for determining whether a project should be subject to EIA.

Annex IIA of the EIA Directive (as amended)/Schedule 7A to the Planning and Development Regulations, 2001, as amended, set out the information to be provided for the purposes of EIA Screening. The information set out in Schedule 7A is grouped together under 3 main headings:

Annex IIA requirements	Relevant section of this screening report
A description of the project, including in particular – a description of the physical characteristics of the whole project and, where relevant, of demolition works, and a description of the location of the project, with particular regard to the environmental sensitivity of geographical areas likely to be affected	Section 3 of this Report describes the characteristics of the project and provides an assessment against the criteria contained in Schedule 7A under this category heading
A description of the aspects of the environment likely to be significantly affected by the project	Section 4 of this Report describes the aspects of the environment that may be affected by the project
A description of any likely significant effects, to the extent of the information available on such effects, of the project on the environment resulting from— (a) the	Section 5 of this Report describes the characteristics of the project and provides an

expected residues and emissions and the production of waste, where relevant, and (b) the use of natural resources, in particular soil, land, water and biodiversity	assessment against the criteria contained in Schedule 7A under this category heading.

During the assessment of the aspects of the environment likely to be significantly affected by the project and the description of any likely significant effects on the environment current Transport Infrastructure Ireland (TII) assessment guidelines have been relied upon to inform these assessments. While it is acknowledged that the project does not represent a national road scheme the various environmental assessment guidelines published by TII represent best practice guidance for the assessment of road schemes in Ireland. As such these guidelines have been relied upon during the preparation of this Screening Report.

3.0 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

3.1 OVERVIEW

The project will consist of a strategic housing development of 143no. residential units, comprising 105no. houses and 38no. apartments, ranging in height from 2-3 storeys above ground, including split-level houses at the project site at Monacnapa, Blarney, Cork. The project will also consist of the demolition of an existing garage and southern boundary wall, to be replaced with a new southern boundary wall, as well as the lowering of the existing eastern boundary wall and pier, at no. 1 Sunberry Drive; a crèche; all associated ancillary site development and landscaping works, to include bin stores, bicycle and car parking, ground works and retaining structures, foul drainage, stormwater drainage, water supply, service ducting and cabling, public lighting, relocation of existing ESB substation, and all boundary treatments. The proposed development is to be accessed via the existing Sunberry Heights/Sunberry Drive off the Blarney Relief Road (R617). An upgrade is proposed to the existing Sunberry Heights/Sunberry Drive and the existing access to the proposed strategic housing development, including the widening of the footpath at the junction with the Blarney Relief Road (R617), raised platforms, security barriers and fencing as necessary, road markings, and road resurfacing to facilitate improved pedestrian/cycle connectivity.

3.2 CONSTRUCTION PHASE

The estimated duration of work will be 24 months in total. The construction compound for the project will be located towards the southwestern boundary such that there is sufficient separation between the compound and the dwellings on Sunberry Heights. The compound area will consist of a crushed stone working platform, utilities, offices, welfare facilities and stores.

The site will require temporary connections for water and a connection to the Foul Sewer on the nearby Estate Road. It may be decided to install the permanent connections on the Estate Road to minimise disruption on the Public Road during the initial site setup and mobilisation phase. It will also be necessary to provide temporary power to the Site which will include the installation of a temporary distribution board on site.

Following completion of the works; all construction materials will be removed from the compound, all temporary services decommissioned and disconnected and the area will be reinstated with finishes (e.g. topsoil) consistent with the landscaping features as identified in the project Landscape Masterplan.

Plant and machinery to be used during the construction phase will be typical construction machinery, including front-tip loaders, wheel loaders/load shovels, 360 degree excavators, off-road dump trucks, track machines, graders, telescopic handlers, compactors/rollers and backhoe loaders. Typical materials to be used during the construction phase will include concrete, concrete blocks, bricks, slate, plaster, sand, insulated cladding panels, steel members etc. Hydrocarbons, such as petrols, diesels, oils etc and other plant and machinery lubricants will be used onsite during the construction phase. Aside from these latter materials, no hazardous material will be used during the construction phase. All hydrocarbons and other aqueous construction material will be stored in bunded areas within the construction compound on site. All refuelling by plant and machinery will be undertaken in designated bunded areas within the construction compound during the construction phase.

Any excavations to be stored on site will be stored in a designated stockpile area located in the construction site compound or other suitable location on site for the storage of segregated wastes prior to their transport for recovery/disposal at suitably licensed/permitted facilities. . Topsoil will be stockpiled on site for reuse in soft landscaping and will be stored separately to subsoils. Stockpiles will be graded to a <1:4 profile The stockpile area will be located over

50m from any watercourse or drainage channels occurring within the site. Stockpiles will be covered with plastic sheeting during wet weather and a temporary berm will be constructed around the stockpile area to prevent runoff to watercourses or drainage channels. Inert spoil material will be transported off site for deposition. All waste spoil material arising from the construction phase will be inert, non-hazardous spoil material and will be disposed at an approved facility.

Additional surface water management measures to be implemented during the construction phase are described in full in the CEMP and the Natura Impact Statement, both of which are provided under separate cover as part of the planning application documentation. Other key management measures include:

- The provision of a construction phase catch drain along the northern boundary of the developable area. The catch drain will intercept surface water runoff draining from lands upslope and to the north of the developable area and will convey such runoff away from the construction footprint; and

- The provision of silt fencing along the southern and western portion of the developable area. The provision of the silt fence will ensure that surface water runoff draining from the construction footprint to the south or west will be treated prior to discharging from the site.

Waste material arising on site during the construction phase will be managed in accordance with the waste management hierarchy detailed in the Construction Environmental Management Plan (CEMP) prepared for the project and provided under separate cover.

3.3 CONSTRUCTION PHASING

The proposed development will be constructed in four phases in accordance with the phasing strategy set out in the Architect's Design Statement that accompanies this planning application. Development will start from the south and east of the site and develop firstly towards the north and then anticlockwise to the northwest and southwest areas of the site.

Within each phase of the development works, the provision of services and site infrastructure will be developed as required by each phase of development. This will involve the laying of

new sewers and water mains within the site, the provision of footpaths, lighting and roadways. As part of any works (i.e. provision of services) along the public areas/roads in the vicinity of the site, it will be ensured that the surface of the roads/areas will be re-instated to a high standard.

The construction of the residential units will, to a certain degree respond to the demand/sale of the units involved, however, it is anticipated that the units will be constructed/completed over a 2 year period and will involve up to 90 no. construction staff (depending on the number of units being constructed at any one time).

3.4 SURFACE WATER MANAGEMENT

The surface water drainage system at the project site has been designed to take account of the following requirements:

- Surface water shall be collected in a series of stormwater drains that will be laid on the estate roads. The drains will collect stormwater arising from roofs and hard-standing areas within the individual properties and stormwater collected on the estate roads via the road gullies.

- The Surface water system shall include Attenuation designed for the 1/100 Year event. The Attenuation shall be provided for in three zones, constructed of Wavin Aquacell Plus Cells installed as per manufacturers' instructions in each zone.

- The principal point of discharge for surface water shall be to an existing stream/watercourse located to the west of the site (see Figure 3.1 for discharge point location). The existing stream/watercourse currently provides drainage from the project site. Discharge to the existing stream/watercourse shall be at a rate equal to the greenfield run-off rate to ensure no significant changes in flow in the existing stream/watercourse.

- The second point of discharge for surface water shall be to the existing surface water sewer on Sunberry Drive (see Figure 3.1 for location). This discharge point shall only be used to serve the most south-easterly area of the site which cannot be facilitated by

the principal discharge due to levels. This discharge will serve circa 3.5% of the site and the discharge will be limited to the greenfield runoff rate.

3.4.1 Details of Existing Principal Stormwater Outfall at Western Boundary

A minor un-named stream/watercourse occurs to the southwest of the project site and this will be the principal point of discharge for treated surface water from the project site to this stream.

Discharge to this existing stream/watercourse shall be at a rate equal to the Greenfield Runoff Rate to ensure no significant changes in flow in the existing stream/watercourse. This unnamed stream flows into the River Martin. The River Martin is a tributary of the River Shournagh, which finally drains into the River Lee to the east of Ballincollig.

The unnamed stream/watercourse begins as an open land drain running in a north to south direction within the western boundary of the development site. At the southwest point of the development site, this open land drain joins with a similar land drain from the adjacent property to discharge into an existing unnamed stream/watercourse which descends through the wooded area towards the Killowen Road and subsequently towards the R617 Regional Road. The watercourse crosses both roads via precast concrete culvert crossings.

A catchment runoff assessment of the potential impact of surface water discharge from the development site to the receiving un-named stream/watercourse was completed by Irish Hydrodata Ltd.[3] The modelling assessment demonstrates that the proposed development will give a 16% (19.2 litres/second) increase in the 1/100-year rainfall event. Irish Hydrodata Ltd. conclude that the post development flow of 142litres per second is well below the culvert capacities which are estimated to be circa 400litres/second. Therefore, there will be no negative impact on the existing watercourse and associated road crossings which are deemed to have sufficient capacity.

[3] The Irish Hydrodata Ltd. Catchment Runoff Assessment is provided under separate cover as Appendix 5 to the Engineering Services Report

The project engineers (OLS Consulting Ltd.) undertook consultations with Cork Ciy Council with respect to the stormwater outfall pathway. Cork City Council advised that there was uncertainty surrounding the discharge point of the culverted road crossing on the R617 Tower Road which forms part of the existing watercourse to which the proposed surface water discharge is to be made. Cork City Council sought clarity in this matter to ensure the existing watercourse was connected to the watercourse south of the Tower Road which ultimately discharges to the River Martin. The following actions were taken to demonstrate connectivity:

The culverted road crossing on the R617Tower Road was visually inspected by OLS Consulting Engineers on Tuesday 23rd November 2021. The crossing comprised of a 600mm diameter concrete pipe which was clearly visible on the upstream side of the crossing.

The crossing was dye traced on the day of the inspection and the outlet was located south of the R617 Tower Road where it discharges to an open watercourse which runs in a southerly direction from the R617 Tower Road. The 600mm diameter pipe was found to be heavily silted on the day of inspection and in need of cleaning.

The dye tracing confirmed that the open land drain which descends through the woodland crossing the Killowen Road initially and subsequently the R617 Tower Road does connect to the open watercourse to the south of the R617 Tower Road which ultimately discharges to the River Martin.

The matter of the condition of the culverted road crossing on the R617 Tower Road was subsequently discussed with Mr. Simon Lyons of the Water and Drainage Services Department of Cork City Council. It was agreed that that piped crossing will need to be cleaned and CCTV surveyed to ascertain the condition of the pipe. Cork City Council intend to undertake the cleaning and CCTV works in due course, however, Mr. Simon Lyons has indicated that the Planning Application may be lodged on the basis that connectivity has been demonstrated.

