SCREENING ASSESSMENT FOR A PROPOSED RESIDENTIAL DEVELOPMENT AT BOHERBOY ROAD, MAYFIELD, CORK.

In support of the Appropriate Assessment Process

Prepared for:

Clancy Construction Ltd

On behalf of Cork City Council.

Prepared by:

Croft Ecology

Kelleher Ecology Services Ltd.

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Our Project Reference: 028-01-2021

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Executive Summary

This report presents a Screening assessment, in support of the Appropriate Assessment process, in relation to a proposed residential development at Boherboy Road, Cork.

It is objectively concluded that no significant effects arising from the development works are likely to occur in relation to the Natura 2000 sites; Cork Harbour SPA and Great Island Channel SAC.

1 Introduction

Croft Ecology and Kelleher Ecology Services Ltd. (KES) were commissioned by Clancy Construction Ltd., on behalf of Cork City Council, to undertake a Screening Assessment in support of the Appropriate Assessment process regarding potential impacts of a proposed residential development at Boherboy Road, Mayfield, Cork on Natura 2000 sites in the wider area. This Part 8 planning application by Cork City Council is for seven units to be included with a permitted scheme at Boherboy Road (planning reference 16/7292 and ABP appeal reference 249376) in response to Conditions 2 & 3 of its planning grant.

1.1 Statement of Competence

1.1.1 Dr Katherine Kelleher

Katherine Kelleher is a graduate of University College Cork with a BSc in Zoology and PhD in Ecology, and established Kelleher Ecology Services in 2011. She has over 15 years of experience in ecological consultancy, acting as project manager on a range of ecological assessments & projects including solar/wind farm, road, gas pipeline, landfill, grid connection, industrial development, retail and housing. Katherine has significant experience of research, evaluative and analytical work in relation to planning applications, EIAR, appropriate assessment, planning compliance, commitments, licensing, baseline assessments, scoping studies *etc*.

1.1.2 Dr Daphne Roycroft

Daphne has over 10 years of experience in the field of Ecological Consultancy and holds a BSc and PhD in Ecology from the National University of Ireland, Cork. She is a self-employed Ecological consultant, trading as Croft Ecology. Daphne is experienced in the preparation of Ecological Impact Assessment Reports and Appropriate Assessment screening appraisals as well as Natura Impact Statements for a variety of projects including wind farms, solar farms, roads, pipelines, residential developments, ports and landfill sites. She has published research papers in several peer-reviewed scientific journals and has lectured on several degree and certificate courses in The National University of Ireland, Cork.

1.2 Background: Appropriate Assessment Process

The Appropriate Assessment process is undertaken to consider if any proposed plan or project is likely to have a significant impact with associated effect on any site that has been designated under the E.U. Habitats Directive (92/43/EEC) as a Special Area of Conservation (SAC), or the E.U. Birds Directive (79/409/EEC as amended 2009/147/EC) as a Special Protection Area (SPA). Collectively, SAC's and SPA's are known as Natura 2000 sites. The E.U. Habitats Directive has been transposed into Irish law under Part X AB of the Planning and Development Act 2000-2015 and the European Communities (Birds and Natural Habitats) Regulations 2011-2015. Appropriate Assessment has been a legal requirement in Ireland since the 26th of February 1997 when the European Communities (Natural Habitats) Regulations 1997 (S.I. No. 94/1997) were signed into law by the then Minister for Arts, Culture and the Gaeltacht, Michael D. Higgins.

A Screening assessment is part of an appropriate assessment process that consists of up to four stages, where each stage follows on from the preceding one. The need to undertake one or more stages of this process has arisen from Articles 6(3) and 6(4) of the aforementioned Habitats Directive; where the former Article is primarily concerned with the protection of sites from likely significant effects and the latter allows

derogation from such protection in very specific circumstances involving imperative reasons of overriding public interest.

In Stage 1, a screening process is undertaken to identify whether significant[1]effects on a Natura 2000 site are likely to arise from the project or plan in question. If significant effects are likely to occur or if it is unclear whether significant effects are likely to occur, then the process moves on to Stage 2 where an appropriate assessment (AA) considers potential mitigation measures for adverse impacts. If it is considered that mitigation measures will not be able to satisfactorily reduce potential adverse impact on a Natura 2000 site then an assessment of alternative solutions is considered in Stage 3. This is then followed by Stage 4 in the event that adverse impacts remain and the proposed activity or development is deemed to be of Imperative Reasons of Overriding Public Interest (IROPI), allowing an assessment of compensatory measures to be considered. The outcome of a Stage 2 and higher assessment is presented in a report known as a Natura Impact Statement (NIS).

While a Screening assessment can be provided by the advocate of the plan or project in question, the AA itself is undertaken by the competent/public authority (*e.g.*the planning authority, An Bord Pleanála *etc*). In this case, Cork City Council is the competent authority in relation to AA regarding the project described herein; although informed by this Screening Assessment and any other relevant information provided.

1.3 Methodology

This report presents the outcome of a Screening assessment to identify whether significant effects or impacts are likely to arise from the proposed development. It is important to emphasise that a Screening Assessment does not have to ascertain the existence of a significant effect or impact on a Natura 2000 site as such; it only has to establish whether a significant effect or impact is possible or may occur (as highlighted by Advocate General Sharpston 22nd November 2012 and Ms. Justice Finlay Geoghegan 25th July 2014; see guidelines below). This assessment was undertaken as part of a SHD Pre Application consultation by the client for planning permission of the aforementioned development, where Natura 2000 conservation sites are present in the wider area.

The conservation objectives of Natura 2000 sites have been compiled by the National Parks & Wildlife Service (NPWS) in relation to the habitats and species (*i.e.* qualifying interests) for which the sites are selected. These conservation objectives are referred to when carrying out appropriate assessments for plans and projects that might impact on these sites. So, in this case, the conservation objectives of the relevant Natura 2000 sites have been considered in the following assessment and report.

Documents associated with the development and relevant ecology databases were consulted as part of this assessment (as outlined in Sections 4 & 5 below), as well as a site walkover of the study site on 2nd July

[1] A European Court of Justice ruling in 2013 (Case C-258/11) has stated the following regarding significant effect: "Where a plan or project not directly connected with or necessary to the management of a site is likely to undermine the site's conservation objectives, it must be considered likely to have a significant effect on that site. The assessment of that risk must be made in the light of, in particular, the characteristics and specific environmental conditions of the site concerned by such a plan or project (see, to this effect, Waddenvereniging and Vogelbeschermingsvereniging, paragraph 49)"

2021 (see Section 2.2 below). Cognisance was also taken of guidelines and judgements pertaining to AA such as the following (not exhaustive) examples;

- Appropriate Assessment Screening for Development Management (OPR 2021).
- Managing Natura 2000 sites. The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. Commission Notice (European Commission 2018).
- Integrated Biodiversity Impact Assessment – Streamlining AA, SEA and EIA Processes: Practitioner's Manual (EPA 2013).
- Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (DoEHLG 2009).
- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites – European Commission Methodical Guidance on the provisions of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (European Commission 2001).
- European Court of Justice Opinion 22nd November 2012 by Advocate General Sharpston; Case C-258/11 Peter Sweetman and Others v An Bord Pleanála – in determining whether a project or plan has an adverse effect on the integrity of a site (to which Article 6(3) of Council Directive 92/43/EEC applies), an effect which is permanent or long lasting must be regarded as an adverse effect.
- European Court of Justice Judgement 11th April 2013 by the Third Chamber; Case C-258/11 Peter Sweetman and Others v An Bord Pleanála - criteria to be applied when assessing the likelihood that a project or plan (N6 Galway City Outer Bypass road scheme in this case) will adversely affect the integrity of a Natura 2000 site (Lough Corrib SAC in this case), where the integrity of a Natura 2000 site is considered to be adversely affected if a plan or project is liable to prevent the lasting preservation of the constitutive characteristics of the site that are connected to the presence of a priority natural habitat whose conservation was the objective justifying the designation of the site.
- High Court Ruling 25th July 2014 by Ms. Justice Finlay Geoghegan; Neutral Citation [2014] IEHC 400; High Court Record No. 2013 802 JR; Kelly -v- An Bord Pleanála – judicial review of grant of planning by An Bord Pleanála for two wind farm phases in County Roscommon, including failure of ABP to carry out lawful appropriate assessment and giving reasons for its determination.
- High Court Ruling 24th November 2014 by Mr. Justice Hedigan; Neutral Citation [2014] IEHC 557; High Court Record No. 2014 320 JR; Rossmore Properties Limited & Anor -v- An Bord Pleanála – where mitigation measures are an intrinsic part of a project, they may be taken into account in the stage 1 screening process.
- High Court Ruling 25th February 2016 by Mr. Justice Barton; Neutral Citation [2016] IEHC 134; High Court Record No. 2013 450 JR; Balz & Heubach -v- An Bord Pleanála - recording complete definitive and precise findings, and conclusions re Appropriate Assessment.
- European Court of Justice Judgement 12th April 2018 by the Seventh Chamber; Case C 323/17; People Over Wind & Sweetman -v- Coillte Teoranta - it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on a Natura 2000 site.
- European Court of Justice 19th April 2018; Case C 164/17; Grace & Sweetman -v- An Bord Pleanála – a measure compensating for the negative effects of a project cannot be taken into account in an Appropriate Assessment Natura Impact Statement (Stage 2).
- European Court of Justice 7th November 2018; Case C 461/17; Holohan & Others v. An Bord Pleanála - all the habitats and species for which the Natura 2000 site is protected must be catalogued; an Appropriate Assessment must identify and examine the implications of the

proposed project for species present on the Natura 2000 site, including species for which the site has been listed and those for which it has not, provided those implications are liable to affect the conservation objectives of the site; an Appropriate Assessment must identify and examine the implications of the proposed project for species and habitats outside the boundaries of the Natura 2000 site, provided those implications are liable to affect the conservation objectives of the site.; the competent authority may grant consent for a plan or project that leaves for later decision the determination of certain parameters relating to the construction phase if the competent authority is certain (i.e. 'no reasonable scientific doubt) that the development consent granted establishes conditions that are strict enough to guarantee that those parameters will not adversely affect the integrity of the site.

- High Court Ruling 2nd February 2019 by Mr. Justice Barniville; Neutral Citation [2019] IEHC 84; High Court Record No. 2017 883 JR; Kelly -v- An Bord Pleanála & Anor- SUDS are not mitigation measures which a competent authority is precluded from considering at the stage 1 screening stage.
- High Court Ruling 21st June 2019 by Mr. Justice Simons; Neutral Citation [2019] IEHC 450; High Court Record No. 2019 20 JR; Heather Hill Management Company clg & anor -v- An Bord Pleanála & anor - a competent authority is not entitled to rely on "best practice measures" for the purposes of a stage 1 screening determination where the legal test is whether measures are intended to avoid and/or reduce a potential harmful effect on a European site.
- High Court Ruling 31st January 2020 by Mr. Justice Denis McDonald; Neutral Citation [2020] IEHC 39; High Court Record No. 2019 33 JR; Peter Sweetman -v- An Bord Pleanála , Ireland and The Attorney General – the competent authority was not entitled to take the measures described in the CEMP into account in carrying out the screening exercise for appropriate assessment in this particular solar farm development case, where the CEMP referenced protection of the River Blackwater that also overlapped with the SAC here.
- High Court Ruling 2nd December 2020 by Mr. Justice Denis McDonald; Neutral Citation [2020] IEHC 622; High Court Record No. 2020 238 JR; Highlands Residents Association and Protect East Meath Limited -v- An Bord Pleanála , Ireland and The Minister For Culture Heritage and The Gaeltacht, Ireland and The Attorney General – the Board (competent authority) erred in law in screening out (in the course of the stage 1 screening exercise carried out by the competent authority) the possibility of significant effects on the relevant four Natura 2000 sites in relation to potential risk arising from the mobilisation of silt and pollutants from the development site in this particular SHD development application, where the relevant application documentation (EIAR, AA NIS, CEMP) referenced protection of the River Boyne within the context that the proposed development site has a relatively close hydrological connection to the four relevant Natura 2000 sites in question here.

2 Brief Description of the Site, Project & Natura 2000 Sites

2.1 Site: Location

The study site is located at Boherboy Road, Mayfield, Cork (see Figure 2.1). The c. 0.58ha application site is associated with a larger permitted housing development (under planning reference 16/7292 and ABP reference 249376), where the main application area here adjoins the south-western corner of the permitted development and a smaller section is located along the northern boundary of the permitted development (see Figure 2.2). Construction works are currently underway at the permitted development and the study site here has been recently disturbed as part of the site clearance works and comprises recolonising bare ground. The site slopes gradually from east to west *c.* 117-98m above sea level, and is surrounded by residential developments and a school.

The study site is located within the Lee, Cork Harbour and Youghal Bay River Catchment, Kiln sub-catchment, Hydrometric Area 19 in the South-Western River Basin District[2]. There are no watercourses or other water-features at or near the site. The nearest watercourse is the Glen River, located *c.* 370m northwest of the study site. The Glen River is a tributary of the Kiln River, which discharges to the Lee (Cork) Estuary Lower. The Glen River is considered to be *At Risk* of not meeting its Water Framework Directive (WFD) targets, but has not been assigned a WFD status[2]. The Lee (Cork) Estuary Lower has a Moderate WFD status and is considered to be *At Risk* under the WFD risk assessment[2].

2.2 Site: Walkover

A site walkover was undertaken on 2nd July 2020 when weather conditions were good (dry with light winds). An objective of the site walkover was to gain an overview of the study site as well as to note ecological points of interest such as the presence of habitats/species that are protected or are qualifying interests of the Natura 2000 sites relevant here (as outlined in Section 2.4 below) and invasive plant species.

As described in Section 2.1, the study site under consideration here is split into two application areas, with one small area located along the northern boundary of the permitted 'parent' housing development site and a larger section located adjacent to the south-western corner of the 'parent' site (see Figure 2.2). Construction works were underway at the 'parent' site during the site walkover where the study site here (including both application areas) had been recently disturbed as part of the site clearance works. The habitat at the study site comprises recolonising bare ground and was dominated by ruderal/early coloniser species such as nettle *Urtica dioica*, ragwort *Senecio jacobaea*, rosebay willowherb *Chamerion angustifolium*, thistles *Cirsium* spp. and a range of grasses (see Plate 1). The south-western part of the application area is bounded on three sides by a concrete/block wall (buildings and artificial surfaces) and to the north by the active construction site (spoil and bare ground). The northern part of the application area is bounded to the north by a high block wall associated with the adjacent Ashford Heights Housing Estate and is otherwise surrounded by the construction site associated with the 'parent' development. There are no trees, hedgerows or other semi-natural habitats within the study site boundary. No watercourses, drains or other water-features are present at the study site.

[2] see https://gis.epa.ie/EPAMaps/

No non-native plant species were recorded on the study site during the site walkover. The study site does not currently support habitats/species that are qualifying interests of the Natura 2000 sites under consideration here, or of particular ex-situ ecological value for such qualifying interests (see Section 2.4 below).

Plate 1: Overview of the northern part of the application area, with the adjacent Ashford Heights housing estate in the background (left) and the south-western part of the application area, looking north (right).

2.3 Project Details

This comprises of a Part 8 planning application for a relatively small number of house units to be included with the permitted 'parent' housing development at Boherboy Road Mayfield Cork (under 16/7292 and 249376) in response to planning Conditions 2 & 3 of the 'parent' development that requested a revised layout of Houses Nos. 119, 120, 121, 152 & 153 (south-western application area) and amended design of House No. 41 (northern application area). Due to the addition of the former Harrier Club on Boherboy Road to the development site, one house (No. 154) is proposed to be added to the south-western terrace. This brings the total number of units in the overall development (*i.e.* this application plus the 'parent' application) to 154, a net increase of one unit on the original planning application. Also, the pedestrian connection along the south-west boundary connecting the permitted development with Boherboy Road has been widened to incorporate a cycle lane in accordance with Condition No. 7 of the 'parent' permission. A total of nine car parking spaces are also to be provided for the houses at the south-western application area. In addition, permission is sought for the construction of a 2.4m block wall 1m inside existing boundary with the rear gardens of existing houses fronting onto Boherboy Road. Vehicular access to the study site/application areas is via a single entrance from Boherboy Road in the south-east of the overall development area. In summary, this development will comprise the construction of seven two-bed units as follows:

- 6 no. 2-bed single-storey terraced houses are proposed at the southwestern application area
- 1 no. 2-bed single storey + dormer end-of-terrace house is proposed along the northern application area.