Following the undertaking of the CCTV works on the piped crossing and at the point where the condition of the piped crossing has been established, it has been agreed that should remedial works be required to ensure the piped crossing is fit for purpose, the applicant shall enter into an agreement with Cork City Council to pay a special contribution towards any remedial works to the crossing proportionate to the quantity of surface water discharging through the piped crossing from the proposed development.

For the purposes of this application and predominantly from an environmental perspective, a "worst case" approach has been considered in respect of the necessary remedial works. From an environmental perspective, it has been assumed that the road crossing may have to be replaced in its entirety and all environmental assessment and reporting is based on this "worst case" scenario although it is not envisaged that such extensive remedial works will be required.

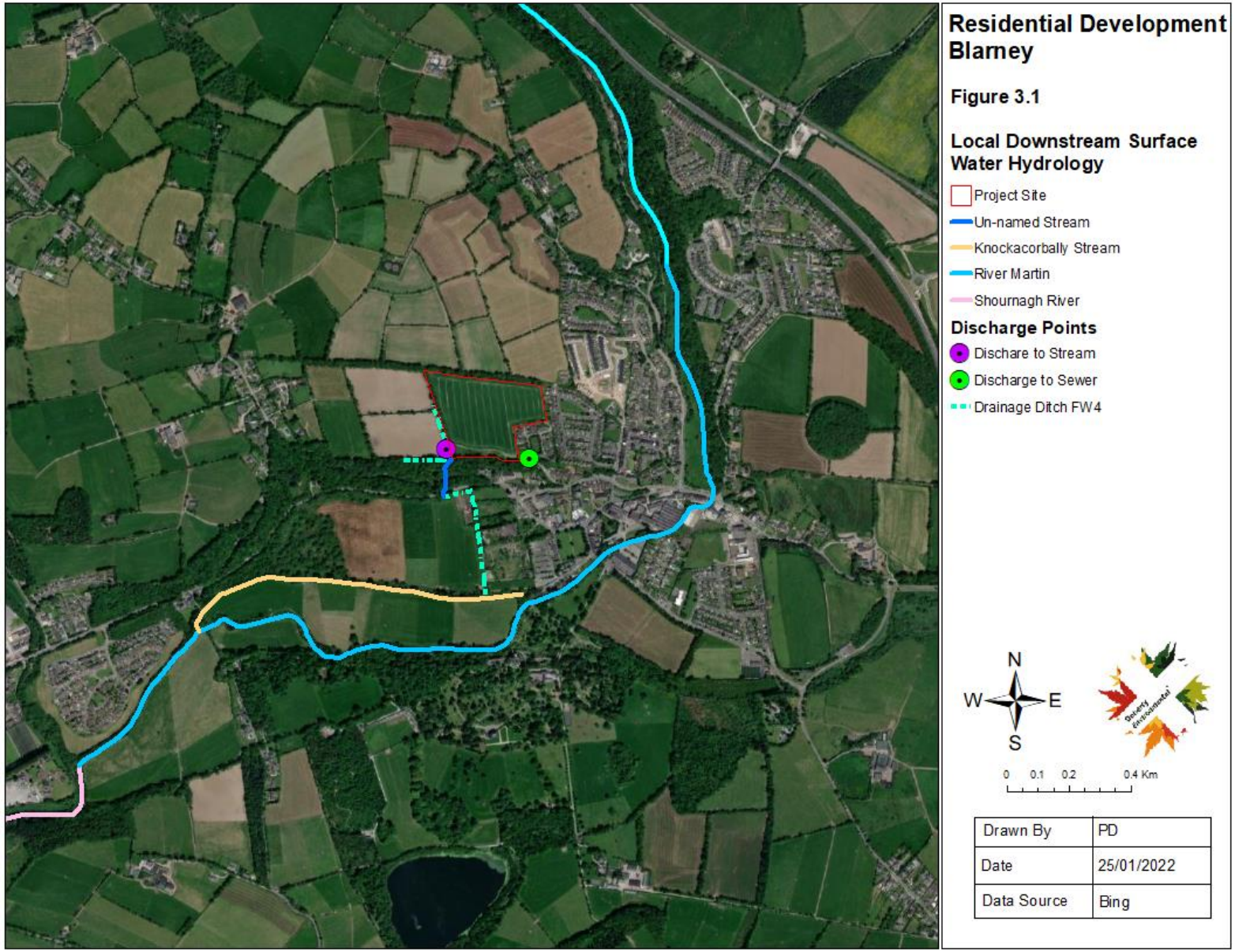

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Figure 3.1
Local Downstream Surface Water Hydrology
Project Site
Un-named Stream
Knockacorbally Stream
River Martin
Shournagh River
Discharge Points
Dischare to Stream
Discharge to Sewer
Drainage Ditch FW4
N
W
E
S
0 0.1 0.2 0.4 Km
Drawn By PD
Date 25/01/2022
Data Source Bing

3.4.2 Surface Water Management on Upper Site Area (North of Net Developable Area)

The area of the development site north of the Net Developable Area shall be retained as existing Meadow. The site is sloping in a north to south direction towards the developable area of the site.

To prevent excess surface water entering the developable area, an open swale shall be constructed north of the net developable area/on the southern extremity of the existing meadow. The open swale shall facilitate infiltration and shall also be connected to the existing open land drain located on the western boundary of the development site.

3.4.3 "Worst Case" Remedial Works to the R617 Tower Road Crossing

The culverted road crossing on the R617 Tower Road was inspected on the 23rd November 2021 where it was found to be heavily silted at the outfall of the culvert on the southern side of the R617 Tower Road.

The crossing will need to be fully cleaned and CCTV surveyed to ascertain the condition of the crossing which comprises of a 600mm diameter precast concrete pipe. There is an element of screening installed on the upstream side of the culvert to prevent large debris entering the pipe but this needs to be cleaned and maintained.

As outlined in the previous section a "worst case" approach has been considered in respect to the required remedial works for this crossing in the absence of information on the condition of the precast pipe. In this regard and for the purposes of comprehensive environmental assessment, it is assumed that the entire precast pipe crossing may need to be replaced. The following is an outline scope of the works required to replace the crossing in its entirety:

- Implement Traffic Management appropriate to the task and scope of the works in hand - this may necessitate a temporary road closure depending on how the contractor plans to undertake the works.

- Retain the existing culvert in operation for the duration of the laying of the new culvert crossing to prevent unnecessary contamination of surface water.

- Saw cut existing road surfacing, excavate trenching for new precast pipe and dispose of all waste materials to appropriate licensed facilities by licensed contractors.
- Lay new 600mm Precast Pipe Crossing, backfill with suitable fill material.
- Install new head wall at pipe outfall location.
- Divert surface water flow to new culvert and make good to inlet screen upstream of culvert.
- Decommission/remove old pipework.
- Backfill/reinstate road crossing in preparation for laying road surfacing.
- Lay road surfacing to match existing, seal all joints.
- Reinstate public footpath, hedgerows and existing boundaries .
- Reinstate road markings and signage where affected.
- Stand down traffic management procedures.

3.4.4 Stormwater Attenuation Design

The management of surface water on the site has been considered in the context of the CIRIA SuDS Manual 2015. In this regard, it is proposed to attenuate surface water generated on the site in a series of 3 attenuation zones designed in accordance with the guidelines set out in Chapter 21 of the SuDS Manual 2015.

Attenuation of surface water on site is considered to be the most effective means of controlling and managing surface water discharge from this site to ensure that surface water arising within the site is discharged at a controlled rate equal to the Greenfield Runoff Rate for the Site.

3.4.4.1 Design Flood Event

The attenuation volume for all zones is calculated on the basis of a 1 in 100 year return period and the outflow from each zone shall be equal to the greenfield run-off rate calculated for each zone.

Detailed attenuations calculations for the 1 in 100 Year Event are contained in the Engineers Report provided for the project under separate cover. The greenfield runoff rates, required and proposed attenuation volumes are summarised in Table 2.1 below.

3.4.4.2 Siting of Attenuation Chambers

All attenuation chambers will be sited in green areas/soft landscaped areas within the site and at least 15m from any dwelling on the site.

Table 3.1: Attenuation Volume Summary

Zone	Storage Volume Required (m^3)	Storage Volume Provided (m^3)*
Zone 1	738.43	760.00 20m x 20m x 2m Zone 4,000 Aquacell Plus Units laid in 5 Layers 800 Units/Layer
Zone 2	533.61	570.00 30m x 10m x 12m Zone 3,000 Aquacell Plus Units laid in 5 Layers 600 Units/Layer
Zone 3	47.35	57.00 7.5m x 5m x 1.6m Zone 600 Aquacell Plus Units laid in Layers

		150 Units/Layer
***Note Volume Provided is calculated on 95% Void Ratio for Aquacell Plus Units which have a volume of 0.19m^3/Unit**		

3.4.4.3 Attenuation Storage Proposal

It is proposed to install a Wavin Aquacell Underground Attenuation System on site. The system shall comprise of 3 no. Attenuation Zones distributed throughout the site.

The Aquacell Plus Cells are wrapped in a fully sealed & welded geomembrane and an outer protective layer to prevent damage to the geomembrane. This will give a fully sealed installation with no potential for groundwater infiltration.

The units shall be installed as per manufacturers' instructions. The outline method of construction as prescribed by the manufacturer is a s follows:-

a) Excavate the trench to the required depth ensuring that the plan area is slightly greater than that of the Aquacell units.

b) Lay 100mm bed of coarse sand, level and compact.

c) Lay the geotextile over the base and up the sides of the trench.

d) Lay the geomembrane on top of the geotextile over the base and up the sides of the trench.

e) Lay the Aquacell units parallel with each other. In multiple layer applications, wherever possible, continuous vertical joints should be avoided. AquaCell units can be laid in a 'brick bonded' formation (i.e. to overlap the joints).

f) Wrap the geomembrane around the Aquacell structure and seal to manufacturers recommendations.

g) If side connections into the Aquacell units is required, (other than the preformed socket), use the appropriate Flange Adaptor (6LB104 or 6LB106). Fix the flange adaptor to the unit using self-tapping screws. Drill a hole through the Flange Adaptor and connect the pipework. (6LB106 should not be used with Aquacell Eco).

h) In order to prevent silt from entering the tank, clogging inlet pipework and reducing storage capacity, it is recommended that the Domestic Silt Trap (6LB300) or the standard Silt Trap (6LB600) is installed prior to the inlet pipework.

i) Wrap and overlap the geotextile covering the entire AquaCell structure, to protect the geomembrane.

j) Lay 100mm of coarse sand between the trench walls and the AquaCell units and compact.

k) Lay 100mm bed of coarse sand over the geotextile and compact. Backfill with suitable material.

The outfall manhole from each attenuation zone shall be fitted with a Vortex Flow Control Valve to limit the flow to the outfall discharge points to the Greenfield Runoff Rate.