The proposed site development works will be carried out in accordance with best practice regarding standard environmental protection (*e.g.* CIRIA 2015 and 2001), where it is currently anticipated that the completion of the development will be in tandem with the permitted 'parent' housing development (expected May 2022). Environmental inputs associated with the proposed development will include

surface-water run-off, waste-water and other wastes; however, these inputs will be controlled/managed as follows.

2.3.1 Surface-Water Run-Off: Construction Phase

There are no existing watercourses/drains or other water-features at the study site that could convey construction stage surface-water run-off to any off-site watercourses/waterbodies. Although surface-water run-off associated with the construction stage will generally percolate to ground, standard environmental controls will nonetheless be implemented as part of the project to ensure the appropriate management and control of surface-water run-off potentially arising from development activities at the site (*e.g.* CIRIA 2015 and 2001).

As construction progresses, part of the proposed surface-water drainage network for the south-western part of the application area may become active where it will be connected into an existing public combined stormwater/foul sewer network on Boherboy Road (see HL, which directs waste-water for treatment at Cork City Wastewater Treatment Plant (WWTP). Cork City WWTP outfalls into Cork Harbour at Lough Mahon transitional waterbody, where sections of Cork Harbour SPA are located downstream of the outfall location (see Figure 2.1).

Similarly, part of the proposed surface-water drainage network associated with the revised unit at the northern part of the application area may become active as construction progresses where it will be connected into the permitted run-off network of the 'parent' housing development (under 16/7292 and 249376). The proposed revised unit will not result in additional surface-water run-off from its original design in the 'parent' housing application such that its run-off contribution has already been catered for in the drainage design of the 'parent' housing development (see Horgan Lynch 2021). In the context of the overall 'parent' housing development, the run-off contribution of this revised unit is effectively imperceptible.

Construction stage surface-water run-off controls will be specific to the study site and proposed works as follows (see Clancy 2020);

<u>Control of Pollution of Surface Water</u>:

- any containers of contaminating substances on site shall be:
    - leak proof and kept in a safe and secure building or compound from which they cannot leak, spill or be open to vandalism;
    - protected by impermeable bunds with a capacity of 110% of the maximum stored volume, or if more than one container is stored, 110% of the largest container's capacity or 25% of the total tank capacity within the bund, whichever is greater; and
    - transfer of contaminating substances shall be undertaken within similarly protected areas;
- all refuelling, oiling and greasing shall take place above drip trays or on an impermeable surface which provides protection to underground strata and watercourses, away from drains and vehicles and Equipment shall not be left unattended during refuelling;
- only construction equipment and vehicles free of oil/fuel leaks which could cause material contamination shall be permitted on site;
- placing of drip trays below static mechanical Equipment;
- all wash down of vehicles and Equipment will take place off site;

- only biodegradable hydraulic oils shall be used in equipment working in or over watercourses; and take appropriate measures to protect erodible earthwork surface

Site Drainage

Clancy Construction will avoid interference with surface water features and existing drainage patterns. Where surface water features, existing drainage patterns, new or extended culverts, stream diversions, and balancing ponds are interfered with Clancy Construction will ensure;

- that necessary works are positioned, designed and constructed to minimise impacts in terms of flow, minimise or manage flood risk, dewatering, water quality, erosion and/or sedimentation, resulting in adverse impacts on paleoenvironmental, archaeological, ecological or landscape resources;
- mitigation of ecological impacts and nature conservation benefits be provided for drainage works.
- ensure that site drainage, including surface run-off and dewatering effluents, be discharged to crane base/sedimentation tank, unless consent is obtained for alternative discharge arrangements as agreed with Environmental Manager;
- ensure that the site drainage meets the effluent and flood risk standards required by the sewerage undertaker or EPA/CCC in accordance with the current legislation;
- provide and maintain holding or settling tanks, separators and other measures to meet the sewerage undertaker in accordance with the current legislation;
- provide access to the statutory undertaker to obtain and analyse samples of discharge and the flows verified as required.

2.3.2 Surface-Water Run-Off: Operational Phase

Operational phase surface-water run-off generated by the proposed development will be collected and discharged to a new gravity storm system (see Horgan Lynch 2021). This gravity system servicing the 6 units proposed at the south-western part of the application area will discharge to the existing combined sewer on Boherboy Road (Horgan Lynch 2021). However, the rate of discharge to the public system will be controlled by means of a flow restrictor so as to reflect the green field run off from the site (circa 2 litres/sec; see Horgan Lynch 2021). Attenuated water will be collected in an online attenuation tank, which will be sized to reflect the volume of water attenuated (see Horgan Lynch 2021). The combined storm water/foul sewer network directs waste-water for treatment at Cork City Wastewater Treatment Plant (WWTP) that outfalls into Cork Harbour at Lough Mahon transitional waterbody, where sections of Cork Harbour SPA are located downstream of the outfall location (see Figure 2.1).

Operational phase surface-water drainage from the unit at the northern part of the application area will discharge into the permitted surface-water network of the 'parent' housing development (under 16/7292 and 249376; see Horgan Lynch 2021). As previously mentioned, run-off associated with this unit has already been catered for as part of the 'parent' planning application drainage network (Horgan Lynch 2021) as no additional surface-water run-off will be relevant to this proposed revised unit from its original design in the 'parent' housing application where its run-off contribution is effectively imperceptible in the context of the overall 'parent' housing development.

Operational stage surface-water run-off controls will be specific to the study site and operations.

2.3.3 Waste-Water/Foul Effluent

Prior to the site being connected into the public foul sewer, **construction stage** waste-water/foul effluent will initially be managed and controlled at the temporary site compound through the use of portaloos and welfare units with storage tanks, where sanitary waste will be removed from site via a licenced waste disposal operator.

When the site is connected to the public foul sewer network, **construction and operational stage** waste-water/foul effluent from the south-western part of the application area will be collected via a gravity foul system that will discharge to the nearby existing public combined sewer system on Boherboy Road (see Horgan Lynch 2021). The unit in the northern part of the application area will connect into the newly laid foul network constructed as part of the permitted 'parent' housing development (under 16/7292 and 249376). In both cases the public foul sewer directs waste-water for treatment at Cork City Wastewater Treatment Plant (WWTP) that outfalls into Cork Harbour at Lough Mahon transitional waterbody, where sections of Cork Harbour SPA are located downstream of the outfall location (see Figure 2.1).

2.3.4 Other Wastes

Other wastes associated with the development will be collected and removed from site by licensed operators during the construction and operational stages of the project. This will allow for the appropriate control and management of other wastes at site, with no uncontrolled releases of same into the environment (see Clancy 2020).

Figure 2.1: Study Site Location & Natura 2000 Sites

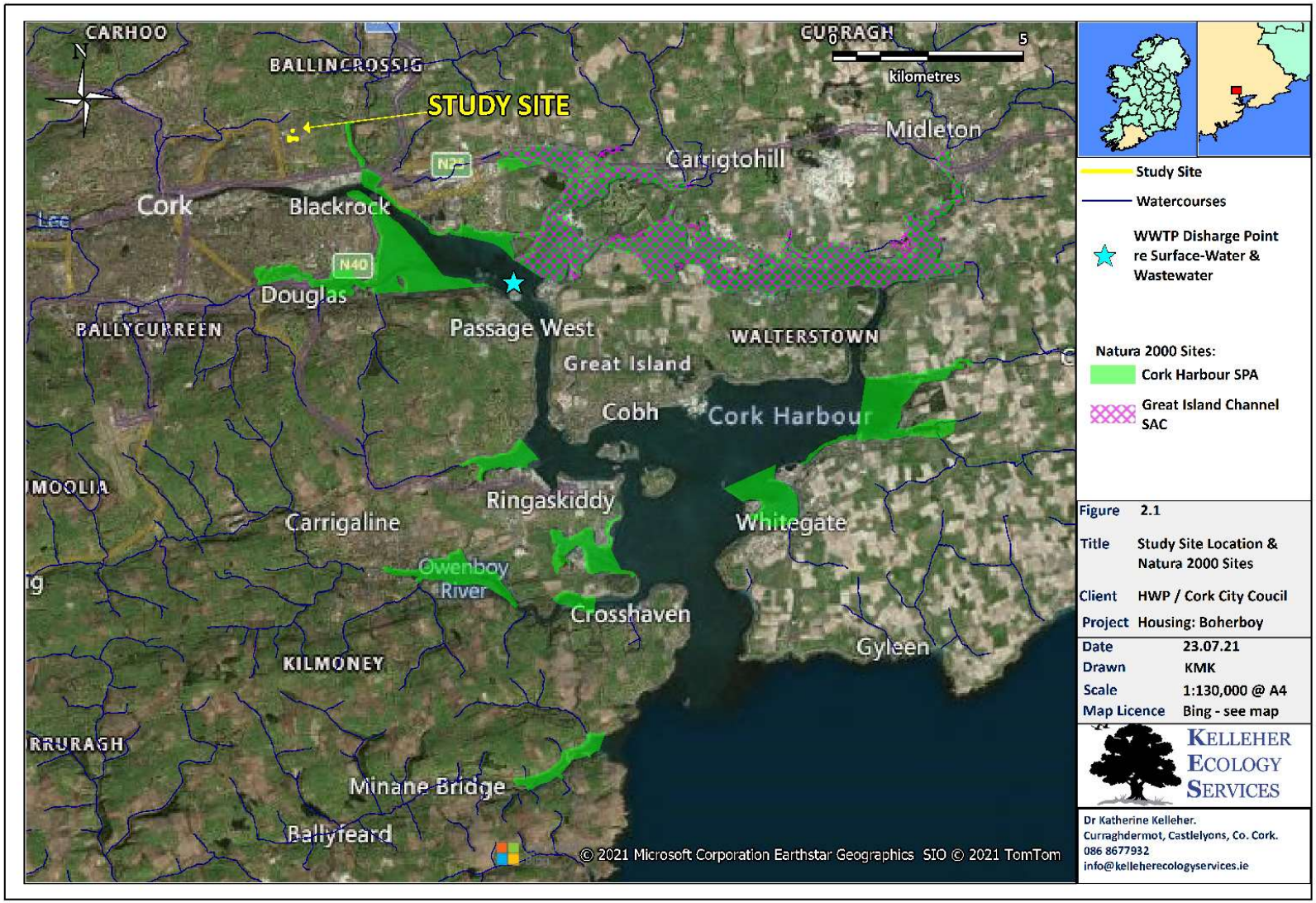
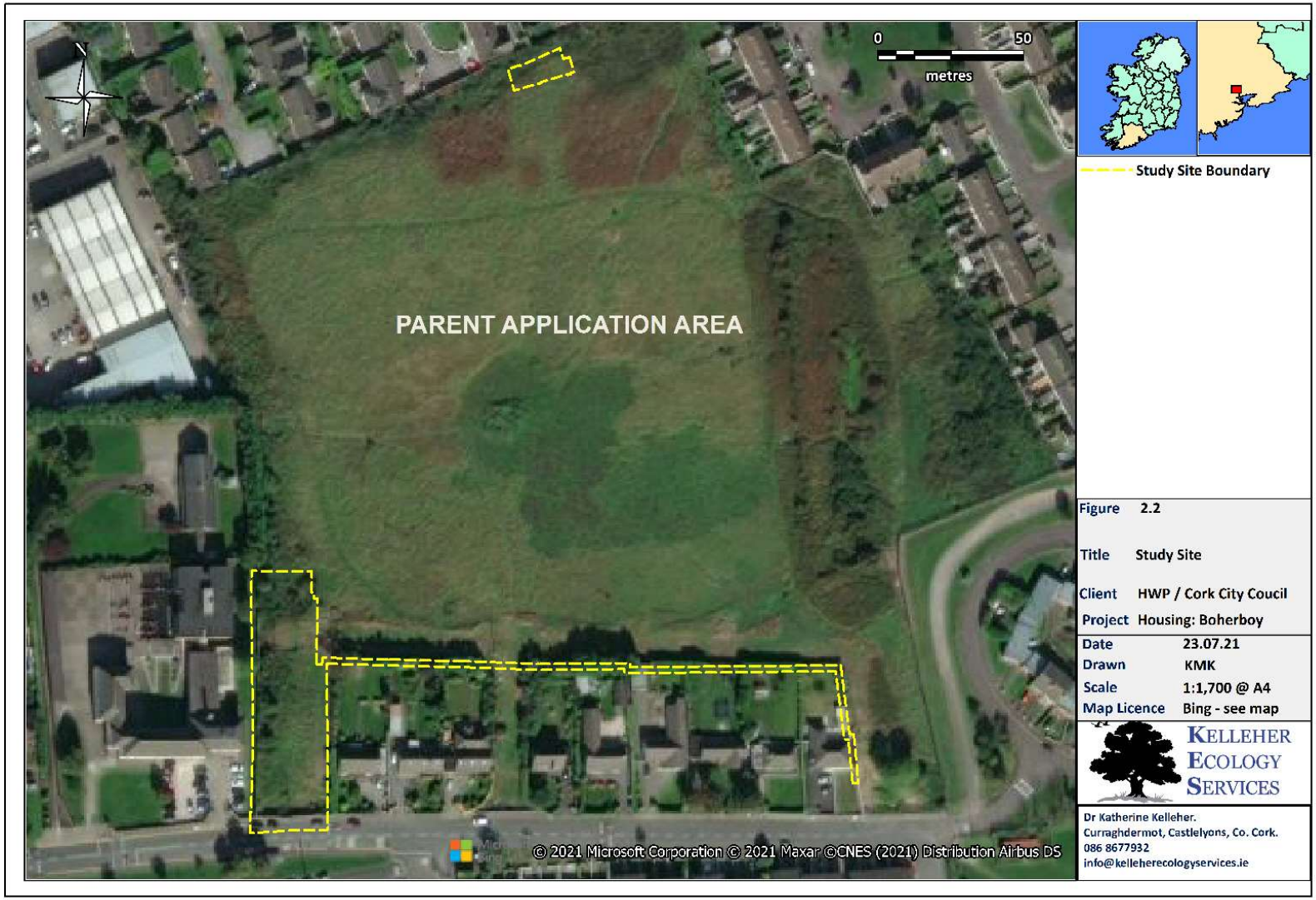


Figure 2.2: Study Site



2.4 Description of the Natura 2000 Sites

Natura 2000 sites were identified through a desktop mapping review (using MapInfo Pro, a geographic information system software programme), where focus was given to sites where a potential impact-receptor pathway or zone of influence with the study site may be relevant. In other words, Natura 2000 sites that may potentially have a link to the study site were focused on as part of this assessment (*e.g.* through hydrological link, overlapping, proximity, ex-situ usage).

In this case, the study site is not part of or close to any Natura 2000 designated sites nor does it require any resources from them, thereby ruling out any direct habitat loss at such conservation sites.

2.4.1 Potential Impact-receptor Pathways: Overview

2.4.1.1 Surface-Water Run-Off

There is a potential impact-receptor pathway via surface-water run-off between the study site and Cork Harbour SPA via the combined public stormwater/foul water sewer network at Boherboy Road in relation to the south-western part of the application area. Surface-water run-off arising from the site will discharge into the combined sewer, which directs waste-water for treatment at Cork City Wastewater Treatment Plant (WWTP). The WWTP outfalls into Cork Harbour at Lough Mahon transitional waterbody where sections of Cork Harbour SPA are located >4km downstream of the WWTP discharge point (see Table 2.1 & Figure 2.1). A potential impact-receptor pathway therefore exists between the study site and Cork Harbour SPA via surface-water discharge during the construction and operational phases of the proposed residential development that is further considered in this report.