The outfall discharge works by gravity as follows:

- The Outfall Manhole which shall be constructed with a weir fills with water and continues to discharge normally for flows up the greenfield runoff rate.
- As flows increases, the outfall manhole fills with water up to the top of the weir wall.
- Water overflows the weir wall and enters the Aquacell Storage Chamber.
- The Aquacell Chamber fills with water for the duration of the rainfall event.
- After the rainfall event; water flows back out of the Aquacell storage chamber, finding its own level and through the non-return flap valve fitted at the bottom of the weir wall.
- The water discharges from the outfall manhole via the vortex flow control valve so that flow from the attenuation zones at all times is limited to the greenfield run-off rate.

3.4.5 Oil & Silt Interception

A Hydrocarbon Interceptor shall be installed prior to each attenuation zone. The units to be installed shall be Kingspan Environmental Class 1 Bypass Separator which shall suitably sized to treat surface waters generated in each attenuation zone.

All Attenuation Zones will be preceded by a Wavin Silt Trap (6LB600) to prevent excessive silt build up in the Aquacell Chambers.

3.5 WASTEWATER MANAGEMENT

It is proposed to discharge foul effluent arising within the development to the Public Foul Sewer located on Sunberry Drive, which is located to the southeast extremity of the site.

There has been consultation with Irish Water in this matter through the submission of a Pre-Connection Enquiry for the development which was submitted on the 25th January 2021. Irish Water subsequently issued Confirmation Feasibility on the 24th March 2021 confirming the proposed connection to the Irish Water Network could be facilitated.

Irish Water further advised in their confirmation of Feasibility Letter that it is likely that an upgrade of the foul sewer in Sunberry Drive will be necessary to facilitate the development and have advised that should the works proceed. Irish Water may seek a contribution towards the upgrade of the network. Irish Water advise the detail surrounding any such upgrades and possible contributions can be agreed as part of the putting in place of a valid connection agreement.

All houses on the site are served by 160/225mm diameter gravity foul sewers which collect foul effluent from each dwelling connection on the site. The new sewer shall be connected to the existing foul sewer network on Sunberry Drive.

The Foul Sewerage System shall be designed and installed in accordance with the guidance contained in the " Code of Practice for Wastewater Infrastructure" published by Irish Water in July, 2020 (Rev. 2).

The following key guidance criteria has been established from the above publication:

- The sewers have been designed on the basis of 6 times Dry Weather Flow (6DWF). Dry weather flow (DWF) is taken as 400 litres per dwelling (2.7 persons per house and a per capita wastewater flow of 150 litres per head per day with provision for a 10% consumption allowance).
- All sewers have been designed with gradients that ensure self-cleansing velocities are achieved. This is based on a minimum flow velocity of 0.75m/second at one third design flow or during average flow conditions (2 times DWF).

In addition to satisfying the criterion on self-cleansing velocity the following conditions shall also be satisfied:

- 150mm nominal internal diameter gravity sewer shall be laid at gradients not flatter than 1:150 where there is at least ten dwelling units connected;
- 225mm nominal internal diameter gravity sewer shall be laid at gradients not flatter than 1:225 where there is at least twenty dwelling units connected;
- A service connection with a nominal internal diameter of 100mm laid to a gradient not flatter than 1:80, where there is at least one WC connected and 1:40 if there is no WC connected.

On the basis of the guidance above, sewer connections from individual houses shall be 100mm diameter pipes laid at a minimum gradient of 1 in 60.

A Statement of Design Acceptance has also been issued by Irish Water on 16th September, 2021 in respect of the proposed wastewater services for the site.

All wastewater will be conveyed from the project site, via the Irish Water sewerage system to the Blarney/Tower wastewater treatment plant (WWTP). Following treatment effluent will be discharged from the WWTP to the River Shournagh, which is a tributary of the River Lee.

The latest available Annual Environmental Report (AER) for the Blarney Agglomeration published on the EPA website is for 2019 (published August, 2020). The 2019 AER reported an exceedance in the emissions limit values (ELVs) for orthophosphate and total phosphorous as a result of low influent flows and inadequately adjusted chemical dosing, however the discharges from the wastewater treatment plant were found not to have an observable impact on water quality of the River Shournagh, which is the receiving watercourse for effluent from the WWTP.

The results of the AER monitoring show that effluent from the WWTP does not negatively impact the River Shournagh and given this result and the adequate capacity available at the WWTP to treat additional loads generated by the project site, all wastewater generated by the project will be adequately treated prior to discharge to the River Shournagh and the Lee catchment such that it will not have the potential to perturb the water quality of the River Shournagh and Lee catchment.

3.6 WATER SUPPLY

There has been consultation with Irish Water in this matter through the submission of a Pre-Connection Enquiry for the development which was submitted on the 25th January 2021. Irish Water subsequently issued Confirmation of Feasibility on the 24th March 2021 confirming the proposed connection to the Irish Water Network could be facilitated.

Irish Water advised in their Confirmation of Feasibility that the preferred connection point for water is the 150mm water main running through the northeast of the site.

The proposed development will be served by a network of 150mm diameter watermain laid out as shown on the accompanying drawings to the Engineering Services Report (provided under separate cover).

Fire Hydrants will be provided such that each house will be within 46m of a Hydrant and these hydrants will be provided so as to be fully accessible to the fire service.

Sluice valves will be installed on all principal water main connections to ensure sections of the development or areas of the development can be isolated for maintenance and repair as required.

A Statement of Design Acceptance has also been issued by Irish Water on 16th September, 2021 in respect of the proposed water services for the site.

3.7 LIGHTING

Outdoor public street lighting will be provided during the operation of the development along the estate public roads.

The entire proposed development will consist of low rise residential buildings, no more than 3-storeys in height and will not involve any tall or brightly illuminated structures. The principal source of night-time lighting associated with the project will be public lighting along the housing estate roads. The proposed development will aim to control the levels of light emitted by all public lighting associated with the development by implementing best practice approaches that aim to minimise light pollution. These measures are as follows:

- All external lighting will be designed to avoid night sky pollution/upward light spill;
- All lighting will be shielded and pointed so that is shines downward onto the ground, minimising the levels of sky glow and glare;
- The minimum amount of light will be used to allow adequate ground level illumination;
- No street lighting will be directed towards the existing hedgerow and treeline bounding the north of the project site and the woodland bounding the south of the project site. These habitat features will be located outside the 1 lux contour of the proposed lighting regime as detailing in the Outdoor Lighting Report prepared for the project.
- Street lighting has also been designed to ensure that new woodland landscape planting to be provided to the north of the developable area will also be located outside the lux contour associated with the outdoor lighting design. This will ensure that this area of proposed woodland habitat will no be subject to elevated lighting and will be optimised to function as habitat for wildlife.

3.8 LANDSCAPING

It is proposed to retain all vegetation associated with the existing woodland habitats bounding the project site to the north, south and west. The project includes a significant programme for tree planting (which is shown on the Landscape Masterplan drawings, presented under separate cover as part of the project planning application documentation). The landscaping design proposes to plant additional specimen and small/medium woodland trees along the northern boundary of the proposed project layout. The specimen woodland trees and small/medium woodland trees will include native species such as *Quercus petraea, Betula pendula, Corylus avellana, Alnus glutinosa, Sorbus acuparia* and *Pinus sylvestris*. The enhancement tree planting will augment the extent of woodland habitat occurring within the footprint of the project site.

The upper part of the site is excluded from development and the long-term planting strategy will provide green infrastructure in keeping with existing field boundary trees to provide a natural backdrop to the development and contribute towards integration of the new houses in the local landscape setting.

3.9 CONSTRUCTION PHASE MONITORING

A Construction and Environment Management Plan (CEMP) has been prepared for the project. As part of the CEMP the construction phase of the project will be monitored to ensure that environmental best practice is adhered to and effectively implemented throughout the duration of this phase. The following systems will be put in place to ensure adherence to best practice:

- The contractor will assign a member of the site staff as the environmental officer with the responsibility for ensuring the environmental measures prescribed above are adhered to. A checklist will be filled in on a weekly basis to show how the measures have been complied with. Any environmental incidents or non-compliance issues will immediately be reported to the project team.

- The project managers will be continuously monitoring the works and will be fully briefed and aware of the environmental constraints and protection measures to be employed.

3.10 ASSESSMENT OF THE CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

An assessment of the potential characteristics of the Proposed Development as described above against the criteria outlined in Schedule 7 of the Planning and Development Regulations 2001 to 2018 are outlined in Table 3.2 below and conclusion and rationale is provided to determine whether these characteristics have the potential to result in likely significant effects to the environment.

Table 3.2: Characteristics of the Proposed Development

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
(a) the size and design of the whole project	The project site is approximately 7.79 Ha in size. All construction works will be largely restricted to the footprint of the development area within the project site and will be completed within a 24-month period. The construction phase will be guided by best practice construction measures that will seek to ensure the construction phase is completed in a manner that does not result in adverse effects to surrounding receptors. The net developable area of the site will be c. 4.1 ha. A landscape design has been prepared for the project, which includes for the retention of boundary woodland habitats, the establishment of additional woodland habitat and the meadow grassland habitat resulting in an overall gain in the extent of woodland and grassland habitats to be managed as semi-natural habitat surrounding the project site. Other areas will also be retained as open space for recreation. The scale of the proposed development is in keeping with the scale of surrounding residential land use in terms of size and design. The project site is located within the settlement boundary of the town of Blarney and is well served by amenities and public transport.
(b) cumulation with other existing and/or approved projects;	A review of Cork County Council's EPlan online planning viewer identified planning approval for a residential development (Planning Ref. 16/7122), comprising the construction of 88 no. dwellings, a crèche and all ancillary development works. This project is located to the east of the project site. Construction is underway for this project since 2019 and the construction phase of this project will not overlap with that of the currently proposed project. The operation phase of this project includes best practice design features (such as surface water and wastewater design management measures) to avoid impacts to the surrounding environment. In addition, strict requirements are to be implemented for the current project to ensure that emissions to surface waters, air and noise are treated and mitigated so that the construction phase does not result in

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	significant disturbance to surrounding receptors. It will be a requirement of the construction phase that all best practice measures relating to the control of noise and air emissions, as detailed in this report, are implemented to ensure that noise and air emission limits are not exceeded during the construction phase. Measures to protect the water quality of surrounding surface waters will also be implemented throughout the construction phase. Such measures are outlined in the Ecological Impact Assessment (EcIA) Report and the Outline Construction Plan and Construction Waste Management Plan for the project, which is provided under separate cover. It is also noted that a similar approach is to be adopted for the development under Planning Ref. 16/7122. Planning Reference 14/4879: Retention of a single storey utility room to the rear of an existing dwelling. This is a small-scale project that will not have the potential to combine with the proposed project to result in significant cumulative effects to biodiversity. Planning Reference 15/5689: Extension to an existing two storey house. This is a small-scale project that will not have the potential to combine with the proposed project to result in significant cumulative effects to biodiversity. Planning Reference 15/5448: Extension to an existing two storey house. This is a small-scale project that will not have the potential to combine with the proposed project to result in significant cumulative effects to biodiversity. Planning Reference 15/6413: Extension to an existing house. This is a small-scale project that will not have the potential to combine with the proposed project to result in significant cumulative effects to biodiversity. Planning Reference 17/6849: Extension to an existing house. This is a small-scale project that will not have the potential to combine with

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	the proposed project to result in significant cumulative effects to biodiversity. Planning Reference 20/39502/An Bord Pleanála Reference No.: 308670: This planning application which has been granted by An Bord Pleanála consists of a 3-storey primary care centre with 5 no. ground floor retail units and café at Stream. Ann's road, Monacnappa. The proposed development site is located approximately 100m to the south of the current project site and is buffered from it by existing roads, woodland and residential housing. In the event that planning approval is granted for both projects the potential will exist for the construction phase of both to overlap. The current project will include the implementation of measures to avoid significant negative impacts to receiving watercourses downstream of the project site; will implement measures to minimise construction noise so that significant disturbance is avoided; and will implement measures to minimise construction related air emissions in the form of dust so that the potential for significant nuisance to surrounding receptors is avoided. With the implementation of these measures the project will not have the potential to combine with this other project result in cumulative negative construction phase impacts. The design measures included for the operation phase of the project to manage and treat surface water and wastewater will ensure that such emissions from the project site will not result in negative impacts to receiving waters and will not have the potential to combine with this other project to result in cumulative negative impacts to receiving waters. Planning Reference No. 20/39597/An Bord Pleanála Reference No.: 309152: Proposed mixed use development, Blarney Town Centre: This planning application which has been approved by An Bord Pleanála consists of a mixed-use development including supermarket at the former Blarney Park Hotel site to the south of the current project site. The proposed development site is located approximately 250m to the south of the current project site and is buffered from it by existing roads, agricultural grassland and residential housing estates. In the event that planning approval is granted for both projects the potential will exist for the construction phase of both to overlap. The current project will include the implementation of measures to avoid significant negative impacts to receiving watercourses downstream of the project site; will implement measures to minimise construction noise so that significant disturbance is avoided; and will implement

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	measures to minimise construction related air emissions in the form of dust so that the potential for significant nuisance to surrounding receptors is avoided. With the implementation of these measures the project will not have the potential to combine with this other project result in cumulative negative construction phase impacts. The design measures included for the operation phase of the project to manage and treat surface water and wastewater will ensure that such emissions from the project site will not result in negative impacts to receiving waters and will not have the potential to combine with this other project to result in cumulative negative impacts to receiving waters. Planning Reference No. 20/39101: planning approval for the demolition of an existing single storey sunroom and the construction of a two-storey extension to the rear of an existing dwelling. This is a small-scale project that will not have the potential to combine with the proposed project to result in significant cumulative effects to biodiversity.
(c) the nature of any associated demolition works	An existing garage and boundary walls will be demolished/lowered in height at 1 Sunberry Drive to facilitate access to the site. The works involve in the demolition of this structure will be minor and of a short term nature and will not have the potential to result in any significant environmental effects.
(d) the use of natural resources, in particular land, soil, water and biodiversity;	Construction related activities will be largely restricted to the footprint of the project site. Soil that will be excavated within the project site will be reused for landscaping and filling. Surplus soil material will be disposed of at an approved facility. Water required for the construction phase and operation phase of the project will be supplied by the existing mains water supply. Irish Water has confirmed that there is adequate water to meet the future needs of the project. No significant effects to biodiversity will arise as a result of the construction or operation of the project. Mitigation measures have been provided in the accompanying EcIA Report to ensure there is no

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	loss of or significant disturbance to foraging bat habitat and nesting bird habitat in surrounding woodland habitats. The EcIA report examined the potential for the project to result in negative impacts to NHAs and pNHAs in the wider surrounding area and has found that the project will not have the potential to undermine such conservation areas. The potential for the project to result in adverse effects to European Sites has also been examined and the results of this examination are detailed in the Natura Impact Statement for the project, provided under separate cover. A highly precautionary approach was adopted for this examination and it was found that in the absence of the implementation of mitigation measures the project could have the potential to combine with other existing sources of pollution to the River Lee catchment and the River Lee Estuary section of the Cork Harbour SPA downstream. Mitigation measures have been outlined in the Natura Impact Statement to ensure that the project's potential to combine with such other existing pressures to the water quality of the River Lee catchment is eliminated. Mitigation measures outlined in the Natura Impact Statement are based on standard construction phase and operation phase approaches to the proper management of surface water generated at construction and development sites and it has been found that with the implementation of these measures the project will not have the potential to result in adverse effects to European Sites in the wider surrounding area. Natural resources in the form of hydrocarbons will be required for energy and electricity during the construction phase and operation phase of the project. Other building raw materials will be required during the construction phase. However the natural resources required will be typical of those required for the development and operation of a residential development and there provision will not have the potential to result in significant negative effects.
(e) the production of waste;	Solid inert waste in the form of soil and stone will be produced during construction but materials will be only ordered as required. Any wastes from the construction process will either be reused within the scheme, or recycled/disposed of at an authorised waste facility.

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	During the construction phase the waste management hierarchy will be implemented onsite, which prioritises the prevention and minimisation of waste generation. The approach to minimising and handling waste as outlined in the CEMP (provided under separate cover) will be implemented in full during the construction phase. During the operation phase the waste generated will be typical of a residential development. All waste generated will be disposed of by a licenced waste contractor. Wastewater generated during the operation phase will be directed to the existing Blarney/Tower WWTP, and Irish Water has issued a Statement of Design Acceptance for the proposed development.
(f) pollution and nuisances;	The construction phase presents the greatest risk of pollution to water resources. Potential sources of water pollution to both surface and groundwater include fuel, lubricants, suspended solids and concrete. Silt-laden surface runoff could arise during vegetation stripping. However as no surface watercourse occurs within the development footprint and given the approach to the construction phase of the project the potential impact to surrounding surface water quality during the construction phase has been assessed as being imperceptible. Similarly, given the design measures to be implemented for the operation phase of the project potential pollution to water resources in the immediate vicinity is considered to be imperceptible. The construction phase has the potential to result in nuisance to surrounding receptors as a result of noise, vibrations and dust generated during construction activities. In order to minimise any potential for noise and vibration nuisance mitigation measures will be implemented during the construction phase. These measures will adhere to the best practice guidelines outlined in BS5228: Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 1 Noise (2009 + A1 2014). These standard guidelines offer detailed guidelines on the control of

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	noise and vibration from construction activities. The following mitigation measures will be implemented during the construction phase of the proposed development to ensure noise and vibration limit values are complied with: • The hours during which site activities are likely to create high levels of noise will be limited to a set time period; • Where construction activity takes place in the vicinity of residential properties, it will be restricted to the stipulated hours of operation identified above. • Construction site hoarding will be erected along noise sensitive boundaries where works are taking place in proximity to existing residential properties where no substantial screening exists. Such hoarding will be provided along the eastern boundary of the project site. • During the construction phase a clear line of communication will be established between the contractor/developer, Local Authority and residents; • A site representative will be appointed to take responsibility of all matters relating to noise and vibration; • A complaints procedure will continue to be operated by the contractor's representative throughout the construction phase and all efforts should be made to address any noise issues at the nearest noise sensitive properties; • Noise monitoring will be undertaken during the construction phase, particularly during critical periods and at sensitive locations; • All site access roads will be kept even to mitigate the potential for noise and vibration from lorries.

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	• The potential for any item of plant to generate noise will be assessed prior to the item being brought onto the site. The least noisy item should be selected; • If replacing a noisy item of plant is not a viable or practical option, consideration will be given to noise control "at source". This refers to the modification of an item of plant or the application of improved sound reduction methods in consultation with the supplier. For example, resonance effects in panel work or cover plates can be reduced through stiffening or application of damping compounds; rattling and grinding noises can often be controlled by fixing resilient materials in between the surfaces in contact. • Where required noise barriers will be erected around items such as generators or high duty compressors; • Noisy plant will be sited as far away from sensitive properties as permitted by site constraints. • Mobile plant will be switched off when not in use and will not be left idling. • • All items of plant will be subject to regular maintenance. Such maintenance can prevent unnecessary increases in plant noise and can serve to prolong the effectiveness of noise control measures. With the implementation of these measures, it is predicted that the nuisance impact of noise generated during the construction phase will be of a short-term, slight, negative nature. There is the potential for dust emissions arising during construction, particularly during dry and/or windy weather conditions. Dust emissions may also be exacerbated by the presence of dry surfaces and uncovered stockpiles during the construction. The quantity of dust is likely to be relatively small and dust emissions would be temporary in nature. Dust effects are likely to create nuisance in the immediate locale rather than significant environmental effects. Best

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	practice mitigation measures will be put in place to minimise adverse effects. In order to minimise dust emissions during construction the following measure will form part of that plan and will be implemented during the construction phase: • Site access routes shall be regularly cleaned and maintained as appropriate. Hard surface areas shall be swept to remove mud and aggregate materials from their surface while any un-surfaced areas shall be restricted to essential site traffic only. Furthermore, any area that has the potential to give rise to fugitive dust must be regularly watered, as appropriate, during dry and/or windy conditions. • The roads will be monitored throughout the works and a road sweeper will be employed when required for the duration should the roads become dirty. • Before entrance on to public roads, trucks will be adequately inspected to ensure no potential for dust emissions. • Public roads outside the site shall be regularly inspected for cleanliness, and cleaned as necessary. • Bowsers or suitable watering equipment will be available during periods of dry weather throughout the construction period. • During periods of very high winds (gales), activities likely to generate significant dust emissions shall be postponed until the gale has subsided. • Vehicles on site shall have their speed restricted, and this speed restriction will be enforced rigidly. Vehicles delivering or removing material with dust potential shall be enclosed or covered with tarpaulin at all times to restrict the escape of dust.

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
	• There will be no stockpiling of materials in public areas within the project footprint. • Weekly dust monitoring will be carried out using a handheld Microdust Pro- Automatic dust monitoring unit. • During working hours, dust control methods will be monitored as appropriate, depending on the prevailing meteorological conditions. • The name and contact details of a person to contact regarding air quality and dust issues shall be displayed on the site boundary, this notice board should also include head/regional office contact details; • Community engagement will be undertaken before works commence on site explaining the nature and duration of the works to local residents and businesses; • A complaints register will be kept on site detailing all telephone calls and letters of complaint received in connection with dust nuisance or air quality concerns, together with details of any remedial actions carried out; • It is the responsibility of the contractor at all times to demonstrate full compliance with the dust control conditions herein; • At all times, the procedures put in place will be strictly monitored and assessed. With the implementation of these dust minimisation measures in addition to a construction management plan including dust mitigation fugitive emissions of dust from the site will be insignificant and will not pose a nuisance at nearby sensitive receptors

Screening Question	**Response**
1. Characteristics of projects The characteristics of projects must be considered, with particular regard to:	
(g) the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge;	Provided that all measures outlined in this report and accompanying documentation for the project are implemented and that all associated building and environmental regulations are adhered to it is not predicted that the project will not have the potential to result in a major accident or disaster.
(h) the risks to human health (for example due to water contamination or air pollution).	Section 1(f) of this Table details measures that are to be implemented to ensure that the project does not result in nuisance generated by noise, dust or vibration emissions. All best practice mitigation measures outlined in this screening report will represent a minimum requirement to be implemented as part of the construction phase of the project. With the implementation of these measures the construction phase will not represent a significant risk to human health. During the operation phase the development will be connected to the existing public water and sewer infrastructure and will not result in the release of untreated foul effluent. Other emissions generated during the operation phase will relate to air conditioning and heating units. The emissions to atmosphere from such units are not predicted to have the potential to result in significant adverse environmental effects.