While Great Island Channel SAC is not downstream of the WWTP discharge point (see Figure 2.1), tidal/wind movements could be of some relevance in relation to the SAC, where its boundary is *c.* 550m north-east of the WWTP's discharge point. However, an assessment on the conservation status of the SAC does not highlight potential impacts arising from tidal/wind movements from Cork City WWTP's discharge point as a significant point of concern but instead highlights water quality management in relation to two other upstream WWTPs (Midleton & Carrigtwohill WWTPs) to maintain/restore the favourable conservation status of the SAC's qualifying interest 'Mudflats and Sandflats' (O'Neill *et al.* 2014). Therefore, a hydrological link via combined stormwater/foul water discharge is not considered relevant in this case and no further assessment is made in this Screening regarding such an impact in relation to Great Island Channel SAC.

Surface-water run-off associated with the proposed revised unit at the northern part of the application area is catered for in the permitted 'parent' planning application drainage network (Horgan Lynch 2021) as no additional surface-water run-off will be relevant to this proposed revised unit from its original design in the 'parent' housing application. Its run-off contribution is effectively imperceptible in the context of the overall 'parent' housing development. Therefore, surface-water run-off associated with the proposed revised unit at the northern part of the application area is not considered relevant to this Screening.

There are no other Natura 2000 sites where a potential impact-receptor pathway is relevant in relation to surface-water run-off impacts.

2.4.1.2 Waste-Water/Foul Effluent

Prior to the site being connected into the public foul sewer, construction stage waste-water/foul effluent will be managed and controlled at the temporary site compound through the use of portaloos and welfare units with storage tanks, where sanitary waste will be removed from site via a licenced waste disposal operator. In this instance, no hydrological link via effluent will be relevant to any of the Natura 2000 sites under consideration here.

When the site is connected to the public foul sewer network, construction and operational stage waste-water/foul effluent arising from the proposed development will be discharged into the public foul effluent network for treatment at Cork City WWTP. Treated waste-water from the WWTP ultimately outfalls into Cork Harbour at Lough Mahon, where sections of Cork Harbour SPA are >4km downstream of the WWTP discharge point (see Table 2.1). A potential impact-receptor pathway therefore exists between the study site and Cork Harbour SPA via waste-water discharge during the construction/operational phases of the proposed residential development that is further considered in this report.

While Great Island Channel SAC is not downstream of the WWTP discharge point (see Figure 2.1), tidal/wind movements could be of some relevance in relation to the SAC, where its boundary is *c.* 550m north-east of the WWTP's discharge point. However, an assessment on the conservation status of the SAC does not highlight potential impacts arising from tidal/wind movements from Cork City WWTP's discharge point as a significant point of concern but instead highlights water quality management in relation to two other upstream WWTPs (Midleton & Carrigtwohill WWTPs) to maintain/restore the favourable conservation status of the SAC's qualifying interest 'Mudflats and Sandflats' (O'Neill *et al.* 2014). Therefore, a hydrological link via effluent is not considered relevant in this case and no further assessment is made in this Screening regarding such an impact in relation to Great Island Channel SAC.

There are no other Natura 2000 sites where a potential impact-receptor pathway is relevant in relation to waste-water/foul effluent impacts.

2.4.1.3 Disturbance/Displacement

Disturbance/displacement impacts of fauna that are listed as qualifying interests of a Natura 2000 through noise and/or visual cues needs consideration. This also includes ex-situ disturbance/displacement impacts on highly mobile species that are qualifying interests of the relevant Natura 2000 sites; ex-situ impacts occur when highly mobile species occur outside of the boundaries of their designated Natura 2000 sites (*e.g.* to forage or commute).

As the conservation objectives of Great Island Channel SAC relate to habitats and not fauna (see Table 2.1), disturbance/displacement impacts are not relevant to this Natura 2000 site. Furthermore, the study site does not overlook the SAC due to distance (>5.2km) combined with screening from existing buildings/vegetation/topography.

The conservation objectives of Cork Harbour SPA relate to waterbird qualifying interest species that typically forage and roost along intertidal mudflats and coastal wetlands/fields associated with Cork Harbour (see Table 2.1). While such fauna could suffer disturbance/displacement impacts as a result of the construction/operation of a development such as described here, the study site in this case does not overlook Cork Harbour SPA due to distance (>1.3km) combined with screening from existing buildings/vegetation and topography. Furthermore, the study site does not support habitats of ex-situ ecological value for qualifying interest species of the SPA in question, where the study site is dominated by highly modified and disturbed habitats (recolonising bare ground) and non-vegetated habitat (buildings and artificial surfaces). Also, the study site is not of known historical importance for waterbirds (see Crowe 2005 and IWeBS online mapping[3]).

Taking the above into consideration, no disturbance/displacement impacts (including ex-situ) are considered relevant in relation to the Natura 2000 sites under consideration here. There are no other Natura 2000 sites where a potential impact-receptor pathway is relevant in relation to disturbance/displacement impacts (including ex-situ).

2.4.1.4 Invasive Plants

Activities associated with development works can inadvertently result in the spread of invasive plants, where a watercourse/water-feature can subsequently act as a potential impact-receptor pathway regarding indirect habitat loss/damage to downstream locations in the wider area including any Natura 2000 sites that are present.

In this case, there are no invasive plant species at the study site and no watercourses are present that could facilitate the spread of such species if present, therefore potential indirect habitat loss/damage impacts on downstream Natura 2000 sites arising from the spread of invasive plants are not considered relevant here.

2.4.2 Potential Impact-receptor Pathways: Summary

In summary, Section 3.1 further considers; (i) potential construction/operational surface-water run-off impacts in relation to Cork Harbour SPA and (ii) potential construction/operational waste-water discharge impacts in relation to Cork Harbour SPA.

[3] https://bwi.maps.arcgis.com/apps/View/index.html?appid=1043ba01fcb74c78bc75e306eda48d3a

Table 2.1 Natura 2000 Site Summary

Natura 2000 Site & Site Code	Qualifying Interests & Conservation Objectives	Minimum Distance From Site Boundary & Discharge Points
Cork Harbour SPA 004030	Cork Harbour is of major ornithological significance, being of international importance both for the total numbers of wintering birds (*i.e.*>20,000). Several of the species which occur regularly are listed on Annex I of the E.U. Birds Directive. The site provides both feeding and roosting sites for the various bird species that use it. Its conservation objectives relate to maintaining the favourable conservation condition of the following qualifying interests (after NPWS 2014a); **Wintering bird species:** Little Grebe *Tachybaptusruficollis,* Grey Plover *Pluvialissquatarola,* Great Crested Grebe *Podicepscristatus,* Lapwing *Vanellus vanellus,* Cormorant *Phalacrocorax carbo,* Dunlin *Calidris alpine alpine,* Grey Heron *Ardeacinerea,* Black-tailed Godwit *Limosa limosa,* Shelduck *Tadorna tadorna,*Bar-tailed Godwit *Limosa lapponica,* Wigeon *Anas Penelope,* Curlew *Numenius arquata,* Teal *Anascrecca,* Redshank *Tringatetanus,*Pintail *Anasacuta,* Black-headed Gull *Chroicocephalus ridibundus,* Shoveler *Anas clypeata,* Common Gull *Larus canus,* Red-breasted Merganser*Mergus serrator,*Lesser Black-backed Gull *Larus fuscus,* Oystercatcher*Haematopus ostralegus,*Golden Plover *Pluvialis apricaria.* **Breeding bird species:** Common Tern *Sterna hirundo.* **Habitat:** Wetlands.	<u>Site Boundary:</u> Over-land: 1.3km <u>Discharge:</u> Surface-water: >4.0km Waste-water: >4.0km
Great Island Channel SAC 001058	The Great Island Channel stretches from Little Island to Midleton, with its southern boundary being formed by Great Island. The main habitats of conservation interest in Great Island Channel SAC are the sheltered tidal sand and mudflats and the Atlantic salt meadows. This SAC overlaps with part of the Cork Harbour SPA, with its estuarine habitats providing foraging and roosting resources for wintering waders and wildfowl for which the SPA is designated. Its conservation objectives relate to maintaining the favourable conservation condition of the following qualifying interests (after NPWS 2014b); **Annex I Habitats:** Tidal Mudflats and Sandflats (1140), Atlantic Salt Meadows (1330).	<u>Site Boundary:</u> Over-land: 5.2km <u>Discharge:</u> Surface-water: n/a Waste-water: n/a

4 Screening: Assessment Criteria

4.1 Elements of the Project Likely to Impact on the Natura 2000 Sites

As outlined above in Section 2.4, further consideration of the following potential impacts is assessed here in respect of examining elements of the development that are likely to or may cause a significant effect or impact on Cork Harbour SPA.

4.1.1 Indirect Habitat Loss or Deterioration

Indirect habitat loss or deterioration of Natura 2000 sites within the surrounding area can occur from the effects of run-off or discharge into the aquatic environment through impacts such as increased siltation, nutrient release and/or contamination. This requires connectivity between the site and the Natura 2000 site in question through watercourses and/or drainage. In this case, there is a potential impact-receptor pathway via (i) surface-water discharge and (ii) foul water discharge between the study site and Cork Harbour SPA via the combined public stormwater/foul water sewer network and associated Cork City WWTP.

4.1.1.1 Surface-Water Run-Off: Construction & Operational

There are no existing watercourses/drains or other water-features at the study site that could convey surface-water run-off off-site. While surface-water run-off associated with the construction stage will generally percolate to ground, standard environmental controls will nonetheless be implemented as part of the project to ensure the appropriate management and control of surface-water run-off potentially arising from development activities at the site that will be specific to the study site and proposed works (as outlined in Section 2.3.1 above).

As construction progresses, part of the proposed surface-water drainage network associated with the south-western part of the application area may become active where it will be connected into an existing public combined stormwater/foul sewer network on Boherboy Road as per the operational phase as well. The existing public combined stormwater/foul sewer network on Boherboy Road discharges to Cork City Wastewater Treatment Plant (WWTP) for treatment that outfalls into Cork Harbour at Lough Mahon transitional waterbody >4km upstream of sections of Cork Harbour SPA. Construction stage surface-water run-off controls will be specific to the study site/proposed works and are not intended to address any particular risks to Natura 2000 sites; such controls would be proposed regardless of the SPA. While Cork City WWTP is currently non-compliant in relation to Total Nitrogen and Phosphorus ambient monitoring of transitional and coastal receiving waters indicates that discharge from the WWTP does not have an observable negative impact on water quality or the WFD status of the receiving waters (Irish Water 2021). Furthermore, current hydraulic loading at the WWTP is well below its designed peak capacity (see Irish Water 2021). Therefore, no measures are specifically required to address risks to the Natura 2000 site in this case

Taking the above into consideration, no indirect habitat loss or deterioration of Cork Harbour SPA in relation to surface-water run-off/discharge arising from the construction or operation of the proposed development is deemed likely in this case.

4.1.1.2 Waste-Water/Foul Effluent

When the site is connected to the public foul sewer network, there is a potential impact-receptor pathway via construction/operational waste-water/foul effluent links between the study site and Cork Harbour SPA via Cork City WWTP that ultimately discharges into Cork Harbour at Lough Mahon, where sections of Cork Harbour SPA are >4km downstream of the WWTP discharge point.

Even though Cork City WWTP is currently non-compliant in relation to Total Nitrogen and Phosphorus, ambient monitoring of transitional and coastal receiving waters indicates that discharge from the WWTP does not have an observable negative impact on water quality or the WFD status of the receiving waters (Irish Water 2021). Furthermore, the WWTP has sufficient capacity to accept the additional organic loading of 21 PE from the operational development, where remaining organic capacity is >100k PE (see Irish Water 2021); this has also been confirmed by Irish Water's pre-connection enquiry response that the proposed foul connection can be facilitated (see Appendix B).

Taking the above into consideration, no indirect habitat loss or deterioration of Cork Harbour SPA in relation to waste-water via WWTP discharge is deemed likely in this case.

4.2 Likely Impacts of the Project on the Natura 2000 Sites

- Size, Scale & Land-take
- Distance from or Key Features of the Natura 2000 Sites
- Resource Requirements (water abstraction *etc.*)
- Excavation Requirements
- Emission (disposal to land, water or air)
- Transportation Requirements
- Duration of Operations
- Cumulative and In-combination Effects
    - Potential cumulative effects could include construction/operational related surface-water and foul effluent inputs into Cork City WWTP, where qualifying interests of Cork Harbour SPA could be subject to cumulative effects through hydrological or water quality impacts via WWTP discharge. In this case, surface-water and foul water discharge associated with the proposed development has been considered in combination with the permitted 'parent' housing development (as evidenced by the Irish Water pre-connection agreement in Appendix B).

      The current Cork City Development Plan outlines a city-based objective in relation to the management of stormwater in accordance with SuDS strategies (Section 2.2.4 & Objective 12.3; CCC 2015) that is complimented by the surface-water management strategy here through the inclusion of SuDS related aspects such as attenuation (as outlined in Section 2.3 above).

      While Cork City WWTP is currently non-compliant in relation to Total Nitrogen and Phosphorus, ambient monitoring of transitional and coastal receiving waters indicates that discharge from the WWTP does not have an observable negative impact on water quality or the WFD status of the receiving waters (Irish Water 2021). Furthermore, there

is significant remaining capacity currently available at Cork City WWTP to cater for the additional proposed foul effluent here.

Taking the above into consideration, no cumulative/in-combination effects on any Natura 2000 site are considered relevant in this case.

None of the above are applicable - as outlined in Sections 2.4 and 3.1 above, it is deemed unlikely that the proposed development will significantly impact on the Natura 2000 sites; Cork Harbour SPA and Great Island Channel SAC.

4.3 Likely Changes to the Natura 2000 Sites

- Reduction of Habitat Area
- Disturbance to Key Species
- Habitat or Species Fragmentation
- Reduction in Species Density
- Changes in Key Indicators of Conservation Value (water quality *etc*.)

None of the above are applicable - as outlined in Sections 2.4 and 3.1 above, it is deemed unlikely that the proposed development will significantly impact on the Natura 2000 sites; Cork Harbour SPA and Great Island Channel SAC.

4.4 Likely Impacts on the Natura 2000 Sites as a Whole

- Interference with the Key Relationships that Define the Structure of the Natura 2000 Sites
- Interference with Key Relationships that Define the Function of the Natura 2000 Sites

None of the above are applicable - as outlined in Sections 2.4 and 3.1 above, it is deemed unlikely that the proposed development will significantly impact on the Natura 2000 sites; Cork Harbour SPA and Great Island Channel SAC.

4.5 Indicators of Significance as a Result of the Identification of Effects Set Out Above

- Loss
- Fragmentation
- Disruption
- Disturbance
- Change to Key Elements of the Site

None of the above are applicable - as outlined in Sections 2.4 and 3.1 above, it is deemed unlikely that the proposed development will significantly impact on the Natura 2000 sites; Cork Harbour SPA and Great Island Channel SAC.

4.6 Elements of the Project Likely to Significantly Impact on the Natura 2000 Sites or where the Scale or Magnitude of Impacts are Unknown

Taking the above into consideration, it can be objectively concluded that no significant effects arising from the proposed development works are likely to occur in relation to the Natura 2000 sites; Cork Harbour SPA and Great Island Channel SAC.

The key considerations that contributed towards this conclusion are summarised as follows;

4.6.1 Potential Significant Effects: Conclusion

- As none of the Natura 2000 sites overlap the study site, direct impacts via habitat loss are not relevant.

- No indirect construction/operational stage surface-water run-off impacts on Cork Harbour SPA in relation to the south-western part of the application area via an existing public combined stormwater/foul sewer network and associated Cork City WWTP, are expected as a result of the proposed development as follows. Standard environmental controls (as summarised in Section 2.3 above) will be implemented as part of the project to ensure the appropriate management and control of surface-water run-off associated with the proposed development that will be specific to the site and proposed works/operations. Such controls are not intended to address any particular risks to Natura 2000 sites and would be proposed regardless of the SPA. Ambient monitoring of transitional and coastal receiving waters indicates that discharge from Cork City WWTP does not have an observable negative impact on water quality or the WFD status of the receiving waters where current hydraulic loading at the WWTP is well below its designed peak capacity. Therefore, no measures are specifically required to address risks to any Natura 2000 site in this case.