Conclusion: No significant effects likely to arise associated with the characteristics of the proposed development.

Rationale: The scale and extent of the works proposed are representative of a medium scale project and are proposed on habitats of low ecological value in an area contiguous with established residential land use and high levels of human activity. Designs measures that form part of the project will also ensure protection of the receiving environment. These design

measures include the implementation of storm water management and the landscaping of the project site with the planting of additional trees and the establishment of meadow grassland. Design measures for lighting will minimise the potential for disturbance to woodland habitats and the fauna supported by them. The provision of a new linear woodland boundary along the northern boundary of the proposed development will screen the development from lands to the north and will also provide additional woodland habitat for fauna species. The implementation of targeted mitigation measures to minimise noise levels and dust emissions at sensitive receptors will also ensure that the project does not result in nuisance to the receiving population.

4.0 LOCATION OF THE PROPOSED DEVELOPMENT

4.1 INTRODUCTION

The location of the proposed development is described in accordance to with the aspects of the environment likely to be significantly affected by a proposed development as outlined in Schedule 6 of the Planning and Development Regulations, 2001, as amended. These aspects of the environment are:

- Population & Human Health
- Biodiversity
- Soil & Geology
- Water
- Air/climatic factors
- Landscape
- Cultural heritage, including the architectural and archaeological heritage and cultural heritage
- Material assets
- The inter-relationship between the above factors.

A summary of each of the above topics as they relate to the location of the proposed development is provided in the following sub-sections.

4.1.1 Population & Human Health

The project site is located within Blarney, Cork.

Figure 2.3 of the Cork County Development Plan 2014 identifies a population target of 7,533 people to 2022 (a growth of 5,096 people from 2011) in an additional 2,566 housing units. The proposed development of 143no. residential units, which could be occupied by up to 420 people (based on the average family size of 2.8 for Cork County (2016 census)), will make a contribution to this population and housing target.

Human health impacts will be primarily considered through an assessment of the environmental pathways by which health can be affected such as air, noise, water or soil.

4.1.2 Land

The land cover within the site is representative of arable land with cereal crops being grown within it. Land use in the surrounding area consists of residential housing estate immediately to the east of the project site. A school is located to the south of the project.

4.1.3 Biodiversity

The project site is located at a remote distance from the nearest European Site, Natural Heritage Areas (NHAs) and proposed NHAs (pNHAs). A Natura Impact Statement and an Ecological Impact Assessment (EcIA) have been completed by DEC Ltd. and these have concluded that the project will not have the potential to result in adverse effects to the qualifying features of interest and Conservation Objectives for European Sites, NHAs and pNHAs and that the integrity of these sites will not be adversely affected.

The project site is entirely comprised of arable land habitat, of low ecological value and conservation importance. No protected mammals were identified as using the project site as a breeding or resting places. Commonly occurring bird species were recorded using treelines and woodland bounding the site for nesting.

DEC Ltd have completed bat surveys for the project site. No roosting opportunities occur within the project site. Mature trees associated with woodland habitat bounding the project site were surveyed for their potential to function as bat roosts. No bats were found to be roosting in those trees that were targeted for survey. Bat activity surveys found that bats use the hedgerows,

treelines and woodland surrounding the site for foraging habitat. Mitigation measures have been incorporated into the design of the development to protect bats and their foraging habitat adjacent to the project site. All development associated with the project will be buffered from boundary hedgerows and woodland. A lighting regime sensitive to bats and their habitat has been prepared for the project. This lighting plan has been prepared with the aim of maintaining unlighted conditions along the hedgerows and woodland bounding the project site. Additional landscape planting, using native species typical of the area surrounding the project site has been prepared and will be implemented. The landscape planting will provide additional foraging/resting/breeding habitat for bats, birds and other fauna species. The lighting regime has also been designed to ensure that light spill in proposed new landscaped habitats will be avoided/minimised.

The threatened slug species *Tandonia rustica* occurs in the woodland to the south of the project site. this species is restricted to the woodland and does not rely on the habitats occurring within the project site or bounding the project to the west. The project will not result in any loss of habitat or disturbance to the habitat upon which this species relies.

4.1.4 Soils & Geology

4.1.4.1 Land & Subsoils

The topography of the study area is sloping from north to south. Elevation changes from circa 87m OD to 55m OD in the south. Overall, this whole area is underlain by glacial deposits and glacial tills, with alluvium mapping the river beds. The bedrock is characterised by sandstone with mudstone and siltstone of the Gyleen Formation. The subsoils are comprised of till derived from Devonian sandstone.

The project site is located within the Ballinhassig East groundwater catchment and is underlain by a locally important aquifer: bedrock, which is moderately productive only in local zones. The GSI aquifer vulnerability maps for the area indicate that the majority of the site is of high vulnerability, while the southern portion of the site is of extreme vulnerability. The groundwater quality of the area is classified as good.

4.1.4.2 Geological Heritage Sites and Protected Habitats

There are no recorded geological heritage sites in the close proximity to the study area. The nearest geological heritage site is located over 5km to the southwest of the project site along the Lee Road in Cork.

4.1.4.3 Historic Landfills and Illegal Dumping

A review of EPA data on waste licence and unlicensed sites has confirmed that there are no known historic landfills or illegal landfills in the area of the study area.

4.1.4.4 Quarrying

There are no quarries within 5km of the study area.

4.1.5 Water

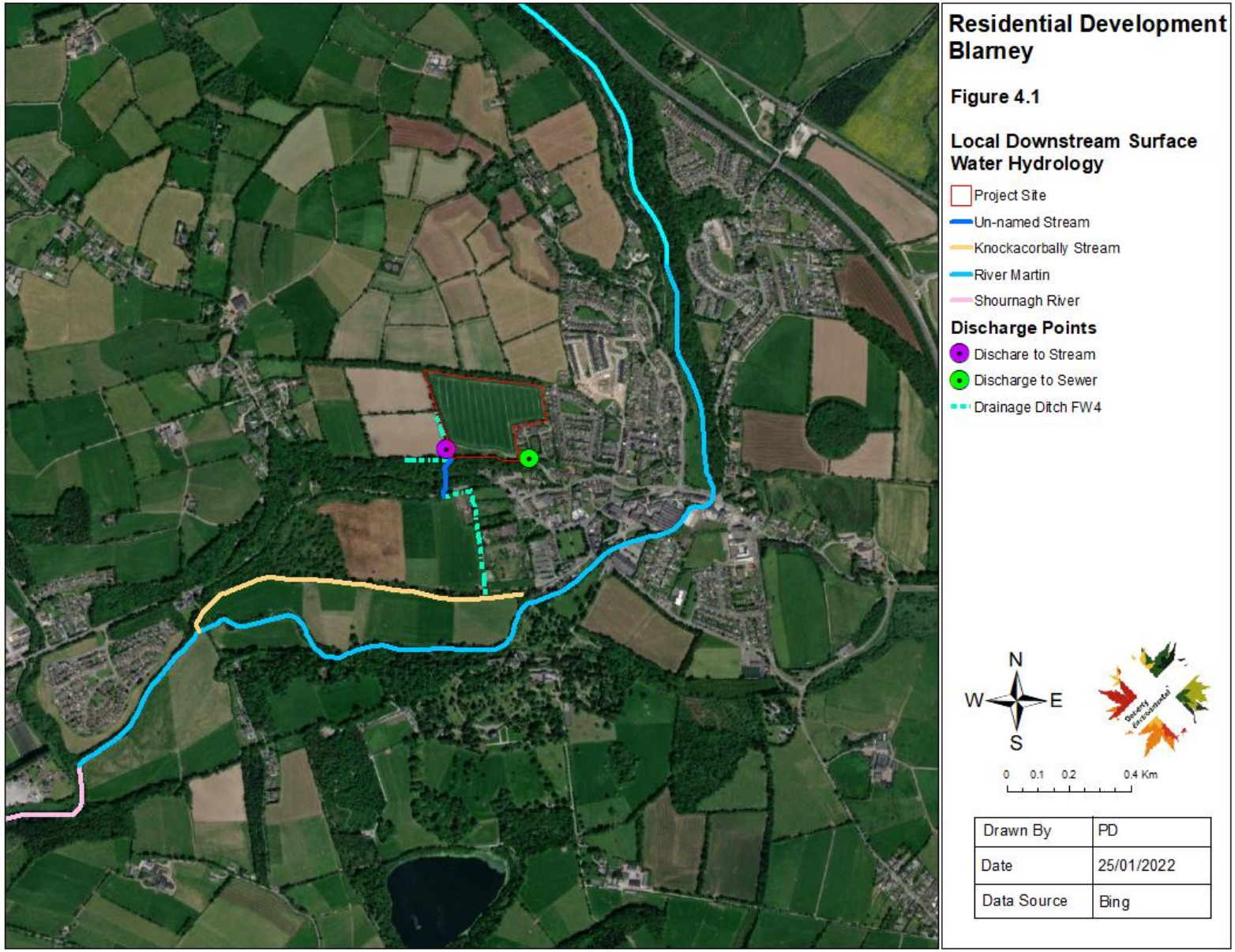
4.1.5.1 Surface Water

The project site is located within the River Shournagh sub-basin district in Hydrometric Area No. 19 of the Irish River Network. It is within the River Lee and Cork Harbour catchment.

A minor un-named stream occurs to the southwest of the project site and treated surface water will be discharged from the project site to this stream. This un-named stream flows into the Knockacorbally Stream, which in turn flows into the River Martin. The River Martin is a tributary of the River Shournagh, which finally drains into the River Lee to the east of Ballincollig. Figure 4.1 illustrates the location of these surface watercourses.

No water quality information is available for the receiving un-named stream or the Knockacorbally Stream. The River Martin is of good to high water quality. The nearest EPA water quality monitoring station to the project site is located downstream along the River Shournagh at Tower Bridge. Recent biological water quality monitoring at this monitoring station in 2011 and 2014 have return a result of Q4-5 indicating that water quality along this river is good.

In accordance with the Water Framework Directive (WFD), each river catchment within the SWRBD has been assessed and its risk of not achieving good status has been assigned. The


Residential Development
Blarney
Figure 4.1
Local Downstream Surface Water Hydrology
Project Site
Un-named Stream
Knockacorbally Stream
River Martin
Shournagh River
Discharge Points
Dischare to Stream
Discharge to Sewer
Drainage Ditch FW4
N
W
E
S
0 0.1 0.2 0.4 Km
Drawn By PD
Date 25/01/2022
Data Source Bing

WFD risk assessment for the Knockacorbally Stream, the section of the River Martin downstream and the River Shournagh has been classed as "Not at Risk".

4.1.5.2 Water Supplies

There are no regional groundwater supplies or Source Protection Areas identified within this area. The nearest Source Protection Areas sites are located over 5km to the north of the project site at Grenagh.

The GSI Well Card Index is a record of wells drilled in Ireland. It is noted that this record is not comprehensive, as licensing of wells is not currently a requirement in Ireland. This current index shows the location of springs and wells. A review of the index has revealed that the nearest well to the project site is located approximately 500m to the north in the townland of Knocknasuff.

4.1.5.2.1 Flooding

The latest Lee Catchment Flood Risk Assessment and Management (CFRAM) study maps available (Halcrow, 2012) show that the project site does not lie within a flood zone.

4.1.6 Air & Climatic Factors

4.1.6.1 Air

The latest annual report on Air Quality in Ireland 2014 (EPA 2014) states that overall air quality in the country is good. Measured values of sulphur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (CO), Ozone (O_3), particulate matter (PM10 and PM2.5), heavy metals, benzene and polycyclic aromatic hydrocarbons (PAH) were all below limit and target values set out in the CAFE Directive and 4th Daughter Directive. However, when some of these parameters are compared to the tighter WHO Air Quality Guideline values, it highlights some potential issues. Ireland is above these guideline values with respect to PM10, PM2.5, ozone and PAH.

The primary sources of pollutants are traffic (source of nitrogen dioxide and particulate matter), and domestic solid fuel use (particulate matter). The project site is located within Air Zone B

and within the Cork City Air Quality Index Region and the current air quality in this region has been classified as "Good" by the EPA (http://www.epa.ie/air/quality/).

A review of IPPC licences issued by the EPA for the region show that there are no IPPC licenced facilities with emissions to the atmosphere within 5km radius of the project site.

4.1.6.2 Climate

Ireland has signed up to several Climate agreements including the "*2030 Climate and Energy Policy Framework*" which aims to reduce GHG emissions by 40% compared with 1990 levels by 2030. 2013 and 2014 saw a decreasing trend in Ireland's GHG emissions, this can be attributed to a decrease in economic activity. The agriculture and transport sectors make up the majority of non-ETS emissions making up 72.4% of emissions in 2014. Energy production using fossil fuels is continually decreasing in recent years with renewable energy production increasing. Renewable energy production increased by 6.6% on 2012 levels in 2013 and by 12.6% based on 2013 levels in 2014. This increasing trend continued into 2015 with a 4% increase in renewable energy production based on 2014 levels. However in 2016 renewables accounted for 25.5% of electricity generated in 2016 (down from 27.3% in 2015).

Between 2014 and 2016, national total emissions have increased by 7.4% or 4.23 Mt CO_2eq. In the same period, emissions in the ETS sector have increased by 11.2% or 1.78 Mt CO_2eq and in the non-ETS sector by 5.9% or 2.45 Mt CO2eq.

This change in trend is a result of increasing economic growth and employment. While Ireland has been in compliance with its EU 2020 target up to 2015 however 2016 figures indicate that Ireland exceeded its 2016 annual limit set under the EU's Effort Sharing Decision (ESD), 406/2009/EC3 by 0.3 Mt CO_2eq.

4.1.7 Landscape & Visual

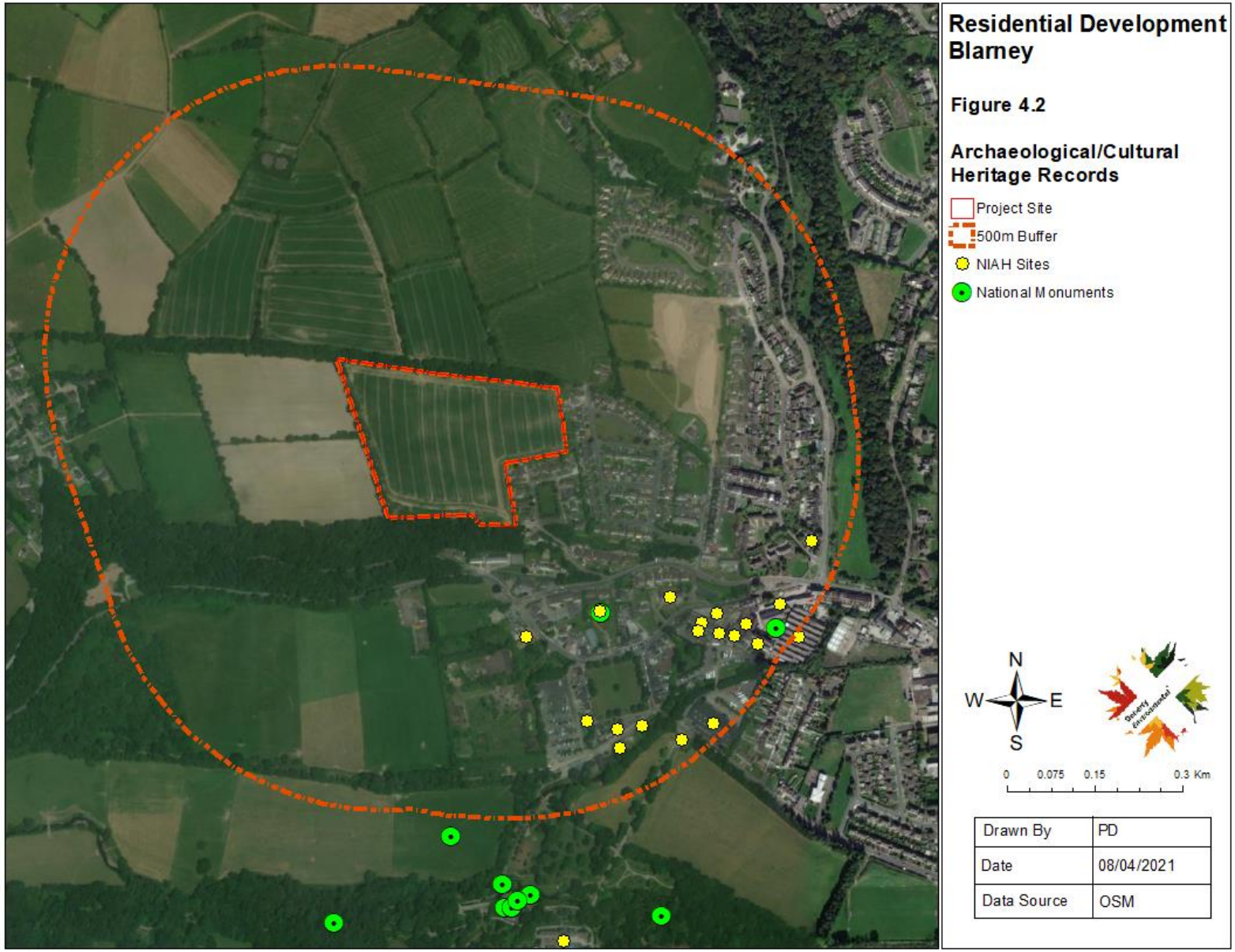
The proposed road lies within the Broad Fertile Lowland Valleys Landscape Character Area (LCA). The site is situated between a rural landscape and a residential area. Existing developments to the east of the site include Sunberry Heights, Sunberry Drive and Castleowen developments. The settlement and development pattern in the immediate context of the site is urban fringe in character. The site is predominately surrounded by farmland to the north and

west with residential developments Sunberry Heights, Sunberry Drive and Castleowen to the east and a woodland area, Blarney National School and Blarney town to the south. The internal and external field boundaries of the proposed site are formed by hedgerows and mature and semi-mature trees. These are generally considered to be dense and of good quality. Sunberry Heights road situated to the south east of the site connects the site to the Blarney road network via the R617. This section of the R617 is not designated as a scenic route.

4.1.8 Cultural Heritage

4.1.8.1 Archaeology

Figure 4.2. shows the recorded sites and monuments within a 500m buffer of the project lands. There are no sites within the project footprint.


Residential Development
Blarney
Figure 4.2
Archaeological/Cultural
Heritage Records
Project Site
500m Buffer
NIAH Sites
National Monuments
N
W
E
S
0
0.075
0.15
0.3 Km
Drawn By
PD
Date
08/04/2021
Data Source
OSM

4.1.8.2 Architectural Heritage

Figure 3.2. shows the record of building of architectural heritage (National Inventory of Architectural Heritage (NIAH)) within a 500m buffer distance of the project site. There are no protected structures within the project footprint. The Blarney Castle complex is located to the south-west of Blarney Town.

4.1.9 Material Assets

4.1.9.1 Transportation

The principal road in the vicinity of the project site is the R617. The Sunberry Heights Road connects the project site to this road.

Blarney is not currently served by any rail link. The town and the surrounding area is served by the Bus Eireann: the 215 bus route, which connects the proposed development site to Cork City on a half-hourly service.

No navigable waterways occur within close proximity to the project site.

4.1.9.2 Utilities

A review of all utility constraints within the surrounding area has been completed. This review identified the following utilities in the wider area surrounding the project site:

- ESBI & ESB – Power Supply
- Gas Networks Ireland (GNI) - Gas Supply
- Eir - Telecommunications
- Virgin Media - Telecommunications
- Irish Water - Storm Water & Foul Wastewater
- Irish Water – Water Supply and Sewerage

4.1.10 Inter-relationship of Parameters & Environmental Sensitivity

The proposed development at the project site will provide continuity with the existing extent of built land occurring within the town of Blarney. It is located within the Blarney Settlement boundary. It supports habitats of low value. Woodland habitats bounding the project site are of higher value and provide foraging habitat for protected bat species and shelter and foraging habitat for protected bird species.

The project site is not located within the immediate vicinity of any major watercourse. It is located in a sensitive groundwater area. It is not at risk of flooding and is located in an area of good air quality status.

The footprint of the proposed development is located in an area of low landscape and visual sensitivity. The footprint is relatively enclosed and the development will not impact the surrounding landscape character as it is restricted to the low portion of the site that is not prominent. The upper part of the site, which is closer to the ridge top and therefore more visible, is not suitable for development and will be managed as a species-rich wildflower meadow grassland habitat. The landscape character of the upper part of the site will be retained as is. The development site is not located within a Scenic Landscape and is screened from Scenic Route No. S39, along the R617 between Clogheen, Tower and Blarney.

There are no protected sites or monuments or protected buildings occurring within or in the immediately vicinity of the project site.

The project will not have the potential to result adverse effects to the material assets occurring in the vicinity of the project site. For instance, it will not have the potential to result in road closures, adversely effect the electricity network or the water supply network.

Given the above the project site is considered to be of low environmental sensitivity. The most environmentally sensitive aspect of the project site and surrounding area is the presence of existing residential dwellings in Sunberry estate to the east of the project site, the presence of a school to the south of the project site and the presence of woodland habitats surrounding the project site.

4.2 ASSESSMENT OF THE LOCATION OF THE PROPOSED DEVELOPMENT

Table 3.1 below provides information on the location of the proposed development with respect to the assessment criteria provided in Schedule 7 of the Planning and Development Regulations 2001, as amended.

Table 4.1: Location of the Proposed Development

Screening Criteria ***The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:***	**Response**
(a) the existing and approved land use;	The existing land use within the project site is arable for the growing of cereal crops. The project site is highly disturbed being intensively managed as arable crops are rotated on site on a seasonal and annual basis. The existing Blarney-Macroom Municipal District Local Area Plan has zoned the project site for residential development. This residential zoning objective is maintained in the draft Cork City Development Plan 2022-2028. The proposed development is in line with approved zoning land use for the project site.
(b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground	The project site is currently subject to intensive agricultural management for the growth of arable crops and is not sensitive in terms of natural resources. The overall design of the project has included landscaping and lighting designs that will aim to protect boundary woodland habitats and the role they play in supporting fauna such as bats and birds.

Screening Criteria ***The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:***	**Response**
	The proposed development will not have a significant effect on the relative abundance, availability, quality and regenerative capacity of natural resources.
(c) the absorption capacity of the natural environment, paying particular attention to the following areas: (i) wetlands, riparian areas, river mouths; (ii) coastal zones and the marine environment; (iii) mountain and forest areas; (iv) nature reserves and parks; (v) areas classified or protected under national legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC;	The potential for the proposed development to significantly affect the absorption capacity of the environment, with respect to the parameters listed in Column 1 opposite are outlined below. (i) no works are proposed that will affect wetlands, riparian areas or river mouths. (ii) not applicable, the project is located at a remote distance from the coastal zone. (iii) not applicable, the project is located at a remote distance from mountainous and forested areas. (iv) not applicable, the project is located at a remote distance from any nature reserves and parks. (v) The Natura Impact Statement that accompanies the proposed development application has examined the potential for adverse effects of the project on the conservation objectives of the Cork Harbour SPA downstream of the development and has concluded, that provided all construction phase and operation phase design and mitigation measures are implemented as outlined in the Natura Impact Statement and accompanying Ecological Impact Assessment (EcIA) and Construction Environmental Management Plan (CEMP) the project will not have the potential to result in adverse effects to the Cork Harbour SPA. An EcIA of the proposed development has

Screening Criteria ***The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:***	**Response**
	assessed the potential for the likely significant effects to NHAs and pNHAs and has concluded that the project does not have the potential to result in likely significant effects to these conservation areas.
(vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;	(vi) Surface water quality within the wider area has been assessed by the EPA to be of good status and are not currently failing to meet environmental quality standards. Environmental Quality Standards for Noise and Air have been reviewed as part of this EIA Screening and no existing exceedances in these standards have been reported. The Groundwater Body in the surrounding area has been assigned Good status (EPA, 2015). The design of the project and the best practice mitigation measures that will be required to be implemented during the construction phase and operation phase, as detailed in the accompanying Natura Impact Statement, EcIA and CEMP, will ensure that the project does not perturb the long-term quality of the environment in the area surrounding the project site.
(vii) densely populated areas;	The subject lands are located within the environs of the town of Blarney. The surrounding area is not representative of a densely populated area, however a population target of 7,533 people to 2022 (a growth of 5,096 people from 2011) in an additional 2,566 housing units has been identified for Blarney in the Cork County Development Plan 2014. It is considered that sufficient capacity in terms of services and amenities are in place to accommodate the proposed development.

Screening Criteria ***The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:***	**Response**
(viii) landscapes and sites of historical, cultural or archaeological significance	The footprint of the proposed development is not located within a sensitive landscape area and is not situated in a prominent location. No sites of historical, cultural or archaeological significance occur within the footprint of the proposed development.

Conclusion: No significant effects likely to arise associated with the location of the proposed development.

Rationale: The proposed development relates to an area of approximately 7.7 ha contiguous with an area of existing residential land use in close proximity to the centre of Blarney. A Natura Impact Statement and an EcIA have determined a finding of no adverse effects on the conservation management objectives of European Sites, NHAs and pNHAs within the wider area surrounding the project site. The change of use from arable land to residential and amenity grassland is not identified as resulting in significant negative effects across the receiving environment as described in this section. The provision of woodland planting along the northern boundary of the proposed development and the management of existing arable land cover as species-rich wildflower meadow to the north of the woodland planting will enhance the overall biodiversity supported by the project site. The project will implement standard construction phase and operation phase design and mitigation measures that will ensure that water quality along freshwater habitats downstream of the project site is safeguarded.

5.0 CHARACTERISTICS OF POTENTIAL IMPACTS

Having considered the above environmental factors the aim of this section is to address likely impacts on the environment resulting from the proposed development. Whether an EIA would

be deemed necessary relevant to the scale of the project and the environment will then be examined.

The 2014 EIA Directive requires that an assessment of the likely significant effects of a project on the environment must be considered with regard to the factors specified in Article 3(1) of the Directive and Section 171A(b)(i)(I) to (V) of the Planning and Development Regulations 2001 as amended, taking into account:

(a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);

(b) the nature of the impact;

(c) the transboundary nature of the impact;

(d) the intensity and complexity of the impact;

(e) the probability of the impact;

(f) the expected onset, duration, frequency and reversibility of the impact;

(g) the cumulation of the impact with the impact of other existing and/or approved projects;

(h) the possibility of effectively reducing the impact.

The factors outlined in Article 3(1) of the Directive are presented in Table 5.1 below under the heading of "Environmental Factor". The results of the assessment provided in Table 5.1 are then used to inform an assessment against the criteria evaluating the characteristics of potential impacts.

Table 5.1: Characteristics of Potential Impacts on Environmental Factors

Environmental Topic	Potential Impact
Populations & Human Health	Potential temporary negative impacts to existing residents and staff of adjacent residential dwellings and the school during the construction phase of the development. Best practice measures as outlined in this screening report will reduce temporary effects associated with construction. All relevant best practice mitigation measures required for avoiding likely significant effects to populations and human health through potential effects to soils, water, noise, air etc will be required to be implemented for the construction phase of the project. No operational impacts are identified for human beings.
Biodiversity	The construction phase represents the greatest potential risk to local water quality and supporting habitats, and proposed measures identified in this Screening Report 2 will minimise this risk to an insignificant level and provide good practice during the construction phase. As the habitats present relate to existing intensively managed and disturbed arable land no impacts are identified for habitats within the project site at construction or operation in this regard. In the absence of a sensitive approach to the design of the project and lighting regime the potential will exist for disturbance to woodland habitats bounding the project site. However the project has been designed with the aim of minimising disturbance to these habitats. All proposed residential dwellings will be buffered back from the western hedgerow and southern woodland by designing rear garden areas to buffer houses from these western and southern boundary features. Woodland enhancement planting will be provided along the northern boundary of the proposed development. Treeline screening of the southern elevation of the apartment buildings will be provided along the southern boundary between the apartments and the woodland habitat to the south. Lighting will be designed to maintain unlit conditions adjacent to hedgerows and woodland so that disturbance to foraging bats is avoided or minimised to an imperceptible level. The additional woodland planting and the management of the area to the north of the proposed development and the

Environmental Topic	**Potential Impact**
	south of the project site's northern boundary as meadow grassland will provide additional foraging and breeding/resting opportunities for fauna.
Soil and Geology	There will be no significant impact to soils or geology.
Water	The project site is not located in close proximity to any major watercourse and no surface waters occur within the footprint of the project. The project site is underlain by a sensitive aquifer of local importance. All design and mitigation measures outlined in this screening report with regard to managing water on site during the construction phase and operation phase will be implemented. These measures are representative of best practice guidelines for preventing pollution to water and their implementation will eliminate or at minimum reduce to an insignificant level the risk of pollution to waters. The project site is not located within a flood zone and is not at risk of flooding. The project will be connected to the existing sewer and all foul water generated at the project site during the operation phase will be directed to the Blarney/Tower WWTP for treatment. This will eliminate the potential for the emission of wastewater to the surrounding aquatic environment.
Air Quality and climate	The potential will exist for localised, temporary impacts associated with dust generated from construction plant and machinery such as diggers or excavators. Emissions during works phase will be minimised through the implementation of best practice mitigation techniques as outlined in Section 3 above.
Noise and Vibration	Noise during the construction phase may result in nuisance however, noise and vibration during works phase will be minimised through best practice and the implementation of mitigation measures outlined in this screening report. With the implementation of these measures the construction phase

Environmental Topic	Potential Impact
	will not result in significant noise nuisance to sensitive receptors and will be minimised to a short term, slight negative impact. Traffic noise and vibration during the operation phase are not considered likely to be significantly increased as a result of the project.
Cultural Heritage	None identified. No known archaeological or architectural features are within the site footprint.
Landscape & Visual	The proposed development is not located within a prominent setting and will not alter the surrounding landscape character. The proposed development will retain and enhance the semi-mature and mature trees and hedgerows enclosing the site, minimising any visual intrusion of the development in the surrounding area.
Interrelationship between above parameters	The key interrelationship arises between air quality and noise associated with traffic emissions and excavation during construction and human health. The implementation of mitigation measures outlined above will ensure that these emissions are minimised to a level that will not result in significant noise, vibration or dust nuisance to surrounding sensitive receptors.

Table 5.2: Characteristics of the potential impacts

Characteristics of potential impacts (The potential significant effects of project in relation to criteria set out below are informed by the results of the assessment provided in Table 5.1 above)	Potential Impact

(a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);	Minor and localised temporary impacts are identified primarily at construction stage only.
(b) the nature of the impact;	The nature of the impact associated with the proposed development to environmental parameters have been set out in Table 5.1 above. It has been concluded that provided all best practice and mitigation measures as outlined in this report are implemented the project will not have the potential to result in significant environmental effects.
(c) the transboundary nature of the impact;	Given the size, scale and location of the proposed development potential transfrontier impacts will not arise.
(d) the intensity and complexity of the impact;	The project is representative of a medium scale residential development. It will be of a short-term duration with the construction phase being completed within an estimated timeframe of 24 months. With the implementation of best practice measures and associated mitigation it will not result in intense or complex impacts to the receiving environment.
(e) the probability of the impact;	Impacts during the construction phase associated with disturbance to fauna and nuisance to sensitive receptors at adjacent dwellings and schools are probable, but the implementation of best practice measures and associated mitigation will ensure that these effects are of a short term and slight negative impact.
(f) the expected onset, duration, frequency and reversibility of the impact;	It is estimated that impacts associated with the construction phase will commence within 6 months of planning approval and will last for approximately 24 months. This will represent a short-term impact. No long-term or permanent significant negative impacts are predicted to arise as a result of the construction phase. There will be an irreversible and permanent loss of arable land to the footprint of the project. The conversion of this land to

	residential and amenity grassland will not represent a significant negative environmental effect. Furthermore the provision of woodland planting and the management of the area of the project site between the northern boundary of the proposed development and the project site as species-rich wildflower meadow will have the potential to result in positive impacts for local biodiversity.
(g) the cumulation of the impact with the impact of other existing and/or approved projects;	As outlined in Table 3.1 above the project will not have the potential to combine with other projects to result in negative cumulative effects to the surrounding environment.
(h) the possibility of effectively reducing the impact.	Measures are detailed in this screening report that will, upon their implementation, have the potential to effectively reduce the potential for the project to result in significant environmental effects. These measures will be implemented as a best practice approach for the proposed development and are proven to be effective at reducing the potential for adverse environmental impacts to occur. In addition a range of design measures have been incorporated into the project to ensure the potential for the project to result in adverse environmental effects are minimised. These design measures include the proposed approach to surface water and wastewater management during the construction phase and operation phase, the approach to lighting during the operation phase, and the proposed landscaping design for the operation phase of the development.

Conclusion: No significant effects likely to arise associated with the potential impacts on environmental parameters.

Rationale: As outlined in Table 5.1 the proposed development will not have the potential to result in significant adverse effects to biodiversity, soils and geology, water, landscape and cultural heritage. There will be potential for impacts to human beings as a result of noise and air emissions during the construction phase of the proposed development. However these impacts have been assessed as being of low significance and measures have been outlined to ensure that these potential impacts are mitigated to in insignificant level. As such no significant residual impacts to environmental parameters as outlined in Table 5.1 are predicted to arise as a result of the proposed road development.

Conclusion: No significant effects likely to arise associated with the characteristics of the potential impacts.

6.0 CONCLUSION

The project at Monacnapa does not trigger the threshold for mandatory EIA/EIAR as set out in the 2001 Regulations (as amended) and has been assessed as a sub-threshold EIA development. This EIA Screening Assessment has determined that the characteristics of the project are considered not significant due to the scale and nature of the project and its footprint, the characteristics and sensitivities of the receiving environment and design and mitigation measures that will be implemented as part of the construction phase and operation phase of the project.

The European Guidance on EIA Screening provides a checklist to assist with the decision of whether an EIA is required based on the characteristics of a project and its environment. This screening checklist is presented in Table 6.1 below and has been informed by the various assessments that have been set out in Sections 2, 3 and 4 above.

Table 6.1: Screening Checklist

Questions to be Considered	Yes / No? Briefly describe	Is this likely to result in a significant effect? Yes/No/? – Why?
1. Will construction, operation or decommissioning of the Project involve actions which will cause physical changes in the locality (topography, land use, changes in waterbodies, etc.)?	Yes	No. While the project will result in changes to levels and land cover in the site these will not result in a significant negative environmental effect. The current land cover is arable land which is of low value. The change in land cover to residential dwellings and associated infrastructure and amenity grassland will not result in a significant negative impact to existing land cover. The provision of woodland habitat and meadow grassland will have the potential to enhance the biodiversity value of the project site.
2. Will construction or operation of the Project use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?	Yes	No. The project will require natural resources in the form of standard construction materials. The quantities to be used as part of the project will be relatively small given the scale of the project.

3. Will the Project involve use, storage, transport, handling or production of substances or materials which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health?	Yes	No. Standard construction materials will be used during construction. Best practice construction will be implemented during the construction phase and all such materials will be stored in secure locations and will be handled in accordance with accepted construction procedures.
4. Will the Project produce solid wastes during construction or operation or decommissioning?	Yes	No. Waste in the form of construction material wrappings and pallets etc. will be generated during the project. In addition waste generated by site operative at the site canteen etc. will be generated. All solid waste will be managed in accordance with relevant waste legislation and all waste would be removed by the site by a licensed contractor and disposed of at a licensed facilities. Efforts will be made to reuse as part of the project's construction phase wherever possible soil material generated during excavations at the project site. Where materials cannot be reused they will be transferred off site by a licensed contractor and disposed of at a licensed facilities. The movement of an soil material from the project site will be subject to the control measures.
5. Will the Project release pollutants or any hazardous, toxic or noxious substances to air?	Yes	No. It is expected that dust and emissions from construction vehicles, plant and equipment may be released temporarily during construction. These emissions are expected to be at worst minor and mitigation measures as outlined in this Screening Report will be implemented to minimise emissions and prevent discharge. All emissions will be kept within standard air quality limits outlined in the relevant legislation.
6. Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?	Yes	No. It is expected that noise and vibration of a minor and short-lived scale being restricted to the construction phase of the project. Mitigation measures have been outlined this Screening Report to minimise the potential impact of noise and vibration. The project site is located within an urban environment with existing night time lighting. The project will not change the extent of night time lighting in the area.
7. Will the Project lead to risks of contamination of land or water	Yes	No. There are no watercourses in the vicinity of the project site. In addition all potentially polluting

from releases of pollutants onto the ground or into surface waters, groundwater, coastal wasters or the sea?		materials will be stored and used during the construction phase of the project in accordance with best practice procedures.
8. Will there be any risk of accidents during construction or operation of the Project which could affect human health or the environment?	Yes	No. Construction activities would be undertaken with due regard to occupational health and safety. The site manager would be responsible for the management of health and safety on site during construction.
9. Will the Project result in social changes, for example, in demography, traditional lifestyles, employment?	No	No. The project is predicted to have the potential to result in positive effects for local demography. It will not have the potential to result in changes to traditional lifestyles. It will have the potential to result in positive effects for employment during the construction phase and also during the operation phase through the provision of a creche facility.
10. Are there any other factors which should be considered such as consequential development which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality?	Yes	No. The project it will not have the potential to combine with other projects or land uses to result in significant negative cumulative impacts to the environment.
11. Are there any areas on or around the location which are protected under international or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the project?	No	No protected natural areas such as European Sites or NHAs occur in the vicinity of the project site. A Natura Impact Statement for the project has been completed and has found that the project is not likely alone or in combination with other projects result in adverse effects to any European Sites. An EcIA Report has found that the project will not have the potential to result in significant negative effects to NHAs or pNHAs occurring in the wider surrounding area. There will be no potential for the project to interact with areas designated for cultural heritage. The proposed development project site is not located within an area of high landscape value and will not result in any perceptible changes to the landscape and visual setting. The project will not

		have any potential to diminish the value of the landscape in the surrounding area.
12. Are there any other areas on or around the location which are important or sensitive for reasons of their ecology e.g. wetlands, watercourses or other waterbodies, the coastal zone, mountains, forests or woodlands, which could be affected by the project?	No	The habitats occurring within the project site are dominated by artificial arable land habitat of negligible value. They are not representative of sensitive ecological receptors.
13. Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project?	No	There are no protected areas surrounding the project site. woodland habitats surrounding the project site provide habitat for protected fauna species. The project has been designed to minimise disturbance to these habitats. In addition the project will include the establishment of additional woodland habitat and meadow grassland habitat which will have the potential to result in positive impacts for protected fauna species.
14. Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project?	Yes	No.
15. Are there any areas or features of high landscape or scenic value on or around the location which could be affected by the project?	No	No.
16. Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project?	Yes	No.
17. Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?	Yes	No. The construction phase will be of a short-term duration and will involve a low number of construction vehicular movements that are not predicted to have the potential to result in significant traffic volumes that could lead to congestion.
18. Is the project in a location where it is likely to be highly visible to many people?	Yes	Yes. During the construction phase mitigation measures will be put in place to minimise the visual disturbance caused by the construction works.

		Once constructed the project will blend in with the surrounding built and natural landscape.
19. Are there any areas or features of historic or cultural importance on or around the location which could be affected by the project?	No	No. No such features occur within the project footprint. .
20. Is the project located in a previously undeveloped area where there will be loss of greenfield land?	Yes	No. The project site is located in a developed man made environment.
21. Are there existing land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project?	Yes	No. As outlined in this Report the potential exists for at worst minor levels of disturbance and nuisance to properties occurring adjacent to the project site. Mitigation measures have been outlined in this Report and it is predicted that, with the implementation of these mitigation measures, potential for disturbance and nuisance to these properties will be minimised.
22. Are there any plans for future land uses on or around the location which could be affected by the project?	No	No.
23. Are there any areas on or around the location which are densely populated or built-up, which could be affected by the project?	Yes	No. The construction phase will be restricted to the project site and with the implementation of a best practice approach to the construction phase and all measures outlined in this Report there will be no potential for significant effects to the population occurring in the surrounding area.
24. Are there any areas on or around the location which are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project?	Yes	Yes. Schools are located in the vicinity of the project site. However the construction phase will be restricted to the project site and with the implementation of a best practice approach to the construction phase and all measures outlined in this Report there will be no potential for significant effects to the population occurring in the surrounding area.
25. Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism,	No	No.

minerals, which could be affected by the project?		
26. Are there any areas on or around the location which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?	No	No.
27. Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?	Yes	No.

Given the scale and nature of the project and taking account of all available information, the overall probability of impacts on the receiving environment arising from the project (during the construction or operational phases) is considered to be low, as summarised in Table 6.1 above.

No significant environmental impacts will occur and furthermore mitigation measures have been outlined in this Report to further eliminate the potential for any minor disturbances to arise. These mitigation measures are representative of standard industry environmental management that are implemented to minimise the impact of projects to the environment.

The information provided in this EIA Screening Report can be used by the competent authority, An Bord Pleanála, to conclude and determine that an EIA is not required for the project at Monacnapa as there will be no significant environmental effects.

Article 4(5) of the EIA Directive states that:

"The competent authority shall make its determination, on the basis of information provided by the developer in accordance with paragraph 4 taking into account, where relevant, the results of preliminary verifications or assessments of the effects on the environment carried out pursuant to Union legislation other than this Directive. The determination shall be made available to the public and:

(a) where it is decided that an environmental impact assessment is required, state the main reasons for requiring such assessment with reference to the relevant criteria listed in Annex III; or

(b) where it is decided that an environmental impact assessment is not required, state the main reasons for not requiring such assessment with reference to the relevant criteria listed in Annex III, and, where proposed by the developer, state any features of the project and/or measures envisaged to avoid or prevent what might otherwise have been significant adverse effects on the environment."

The proposed development has been assessed as a sub-threshold EIA development. This EIA Screening Assessment has determined that the characteristics of the proposed development are considered potentially not significant due to the size, scale and location of the development, the characteristics and sensitivities of the receiving environment and design and mitigation measures that will be implemented as part of the construction phase and operation phase of the proposed development.

The overall conclusion for this screening exercise is that a full Environmental Impact Assessment Report is not required for the proposed residential development.