- Indirect surface-water run-off impacts are not considered relevant to the proposed revised unit at the northern part of the application area as follows. This unit is catered for in the permitted 'parent' planning application drainage network as no additional surface-water run-off will be relevant to it from its original design in the 'parent' housing application. Its run-off contribution is effectively imperceptible in the context of the overall 'parent' housing development.

- No indirect hydrological impacts on Cork Harbour SPA via waste-water/foul effluent are expected as a result of the proposed development as follows. Prior to the site being connected into the public foul sewer, construction phase waste-water/foul effluent will be managed and controlled at the temporary site compound, where sanitary waste will be removed from site via a licenced waste disposal operator. When the site is connected to the public foul sewer network, construction/operational phase waste-water/foul effluent from the proposed development will be collected via new sewer infrastructure at site and discharged for treatment at Cork City WWTP, which has significant sufficient capacity to accept the additional operational discharge as confirmed by Irish Water's pre-connection enquiry response that the proposed foul connection can be facilitated. Ambient monitoring of transitional and coastal receiving waters indicates that discharge from the WWTP does not have an observable negative impact on water quality or WFD status in the receiving environment.

- Indirect hydrological impacts on Great Island Channel SAC through stormwater and waste-water/foul effluent discharge via Cork City WWTP are not considered relevant here as follows. Great Island Channel SAC is not downstream of the WWTP's discharge point, although its boundary is *c.* 550m north-east of the WWTP's discharge point. However, potential impacts on the SAC arising from tidal/wind movements from Cork City WWTP's discharge point have not been highlighted as being of significant concern in an assessment on the conservation status of the SAC, but rather the impacts from two other upstream WWTPs have been highlighted instead (see O'Neill *et al.* 2014).

- Disturbance/displacement impacts of fauna that are listed as qualifying interests of the Natura 2000 sites are not relevant here as (i) the site does not overlook any Natura 2000 site due to distance combined with screening from existing buildings/vegetation and topography (ii) the conservation objectives of Great island Channel SAC relate to habitats and not fauna and (iii) the study site does not support habitats of ex-situ ecological value for qualifying interest species of Cork Harbour SPA.

- Potential impacts relating to invasive plants are not relevant in this case, due to the lack of any watercourses/other water-features at the study site that may potentially act as an impact-receptor pathway for the spread of invasive plant combined with the absence of any such relevant invasive plant species at the study site.

5 Finding of No Significant Effects Report

Name and location of the Natura 2000 sites.	Cork Harbour SPA and Great Island Channel SAC. See Figure 2.1 above.
Description of the project or plan.	This Part 8 planning application is for seven two-bed units to be included with the permitted Strategic Housing Development at Boherboy Road (under planning reference 16/7292 and ABP reference 249376) in response to conditions 2 & 3 of the planning grant. The application also proposes a cycle lane, parking and wall.
Is the Project or Plan directly connected with or necessary to the management of the site (provide details)?	No.
Are there other projects or plans that together with the project of plan being assessed could affect the site (provide details)?	No.
The Assessment of Significant Effects	
Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site.	Due to the reasons outlined in the following section, it is felt that no elements of the project are likely to impact on the Natura 2000 sites; Cork Harbour SPA and Great Island Channel SAC.
Explain why these effects are not considered significant.	▪ As none of the Natura 2000 sites overlap the study site, direct impacts via habitat loss are not relevant. ▪ No indirect construction/operational stage surface-water run-off impacts on Cork Harbour SPA in relation to the south-western part of the application area via an existing public combined stormwater/foul sewer network and associated Cork City WWTP, are expected as a result of the proposed development as follows. Standard environmental controls (as summarised in Section 2.3 above) will be implemented as part of the project to ensure the appropriate management and control of surface-water run-off associated with the proposed development that will be specific to the site and proposed works/operations. Such controls are not intended to address any particular risks to Natura 2000 sites and would be proposed regardless of the SPA. Ambient monitoring of transitional and coastal receiving waters indicates that discharge from Cork City WWTP does not have an observable negative impact on water quality or the WFD status of the receiving waters where current hydraulic loading at the WWTP is well below its designed peak capacity. Therefore, no measures are specifically required to address risks to any Natura 2000 site in this case. ▪ Indirect surface-water run-off impacts are not considered relevant to the proposed revised unit at the northern part of the application area as follows. This unit is catered for in the permitted 'parent' planning application drainage network as no additional surface-water run-off will be relevant to it from its original design in the 'parent' housing application. Its run-off contribution is effectively imperceptible in the context of the overall 'parent' housing development.

	▪ No indirect hydrological impacts on Cork Harbour SPA via waste-water/foul effluent are expected as a result of the proposed development as follows. Prior to the site being connected into the public foul sewer, construction phase waste-water/foul effluent will be managed and controlled at the temporary site compound, where sanitary waste will be removed from site via a licenced waste disposal operator. When the site is connected to the public foul sewer network, construction/operational phase waste-water/foul effluent from the proposed development will be collected via new sewer infrastructure at site and discharged for treatment at Cork City WWTP, which has significant sufficient capacity to accept the additional operational discharge as confirmed by Irish Water's pre-connection enquiry response that the proposed foul connection can be facilitated. Ambient monitoring of transitional and coastal receiving waters indicates that discharge from the WWTP does not have an observable negative impact on water quality or WFD status in the receiving environment. ▪ Indirect hydrological impacts on Great Island Channel SAC through stormwater and waste-water/foul effluent discharge via Cork City WWTP are not considered relevant here as follows. Great Island Channel SAC is not downstream of the WWTP's discharge point, although its boundary is *c.* 550m north-east of the WWTP's discharge point. However, potential impacts on the SAC arising from tidal/wind movements from Cork City WWTP's discharge point have not been highlighted as being of significant concern in an assessment on the conservation status of the SAC, but rather the impacts from two other upstream WWTPs have been highlighted instead (see O'Neill *et al.* 2014). ▪ Disturbance/displacement impacts of fauna that are listed as qualifying interests of the Natura 2000 sites are not relevant here as (i) the site does not overlook any Natura 2000 site due to distance combined with screening from existing buildings/vegetation and topography (ii) the conservation objectives of Great island Channel SAC relate to habitats and not fauna and (iii) the study site does not support habitats of ex-situ ecological value for qualifying interest species of Cork Harbour SPA. ▪ Potential impacts relating to invasive plants are not relevant in this case, due to the lack of any watercourses/other water-features at the study site that may potentially act as an impact-receptor pathway for the spread of invasive plant combined with the absence of any such relevant invasive plant species at the study site.
List of agencies consulted.	None.
Response to consultation.	n/a

Data Collected to Carry out the Assessment			
Who carried out the assessment	**Sources of Data**	**Level of assessment completed**	**Where can the full results of the assessment be accessed and viewed**
Dr Daphne Roycroft, Consultant Ecologist, BSc & PhD Zoology & MCIEEM. Katherine Kelleher, Principal Ecologist &	▪ Pers. comm. with HW Planning. ▪ Associated documents, drawings. ▪ Site walkover, photo/aerial review. ▪ EPA online river mapping database	Desktop study & site visit; am satisfied that this has yielded enough information to adequately complete a	Full results of the assessment are available in the above Screening report.

Director of Kelleher Ecology Services Ltd. BSc & PhD Zoology & MCIEEM.	▪ NPWS online designated site data/mapping. ▪ National Biodiversity Data Centre (NBDC) online mapping ▪ References (below)	Screening in support of the AA process.	

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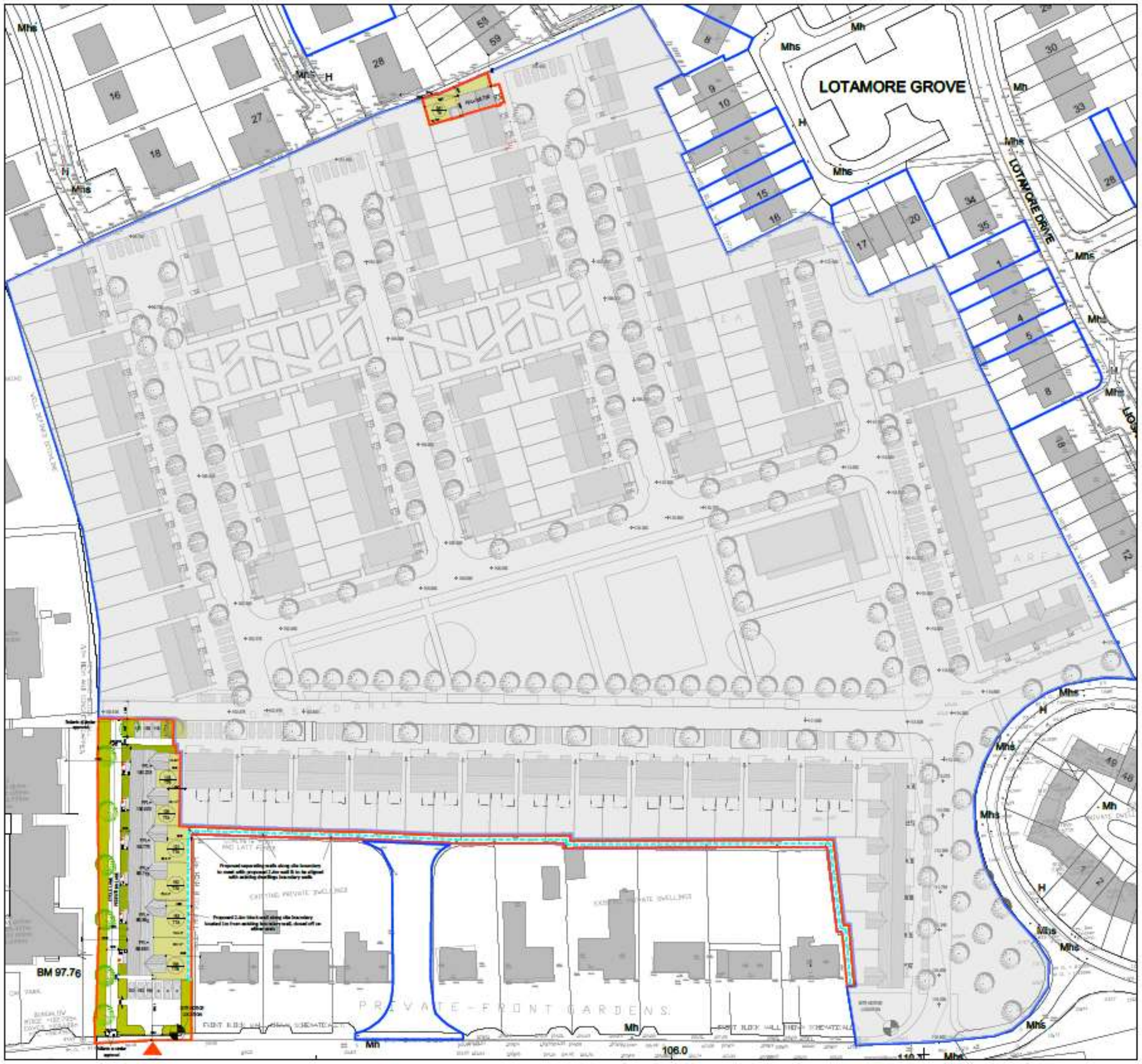
APPENDIX A:
Proposed Development

Proposed Site Layout



APPLICATION SITE OUTLINED IN RED

LANDS ADJOINING, ABUTTING OR ADJACENT TO THE LANDS WHICH ARE THE SUBJECT OF THE APPLICATION AND WHICH ARE IN CONTROL OF THE APPLICANT OUTLINED IN BLUE

2.4 METERS BLOCK WALL 1M FROM EXISTING BOUNDARY WALL

PERMITTED APPLICATION - PL:249376 - P.A.Reg.Ref: 16/07292

OS MAP REF: 6338-19; 6338-24
ORDNANCE SURVEY IRELAND LICENSE No. CYAL50165736
COPYRIGHT ORDNANCE SURVEY IRELAND AND GOVERNMENT OF IRELAND

ALL DIMENSIONS IN MILLIMETERS
ALL LEVELS (IN METRES) ARE RELATED TO MALIN HEAD DATUM

ALL UNITS ARE TAGGED TO SHOW UNIT NUMBER AND HOUSE TYPE; THE UNIT NUMBER IS IN THE TOP SECTION OF THE TAG, E.G. 001, AND THE HOUSE TYPE IS IN THE LOWER SECTION OF THE TAG, E.G. TYPE 1
PLEASE REFER TO TYPOLOGY DRAWINGS FOR FURTHER DETAIL

PLEASE REFER TO ENGINEER'S DRAWINGS & REPORTS FOR PROPOSED ROAD LEVELS, SITE SERVICES LAYOUT & OTHER ENGINEERING DETAILS AND TO LANDSCAPE ARCHITECT'S DRAWINGS FOR LANDSCAPING PROPOSALS & PROPOSED BOUNDARY TREATMENT.

Revision Description	Date	Rev. No.	Issued by
Issued for Planning	22/11/2021	C01	AW

o'mahony pike
architecture | urban design

Project No.:	19070
Project Lead:	AR
Drawn By:	AW
Model No.:	19070-OMP-00-00-DR-A-1900
Purpose:	A3 - Planning
Scale @ A1:	1:500
Date Printed:	22/11/2021
Current Rev.:	C01

Project: Residential Development
Location: Boherboy Road, Mayfield, Cork
Client: Lyonshall Ltd & Clancy Development Ltd

Drawing Title: Proposed Site Layout
Drawing No.: 19070-OMP-00-00-DR-A-1900

APPENDIX B:

Irish Water Pre-Connection Enquiry Response

Niall Fitzgerald

20 November 2019

Uisce Eireann
Bosca OP 448
Oifig Sheachadta na
Cathrach Theas
Cathair Chorcaí

Irish Water
PO Box 448
South City
Delivery Office,
Cork City

www.water.ie

Dear Niall Fitzgerald,

Re: Connection Reference No CDS19007614 pre-connection enquiry - Subject to contract | Contract denied

Connection for Mixed Use Development of 154 unit(s) at Boherboy Road, Mayfield, Co.Cork.

Irish Water has reviewed your pre-connection enquiry in relation to a Water & Wastewater connection at Boherboy Road, Mayfield, Co.Cork.

Based upon the details that you have provided with your pre-connection enquiry and on the capacity currently available in the network(s), as assessed by Irish Water, we wish to advise you that, subject to a valid connection agreement being put in place, your proposed connection to the Irish Water network(s) can be facilitated.

Water:

New connection to the existing network is feasible without upgrade.

This Confirmation of Feasibility to connect to the Irish Water infrastructure also does not extend to your fire flow requirements. Please note that Irish Water can not guarantee a flow rate to meet fire flow requirements and in order to guarantee a flow to meet the Fire Authority requirements, you should provide adequate fire storage capacity within your development.

In order to determine the potential flow that could be delivered during normal operational conditions, an on site assessment of the existing network is required.

Wastewater:

In order to accommodate the proposed connection at the Premises, significant upgrade works are required to the Irish Water network. Upsizing of the receiving sewer on Old Youghal Road and the Interceptor No.1 from 225m to 300mm, for approximately 420m, would be required. Irish Water currently does not have any plans to upgrade its network in this area. Should you wish to progress with the connection you will be required to fund this network extension (please find attached Irish Water GIS record of the area as a general guide only).

Furthermore, upgrade to the Ballyvolane Pumping Station is necessary to facilitate a connection. There is an ongoing Irish Water project to upgrade this pumping station, however the additional discharge from this development will require additional upgrades to the pumping station over and above the current project scope. A Cork City Drainage Area Plan will be completed early next year that will allow us to quantify the needed upgrades and the need to separate foul and surface water within the catchment. It will be necessary for you to contribute marginal costs for these additional works. Please contact Irish Water for further information.

Strategic Housing Development

Irish Water notes that the scale of this development dictates that it is subject to the Strategic Housing Development planning process. Therefore: