

Ecological Impact Assessment (EclA) for a Proposed Residential Development at Elmfield, Clondalkin, Co. Dublin



21st August 2026

Prepared by: Bryan Deegan (MCIEEM) of Altemar Ltd.

On behalf of: Thornmeadow Developments

Altemar Ltd., 50 Templecarrig Upper, Delgany, Co. Wicklow. 00-353-1-2010713. info@altemar.ie

Directors: Bryan Deegan and Sara Corcoran

Company No.427560 VAT No. 9649832U

www.altemar.ie

Document Control Sheet			
Project	Ecological Impact Assessment (EclA) for the Proposed Residential Development at Elmfiled, Clondalkin, Co. Dublin		
Report	Ecological Impact Assessment		
Date	21 st August 2026		
Version	Author	Reviewed	Date
Planning	Kalvin Townsend Smyth	Bryan Deegan	21 st August 2026

Table of Contents

Introduction.....	1
Background.....	1
Study Objectives	1
Altamar Ltd.	1
Project Description	2
Foul & Surface Water Drainage.....	2
Foul Water Drainage.....	2
Surface Water Drainage	2
Landscape	4
Ecological Assessment Methodology	19
Desk Study	19
Spatial Scope and Zone of Influence	19
Field Survey	19
Consultation	20
Impact Assessment Significance Criteria	20
Results	23
Proximity to Designated Conservation Sites	23
Habitats and Species.....	31
Potential Impacts.....	42
Construction Impacts.....	42
Operational Impacts	43
Mitigation Measures & Monitoring.....	44
Cumulative Impacts	47
Residual Impacts and Conclusion	52
References	52
Competency of Assessor	56
Legislative Context.....	56
Project Description.....	57
Landscape	57
Bat survey	65
Survey methodology	65
Survey constraints.....	65
Description of the Site from an Ecological Perspective.....	65
Bat assessment findings.....	70
Review of local bat records	70
Detector survey.....	73
Potential Impacts of Proposed Redevelopment on Bats.....	75
Mitigation measures	75

Predicted and residual impact of the proposal75

References76

Introduction

Background

Ecological Impact Assessment (EcIA) has been defined as *‘the process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components’* (Treweek, 1999). *“The purpose of EcIA is to provide decision-makers with clear and concise information about the likely ecological effects associated with a project and their significance both directly and in a wider context. Protecting and enhancing biodiversity and landscapes and maintaining natural processes depends upon input from ecologists and other specialists at all stages in the decision-making and planning process; from the early design of a project through implementation to its decommissioning”* (IEEM, 2010).

The following EcIA has been prepared by Altemar Ltd., at the request of Thornmeadow Developments, for the proposed residential development at Elmfield, 9th Lock Road, Clondalkin, Co. Dublin.

Study Objectives

The objectives of this EcIA are to:

1. Outline the project and any alternatives assessed;
2. Undertake a baseline ecological feature, resource and function assessment of the site and zone of influence;
3. Assess and define significance of the direct, indirect and cumulative ecological impacts of the project during its construction, lifetime and decommissioning stages;
4. Refine, where necessary, the project and propose mitigation measures to remove or reduce impacts through sustainable design and ecological planning; and
5. Suggest monitoring measures to follow up the implementation and success of mitigation measures and ecological outcomes.

The following guidelines have been used in preparation of this EcIA:

- Guidelines on the information to be contained in Environmental Impact Statements (EPA, 2002);
- Draft Guidelines on the information to be contained in EIARs (2018);
- Guidelines for Ecological Impact Assessment (EcIA) (IEEM, 2019);
- Advice Notes on current practice in the preparation of EIS's (EPA, 2003);
- Institute of Ecology and Environmental Management Guidelines for EIA (IEEM, 2005).

Altemar Ltd.

Since its inception in 2001, Altemar has been delivering ecological and environmental services to a broad range of clients. Operational areas include: residential; infrastructural; renewable; oil & gas; private industry; Local Authorities; EC projects; and, State/semi-State Departments. Bryan Deegan, the managing director of Altemar, is an Environmental Scientist and Marine Biologist with 31 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. He is currently contracted to Inland Fisheries Ireland as the sole "External Expert" to environmentally assess internal and external projects. He is also chair of an internal IFI working group on environmental assessment. Bryan Deegan (MCIEEM) holds a MSc in Environmental Science, BSc (Hons.) in Applied Marine Biology, NCEA National Diploma in Applied Aquatic Science and a NCEA National Certificate in Science (Aquaculture).

Project Description

Thornmeadow Developments Limited intend to apply for permission for a Large-Scale Residential Development on lands at Elmfield, Ninth Lock Road, Clondalkin, Dublin 22. The proposed development will consist of the demolition of the existing warehouses and structures on site and the construction of a mixed-use residential-led development comprising a total of 408 no. residential units (comprising 24 no. studio units, 230 no. 1 bedroom units, 149 no. 2 bedroom/3 persons units and 5 no. 3 bedroom/5 person units) and 1 no. childcare facility. The residential units will comprise a mixture of apartments and own-door houses and range in height from 2-9 storeys. The proposed development will also comprise all associated car parking (202 no. spaces), cycle parking, refuse and storage areas, plant, landscaping, open space, boundary treatment, public lighting, ESB substations, and site and infrastructural works necessary to facilitate the proposed development. There are existing industrial warehouse's & concrete hard standing on the site, which will be demolished to facilitate the new development.

The proposed site outline, location, layout plan, and elevations are demonstrated in Figures 1 – 7.

Foul & Surface Water Drainage

The application is accompanied by an Engineering Services Report prepared by GK Consulting Engineers Ltd. This report states the following in relation to surface water and foul water drainage:

Foul Water Drainage

"The existing 225mm diameter public foul sewer passes across the top let site corner. We propose to connect to this sewer with the new development outfall. New Sewers will be located under main access roads in the new development and the necessary wayleaves provided. All proposed drainage works shall comply with Irish Water Standards.

Foul discharge calculations from the proposed development were issued to IW for the PCE.

All proposed works affecting the public drainage system will be subject to detailed agreement with the water and drainage department of SDCC and with Irish Water. The individual pipe materials and gradients are chosen to ensure self-cleaning velocities (i.e. between minimum velocity 0.75m/sec).

A central spine 225 dia pipe network will service the 4 Blocks, ancillary pipes of 150 dia will connect ground floor units into the network. These will all outflow into a new connection to the existing 225 dia mains to the North West of the site."

A map of the proposed foul water drainage network is displayed in Figure 8.

Surface Water Drainage

"The existing building runoff from roof & hardstanding areas is collected by downpipes & gullies. The surface water from the site currently discharges to a 450mm diameter SW sewer. Flowing north off the site.

Surface water strategy:

This SuDS Design Statement outlines the proposed approach for the management of rainfall runoff within the development to ensure no increase in flood risk to any development within the site or elsewhere with delivery of wider water quality, amenity and biodiversity benefits. The approach to the SuDS Design is per the guidance from the CIRIA SuDS Manual, as outlined in the Surface water management plan, which is summarised as follows:

- *Identify suitable mechanism of discharge for site drainage.*
- *Allocate a management train and appropriate number of sub catchments to provide the collection, treatment, storage, conveyance of runoff across the site.*
- *Identify suitable SuDS components which are in keeping with the proposed landscape character. It is noted that the design presented and summarised in this report is outline / planning stage and surface water drainage at the site will be subject to detailed design post planning.*

SOURCE CONTROL

5.2.1 GREEN ROOF

It is proposed to introduce green roofing as a source control device. The proposed green roofing includes 4 blocks of approximately 2000m² each of extensive lightweight green roof. The total roof area of the blocks is approximately 6500m², which means that the extensive green roof covers approximately 25% of the total site. South Dublin City Council's Green and Blue Roof Guide notes that new developments should provide a minimum green roof coverage of 70% for extensive or 50% for intensive green roofs. The proposed development provides approximately 90% green/blue roof coverage. As set out below, the green roofs will be set above blue roofing to provide additional rainwater storage.

The substrate and the plant layers in a green roof absorb large amounts of rainwater and release it back into the atmosphere by transpiration and evaporation. They also filter water as it passes through the layers, so the run-off, when it is produced, has fewer pollutants. Rainfall not retained by green roofs is detained, effectively increasing the time to peak and slowing peak flows.

A green roof can reduce annual percentage runoff by between 40% and 80% through this retention and evapotranspiration, with the impact dependent on a range of factors including the depth of substrate, the saturation of substrate at the onset of a rain event, the angle of the roof, the range of vegetation growing, intensity of rainfall and the time of year.

5.2.2 BLUE ROOF

Blue roofs hold rainwater runoff on roofs and release that rainfall slowly through a flow control device. While blue roofs do not have to be vegetated, it is proposed to introduce this blue roofing beneath the areas of green roofing covering the flat roof areas. Dublin City Council's Green and Blue Roof Guide notes that green blue roofs that provide attenuation of rainfall on the roof is the approach preferred by SDCC.

Blue roof comprises a combined drainage and attenuation void within the roof structure and a roof outlet system designed to release the attenuated water at a controlled discharge rate via a restrictor chamber. It is proposed to restrict runoff from each of the roofs using Bauder flow restrictor outlets or a similar approved flow control device. An overflow will be provided for rainfall events that exceed the storage capacity of the roof, and an exceedance outfall will be provided to prevent flooding should the primary outfall block. A typical arrangement, extracted from SDCC's Green and Blue Roof Guide, is shown in the Figure below.

Blue roof decks are relatively low maintenance. Specific attention should be given to the blue roof elements such as the outlets. It is proposed to use Bauder blue roof and flow restrictor outlets or a similar approved system from another manufacturer. The Bauder system uses a sealed graded outlet, as shown in the below figure, which shows a typical flow restrictor outlet under construction. This reduces the risk of the outlet becoming blocked. Nonetheless, the outlets should be checked a minimum of twice annually.

5.2.3 PERMEABLE PAVING

Concrete block permeable paving is proposed in all proposed parking and private parking areas. Water will be collected via a network of perforated pipes directing water to the surface water network. Permeable paving will serve multiple purposes, controlling storm water at the source to reduce run off as well as improving water quality by trapping suspended solids and filtering pollutants.

Further to the parking the Homezone roads will also be permeable paving.

5.4 SITE CONTROL

5.4.1 TREE PITS

Due to the large amount of tree planting throughout the proposed site, tree pits along the road system have been proposed to collect surface water runoff from the road system. The proposed tree pits will provide attenuation, optimise the retention time and provide a water quality improvement, especially for the first flush

from the road system. The tree pits along the road system will comprise of a 225mm perforated pipe which will collect and direct the surface water runoff into the below ground surface water system.

5.4.2 RAIN GARDENS

Several Bioretention areas below rain gardens are proposed through the site. Rain gardens are depressions with attractive planting which can act as infiltration points for surface water. The proposed planting will comprise suitable native vegetation that can accommodate occasional inundations. Referral shall be made the landscaping layout and report for further details.

5.5 REGIONAL CONTROL

5.5.1 DETENTION BASIN

Detention basins are proposed as end point attenuation systems throughout the site. Surface water collected throughout the site will flow through the detention basin as the final SUDS control measure. Any surface water over and above the greenfield runoff rates for the site will be attenuated within the basin.

The maximum water level of the detention basin will be minimum 150mm below any FFL throughout the development. A dry swale above the detention basin will also provide an extra level of storage for any surcharge.

5.5.2 FLOW CONTROL

Flows will be controlled by a Hydrobrake or similar approved flow control device, limited to the greenfield equivalent runoff rate (Refer to SW report in appendix), with excess flows being attenuated in the Detention basin as mentioned above before out falling to the existing SW network out fall to the north of the site.

5.5.3 PETROL INTERCEPTOR

A Petrol interceptor is to be installed before the surface water outfall. Petrol Interceptors will remove hydrocarbons from surface flows, protecting the natural watercourse.

5.5.4 CLIMATE CHANGE

Requirements for climate change allowances are as per OPW 'General Map User Guidance Notes' found through floodinfo.ie4. A 20% uplift in extreme rainfall depths (Mid Range Future Scenario (MRFS)) has been adopted for the purposes of undertaking hydraulic calculations to validate the outline design proposal."

A map of the proposed SuDS design and surface water drainage network is displayed in Figures 9-12.

Landscape

This application is accompanied by a Landscape Design Report prepared by Austen Landscape Architects. The report states the following in relation to the landscape plan:

"2.2 –Biodiversity Net Gain Statement

This landscape design has been developed to achieve measurable Biodiversity Net Gain by ensuring that the development leaves biodiversity in a better state than it was before. Impacts on existing ecological features have been carefully considered, with a focus on protecting valuable assets, enhancing existing habitats, and introducing new ecological features to increase overall biodiversity value.

	Existing Site	Proposed Design
Trees	None of crucial significance or retention	395no.
Native and biodiverse Hedgerow	None of crucial significance or retention	1756 lin.m
Biodiversity and Pollinator Friendly Planting	30m ²	8978 m ²

The design incorporates native and pollinator-friendly planting, the creation of diverse habitats, and green infrastructure that strengthens ecological connectivity within the site and its surroundings. The inclusion of green roof wildflower planting and perennial planting mixes further contributes to the ecological value of the scheme, enhancing pollinator resources and increasing the overall green factor across the development.

2.4 – Planting

The planting scheme has been carefully developed to reflect the needs of the site and allow it to flourish as a core landscape element within its wider context and surrounds. The proposed planting priorities native, climate resilient and robust species that provide structure, screening, and seasonal interest while making a strong contribution to a wider biodiversity presence, provide food and shelter for various birds and animals contributing to the wider surrounding habitats and the overall well-being of the future residents. Other proposed planting mixes feature low maintenance species that also deliver high biodiversity value and support pollinator friendly habitats. These mixes include shrubs, perennials, native specimens, along with butterfly and bee friendly wildflower areas.

Large areas of open grass will be retained to support the multifunctional requirements of the community such as open play, gathering, and informal recreation, ensuring a balanced relationship between biodiversity, accessibility and active and passive use of spaces.”

See Figure 13 for the Landscape Plan.



0 25 50 75 100 125 150 m

Project: Elmfield
 Location: Ninth Lock Road, Co. Dublin
 Date: 20th August 2026
 Drawn By: Hugh Butler (Altamar)

ALTEMAR
 Marine & Environmental Consultancy

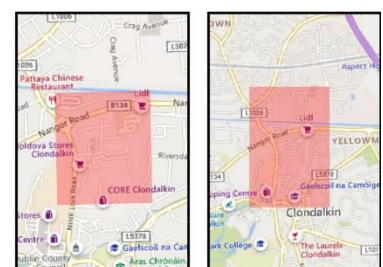


Figure 1. Proposed site outline



0 100 200 300 400 500 m

Project: Elmfield
 Location: Ninth Lock Road, Co. Dublin
 Date: 20th August 2026
 Drawn By: Hugh Butler (Altamar)

ALTEMAR
 Marine & Environmental Consultancy

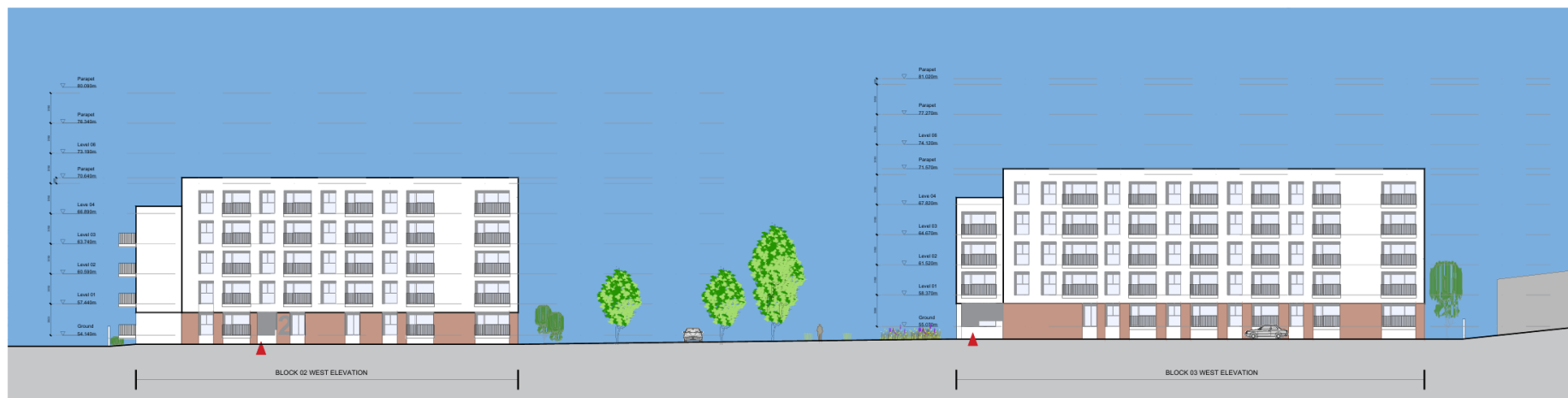
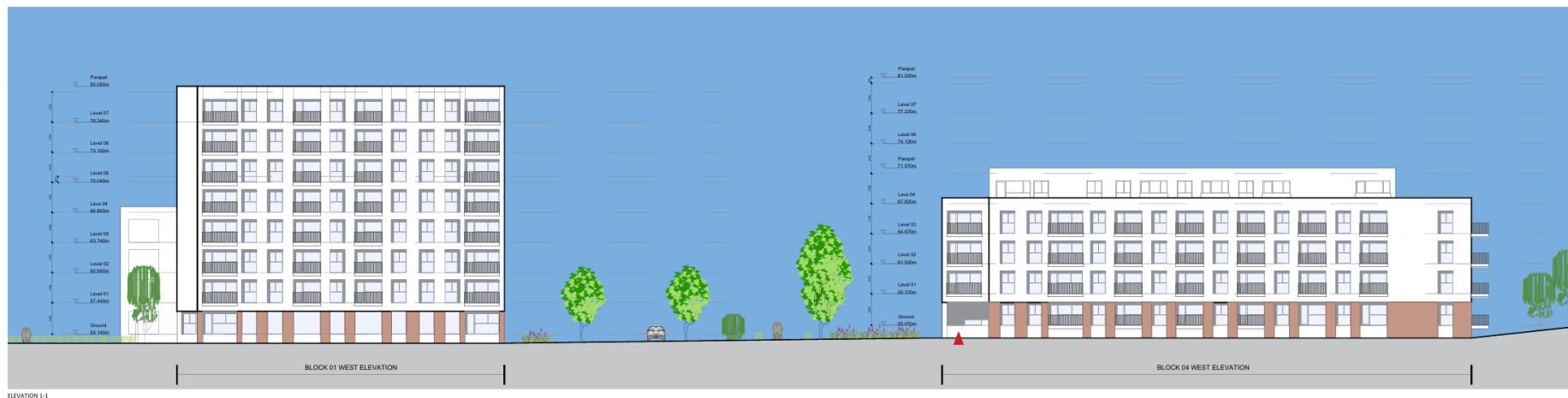


Figure 2. Proposed site location



Proposed Site Layout				Revision Description				architectural urban design				mahony pike				Project Code: P01				Scale: A1: 1:500			
Site Application Boundary - 2.66 Ha				Drawn By: IT				Project Lead: AOC				Date Issued: 16.07.2025				Current Rev: A3-C25				Status: 53			
Lands within Applicant's ownership - 2.29 Ha				Job No: 25018				Purpose: STAGE 3 PLANNING				Project: Elmfield				Location: North Lock Road, Clondalkin				Client: Thornmeadow Developments Limited			
Lands for which Letters of Consent are required				Drawing Title: Proposed Site Layout				Drawing No: 25018-OMP-ZZ-KX-DR-A-0001				DRAFT											
NOTE: Works proposed outside Applicant's Ownership boundary are subject to agreement with the Local Authority																							

Figure 3. Site layout plan



PROPOSED ELEVATIONS SHEET 01

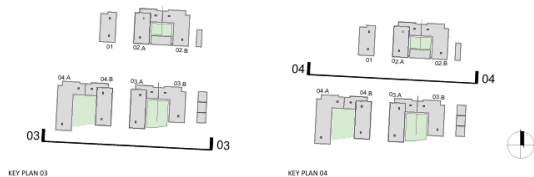


Revision Description	Date	Rev. No.	Issued by		Project Code: PRJ	Scale @ A1: 1:200
					Project Lead: MH	Date Printed: 01.12.2025
					Drawn By: AD	Current Rev.: A2
					Job No.: 25018	Status: S1
					Purpose: S2	
				architecture urban design email: info@mahonypike.com tel: +353 1 202 7601 fax: +353 1 281 8822 www.mahonypike.com	Dublin The Chapel Mount St. Anne's Milltown, Dublin 6 Co. Cork	Cork One South Mall Cork City Co. Cork T12 C23 Ireland
				Project: Elmfield		
				Location: Ninth Lock Road, Clondalkin		
				Client: Thornmeadow Developments Limited		
Any reference to fire safety design or performance is presented for coordination purposes only. Refer only to the granted Fire Safety Certificate, and fire consultant's information for fire safety design, specification and performance.						
Figured dimensions only to be used. This drawing is copyright of O'Mahony Pike Architects Ltd. All information is shared as per approved use in accordance with ISO/IEC 27002:2018, Table 5. Standard Controls for Suitability of Models and Documents and the BCP. If the Status/field is open, this information has been shared at S0 - WIP.						

Figure 4. Proposed site elevations (sheet 1 of 4)



PROPOSED ELEVATIONS SHEET 02



Revision Description	Date	Rev. No.	Issued by		Project Code: PRJ	Scale @ A1: 1:200
					Project Lead: MH	Date Printed: 01.12.2025
					Drawn By: AD	Current Rev.: A2
					Job No.: 25018	Status: S1
					Purpose: S2	
				architecture urban design email: info@omahonypike.com tel: +353 1 281 3860 fax: +353 1 281 3862 www.omahonypike.com	Dublin The Chapel Mauro St. Anna's Milltown, Dublin 8 Co. Car. D06 XN92 Ireland	Cork One South Mall Cork City Milltown, Dublin 8 T12 C2N3 Ireland
				Project: Elmfield		
				Location: Ninth Lock Road, Clondalkin		
				Client: Thornmeadow Developments Limited		
Any reference to fire safety design or performance is presented for coordination purposes only. Refer only to the granted Fire Safety Certificate, and fire consultant's information for fire safety design, specification and performance.						
Figured dimensions only to be used. This drawing is copyright of O'Mahony Pike Architects Ltd. All information is shared as per approved use in accordance with ISO 19650-2:2018, Table 5, Standard Codes for Suitability of Models and Documents and the BEP. If the 'Status' field is empty, this information has been shared at 50 - WP.						
				Drawing Title: Proposed Elevations Sheet 02		
				Drawing No.: 25018-OMP-ZZ-XX-DR-A-2001		

Figure 5. Proposed site elevations (sheet 2 of 4)



ELEVATION 5 - 5



ELEVATION 6 - 6

PROPOSED ELEVATIONS SHEET 03



Revision Description	Date	Rev. No.	Issued by	Project Code	Scale @ A1: 1:200
				Project Lead: MH	Date Printed: 01.12.2025
				Drawn By: AD	Current Rev: A2
				Job No.: 25018	Status: S1
				Purpose: 52	
Any reference to fire safety design or performance is presented for coordination purposes only. Refer only to the granted Fire Safety Certificate, and fire consultant's information for fire safety design, specification and performance. Figured dimensions only to be used. This drawing is copyright of O'Mahony Pike Architects Ltd. All information is shared as per approved use in accordance with ISO19650-2:2018, Table 5; Standard Codes for Suitability of Models and Documents and the BEP. If the 'Status' field is empty, this information has been shared at 50% - WIP.					
Project: Elmfield Location: Ninth Lock Road, Clondalkin Client: Thornmeadow Developments Limited					
Drawing Title: Proposed Elevations Sheet 03 Drawing No.: 25018-OMP-ZZ-XX-DR-A-2002					

Figure 6. Proposed site elevations (sheet 3 of 4)

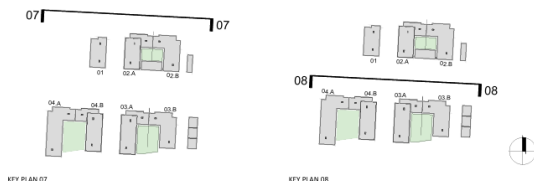


ELEVATION 7 - 7



ELEVATION 8 - 8

PROPOSED ELEVATIONS SHEET 04



Revision Description	Date	Rev. No.	Issued by		Project Code: PRJ	Scale @ A1: 1:200
					Project Lead: MH	Date Printed: 01.12.2025
					Drawn By: AD	Current Rev.: A2
					Job No.: 25018	Status: S1
					Purpose: S2	
				Project: Elmfield		
				Location: Ninth Lock Road, Clondalkin		
				Client: Thornmeadow Developments Limited		
Any reference to fire safety design or performance is presented for coordination purposes only. Refer only to the granted Fire Safety Certificate, and fire consultant's information for fire safety design, specification and performance.						
Figured dimensions only to be used. This drawing is copyright of O'Mahony Pike Architects Ltd. All information is shared as per approved use in accordance with 102/1950-2/2018, Table 5, Standard Codes for Suitability of Models and Documents and the BCP. If the 'Status' field is empty, this information has been shared at 50 - WIP.						
				Drawing Title: Proposed Elevations Sheet 03		
				Drawing No.: 25018-OMP-ZZ-XX-DR-A-2003		

Figure 7. Proposed site elevations (sheet 4 of 4)

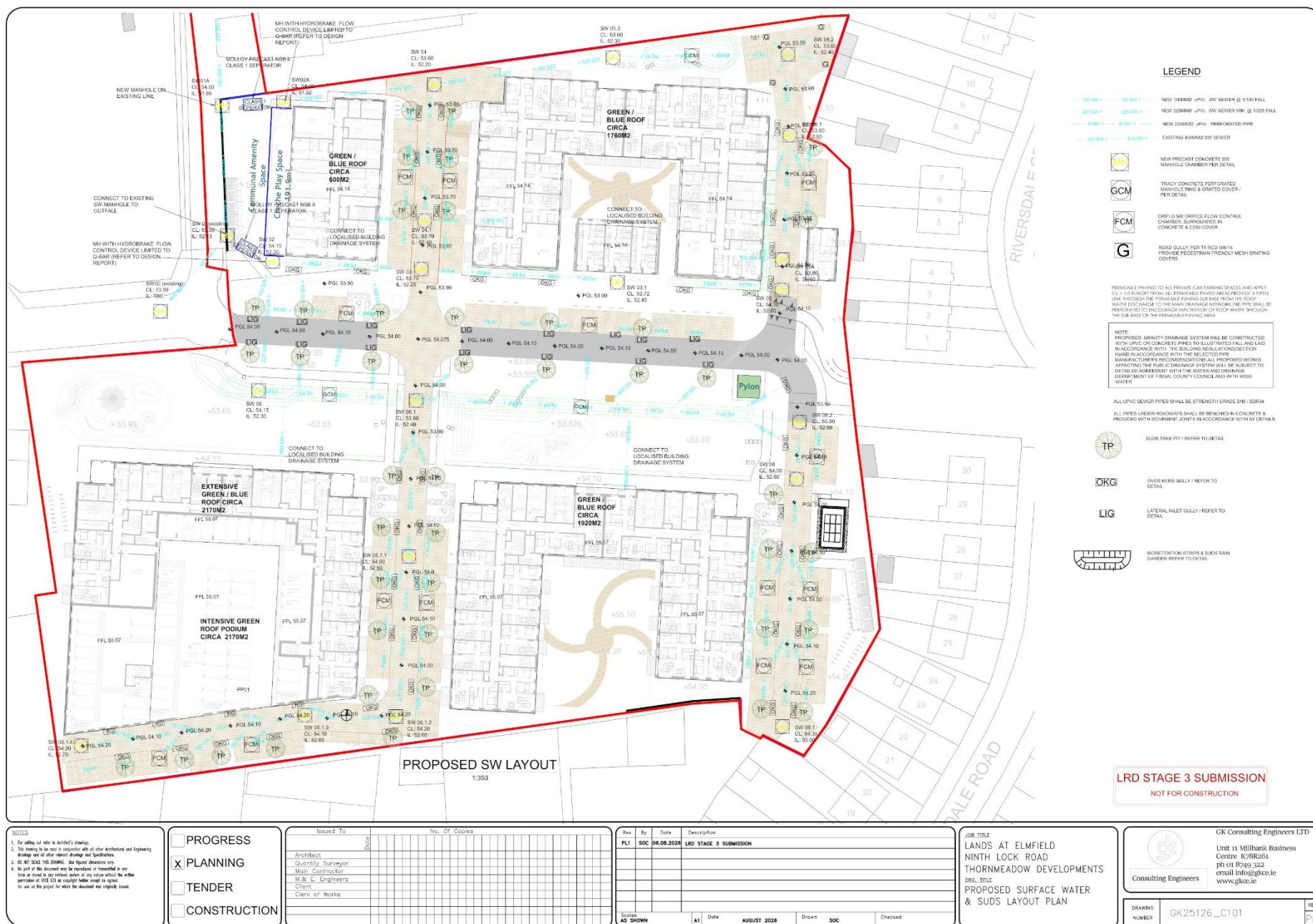


Figure 9. Proposed surface water & SUDS layout plan



Figure 10. Proposed site SUDS layout catchment areas





Figure 13. Landscape Plan

Ecological Assessment Methodology

Desk Study

A desk study was undertaken to gather and assess ecological data prior to undertaking fieldwork elements. Sources of datasets and information included:

- The National Parks and Wildlife Service
- National Biological Data Centre
- Satellite, aerial and 6" map imagery
- ESRI (QGIS)

A provisional desk-based assessment of the potential species and habitats of conservation importance was carried out in September 2025 and updated in July 2026. Altamar assessed the project, the proposed construction methodology and the operation of the proposed development.

Spatial Scope and Zone of Influence

As outlined in CIEEM (2018) *'The 'zone of influence' for a project is the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries.'* In line with best practice guidance an initial zone of influence be set at a radius of 2km for non-linear projects (IEA, 1995).

IEEM (2016) defined the zone of influence as "the areas/resources that may be affected by the biophysical changes caused by activities associated with a project". In order to define the extent of the study area for ecological assessment, all elements of the project were assessed and reviewed in order to identify the spatial scale at which ecological features could be impacted. Due to the limited temporal and geographical scale of the project it is considered that the impacts of the proposed development would not extend beyond the site outline, with the exception of potential impacts on downstream conservation sites via the indirect pathway of foul and surface water drainage to the existing public combined sewer network. The project would also involve reprofiling, excavations, demolition and construction, which may impact beyond the site through noise, dust and light impacts. Standard but robust construction phase controls need to be implemented to limit the potential impact of the proposed development into the surrounding environment. The ZOI of the operation of the proposed development would be the immediate area of the proposed development site.

Field Survey

Field survey of the proposed development site was carried out by Altamar Ltd. on the 2nd September 2025. The purpose of the field surveys was to identify habitat types according to the Fossitt (2000) habitat classification and map their extent. In addition, more detailed information on the species composition and structure of habitats, conservation value and other data were gathered.

A survey for terrestrial mammals was undertaken on the 12th December 2025 with the aim of identifying the presence or likely presence of protected terrestrial mammals' species such as Badger (*Meles meles*) within or immediately adjacent to the site of the proposed development. The survey followed best practice guidance (NRA, 2008) and involved a systematic search for evidence of terrestrial mammals, such as setts, latrines, mammal paths, etc.

Bat surveys (emergent and detector) were also carried out on the 2nd and 9th September 2025, 27th April and 5th May 2026 and the site was assessed for roosting potential. Dusk bat detector surveys were carried out onsite using a Batbox Duet detector to determine bat activity. Bats if present were identified by their ultrasonic calls coupled with behavioural and flight observations.

Survey Limitations

The surveys covered appropriate seasons for flora, bat, and terrestrial mammal assessments. The site consisted primarily of built land. All areas of the site were accessible and there are no limitations seen in relation to the surveys.

Consultation

The National Parks and Wildlife Service (NPWS) was consulted in relation to species and sites of conservation interest. Data of rare and threatened species were acquired from NPWS. The National Biological Data Centre records were consulted for species of conservation significance.

Impact Assessment Significance Criteria

This section of the EclA examines the potential causes of impact that could result in likely significant effects to the species and habitats that occur within the ZOI of the proposed development. These impacts could arise during either the construction or operational phases of the proposed development. The following terms are derived from EPA EIAR Guidance and are used in the assessment to describe the predicted and potential residual impacts on the ecology by the construction and operation of the proposed development.

Magnitude of impact and typical descriptions

Magnitude of impact (change)		Typical description
High	Adverse	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements.
	Beneficial	Large scale or major improvement of resource quality; extensive restoration; major improvement of attribute quality.
Medium	Adverse	Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements
	Beneficial	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality.
Low	Adverse	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements.
	Beneficial	Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring
Negligible	Adverse	Very minor loss or alteration to one or more characteristics, features or elements.
	Beneficial	Very minor benefit to or positive addition of one or more characteristics, features or elements.

Criteria for Establishing Receptor Sensitivity/Importance

Importance	Ecological Valuation
International	Sites, habitats or species protected under international legislation e.g. Habitats and Species Directive. These include, amongst others: SACs, SPAs, Ramsar sites, Biosphere Reserves, including sites proposed for designation, plus undesignated sites that support populations of internationally important species.
National	Sites, habitats or species protected under national legislation e.g. Wildlife Act 1976 and amendments. Sites include designated and proposed NHAs, Statutory Nature Reserves, National Parks, plus areas supporting resident or regularly occurring populations of species of national importance (e.g. 1% national population) protected under the Wildlife Acts, and rare (Red Data List) species.
Regional	Sites, habitats or species which may have regional importance, but which are not protected under legislation (although Local Plans may specifically identify them) e.g. viable areas or populations of Regional Biodiversity Action Plan habitats or species.
Local/County	Areas supporting resident or regularly occurring populations of protected and red data listed-species of county importance (e.g. 1% of county population), Areas containing Annex I habitats not of international/national importance, County important populations of species or habitats identified in county plans, Areas of special amenity or subject to tree protection constraints.
Local	Areas supporting resident or regularly occurring populations of protected and red data listed-species of local importance (e.g. 1% of local population), Undesignated sites or

Importance	Ecological Valuation
	features which enhance or enrich the local area, sites containing viable area or populations of local Biodiversity Plan habitats or species, local Red Data List species etc.
Site	Very low importance and rarity. Ecological feature of no significant value beyond the site boundary

Quality of Potential Impacts on Biodiversity

	Impact Description
Negative /Adverse Impact	A change which reduces the quality of the environment (for example, lessening species diversity or diminishing the reproductive capacity of an ecosystem; or damaging health or property or by causing nuisance).
Neutral Impact	No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.
Positive Impact	A change which improves the quality of the environment (for example, by increasing species diversity; or the improving reproductive capacity of an ecosystem, or by removing nuisances or improving amenities).

Significance of Impacts

Significance of Impact	Description of Potential Impact
Imperceptible	An effect capable of measurement but without significant consequences.
Not significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.
Slight Effects	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Moderate Effects	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
Significant Effects	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
Very Significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
Profound	An impact which obliterates sensitive characteristics.

Duration of Impact

Duration of Impact	Description
Momentary	Effects lasting from seconds to minutes
Brief	Effects lasting less than a day
Temporary	Effects lasting less than a year
Short-term	Effects lasting one to seven years.
Medium-term	Effects lasting seven to fifteen years.
Long-term	Effects lasting fifteen to sixty years.
Permanent	Effects lasting over sixty years
Reversible	Effects that can be undone, for example through remediation or restoration
Likely Effects	The effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented.
Unlikely Effects	The effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented.
Extent of Effects	Description
Extent	Describe the size of the area, the number of sites, and the proportion of a population affected by an effect.

As outlined in IEEM (2010) 'assessment of impacts should be undertaken in relation to the baseline conditions within the zone of influence of the proposed development'. Impacts during site preparation, construction and occupation

upon ecological receptors were quantified and characterised based on IEEM impact characterisation (IEEM, 2010). Following an evaluation of ecological receptors, the potential impact (positive, neutral or adverse) of the project on the ecological receptors was carried out based on the criteria in an impact significance matrix (based on NRA, 2009).

Results

Proximity to Designated Conservation Sites

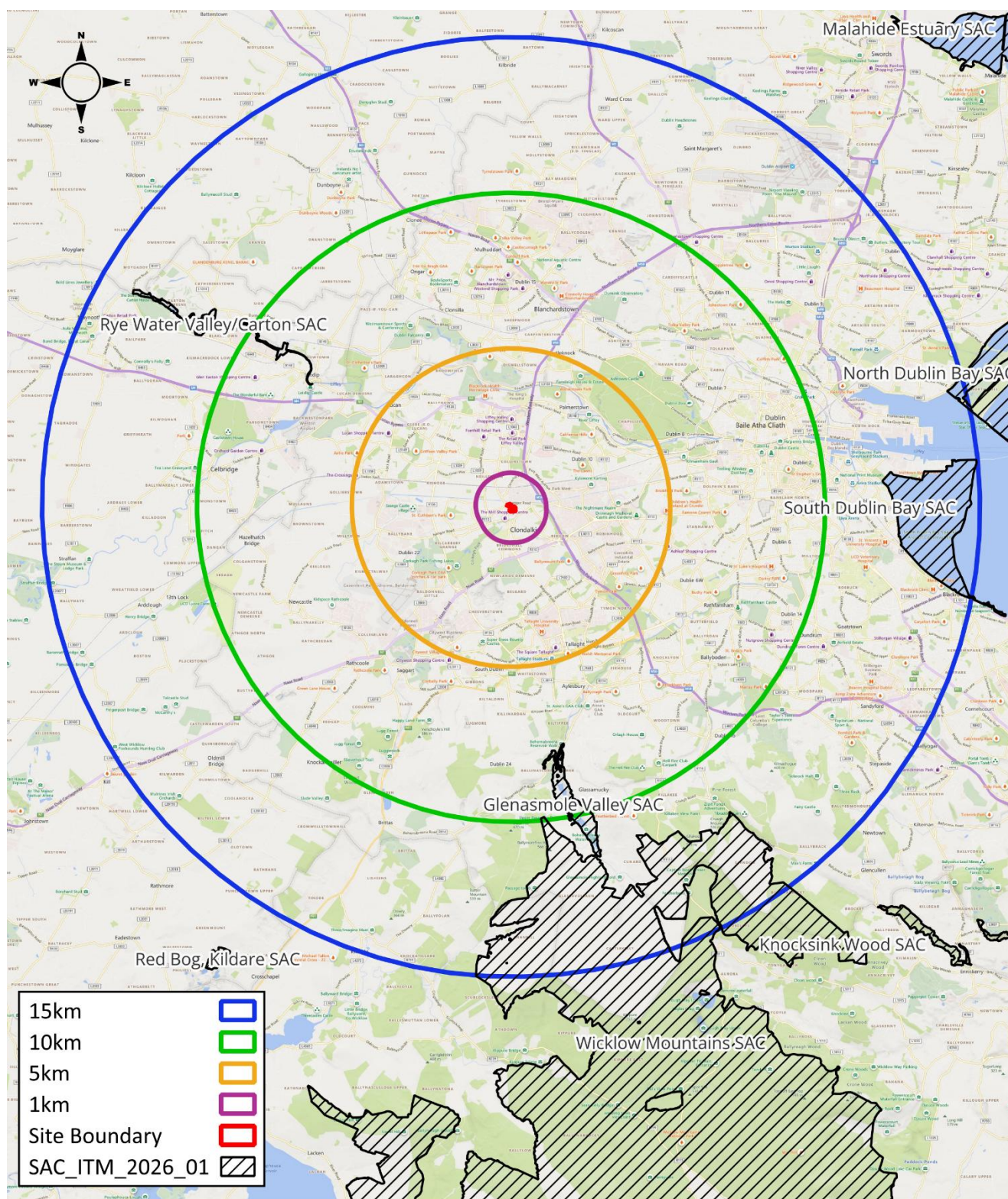
Designated conservation sites (National and international) within 15km of the proposed development are seen in Figures (14-17) and Tables 1 & 2. It should be noted that the proposed development site is not within a designated conservation area. The closest Natura 2000 sites are the Rye Water Valley / Carton SAC (7.3 km from the subject site)) (Figures 14 and 15). There are no designated Natural Heritage Areas (NHA) within a 15km radius, however, the nearest Proposed NHA (Grand Canal pNHA) is located 51m to the north of the site (Figure 17). The closest RAMSAR Site is Sandymount Strand/Tolka Estuary at 11.9 km (Figure 16). Watercourses located proximate to the subject site are demonstrated in Figures 19. There is no direct hydrological pathway to designated conservation sites. There is an indirect hydrological pathway to marine-based conservation sites via the proposed foul and surface water drainage strategy. Both foul and surface water drainage will be directed to a public combined sewer located to the north west of the site. This network discharges to Ringsend WwTP, which in turn outfalls to Dublin Bay after treatment.

Table 1. European sites within 15km of the proposed site

Code	European Site	Distance	Direct Hydrological / Biodiversity Connection
Special Areas of Conservation			
IE001398	Rye Water Valley / Carton SAC	7.3 km	No
IE001209	Glenasmole Valley SAC	7.6 km	No
IE002122	Wicklow Mountains SAC	9.9 km	No
IE000210	South Dublin Bay SAC	11.9 km	No
IE000206	North Dublin Bay SAC	14.4 km	No
Special Protection Area			
IE004024	South Dublin Bay and River Tolka Estuary SPA	11.9 km	No
IE004006	North Bull Island SPA	14.4 km	No
IE004040	Wicklow Mountains SPA	11.5 km	No

Table 2. Ramsar Sites and (proposed) NHAs within 15km of the proposed development site

Status	Site Name	Distance
Ramsar		
Ramsar	Sandymount Strand/Tolka Estuary	11.9 km
Ramsar	North Bull Island	14.6 km
Proposed Natural Heritage Area		
Proposed NHA	Grand Canal	51 m
Proposed NHA	Liffey Valley	3.3 km
Proposed NHA	Dodder Valley	5.5 km
Proposed NHA	Royal Canal	5.5 km
Proposed NHA	Lugmore Glen	6.1 km
Proposed NHA	Rye Water Valley / Carton	7.3 km
Proposed NHA	Glenasmole Valley	7.6 km
Proposed NHA	Slade of Saggart and Crooksling Glen	7.6 km
Proposed NHA	North Dublin Bay	11.1 km
Proposed NHA	South Dublin Bay	11.8 km
Proposed NHA	Fitzsimons Wood	12.1 km
Proposed NHA	Santry Demesne	12.2 km
Proposed NHA	Boosterstown Marsh	12.7 km
Proposed NHA	Dolphins, Dublin Docks	13 km
Proposed NHA	Kilteel Wood	13.3 km



Project: Elmfield
Location: Ninth Lock Road, Co. Dublin
Date: 20th August 2026
Drawn By: Hugh Butler (Altamar)

ALTEMAR
Marine & Environmental Consultancy

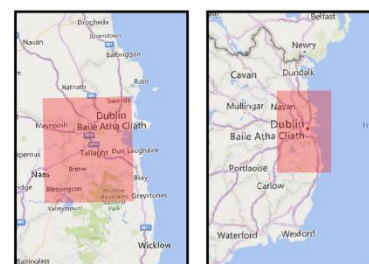


Figure 14. Special Areas of Conservation (SAC) within 15km of proposed development

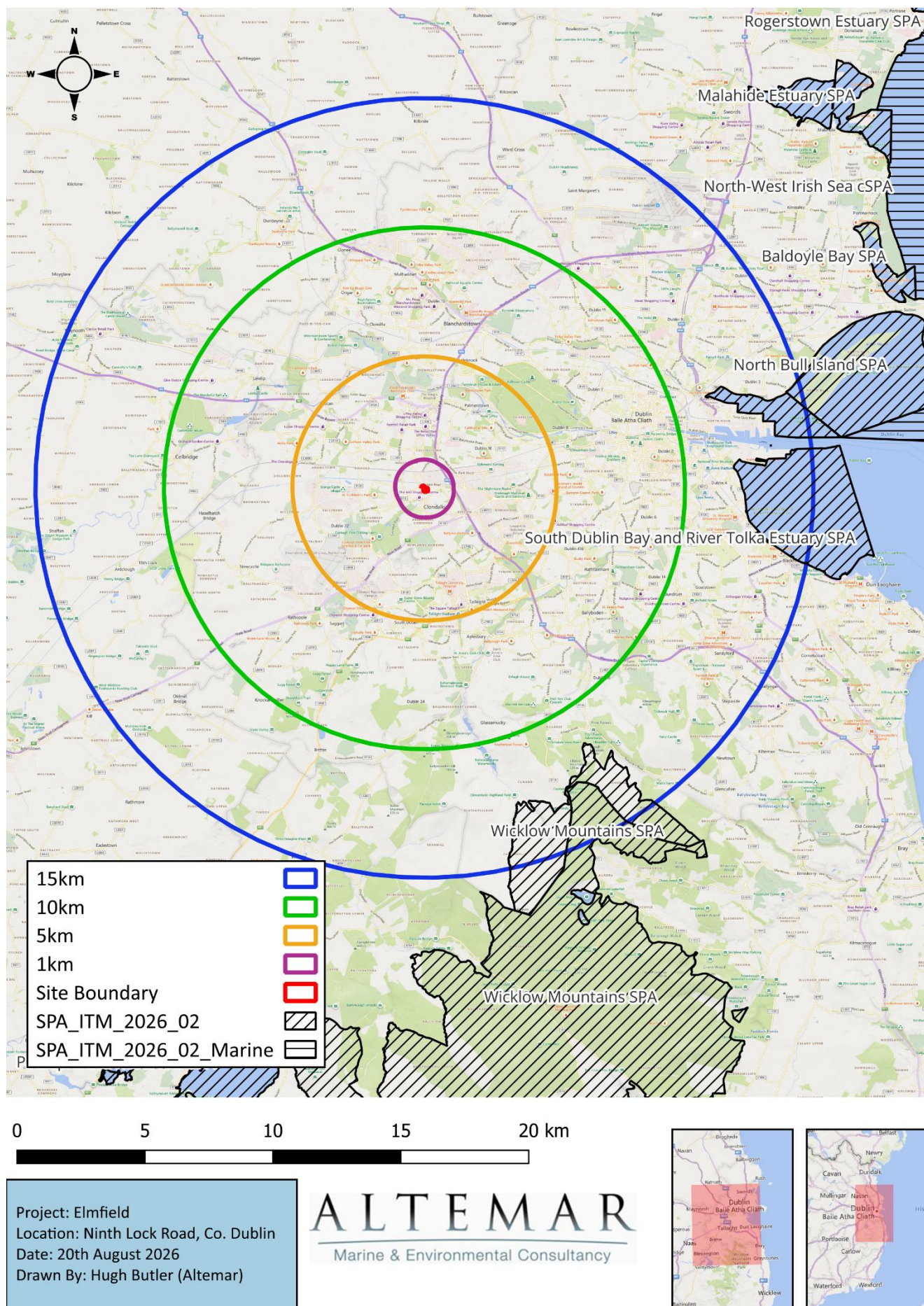
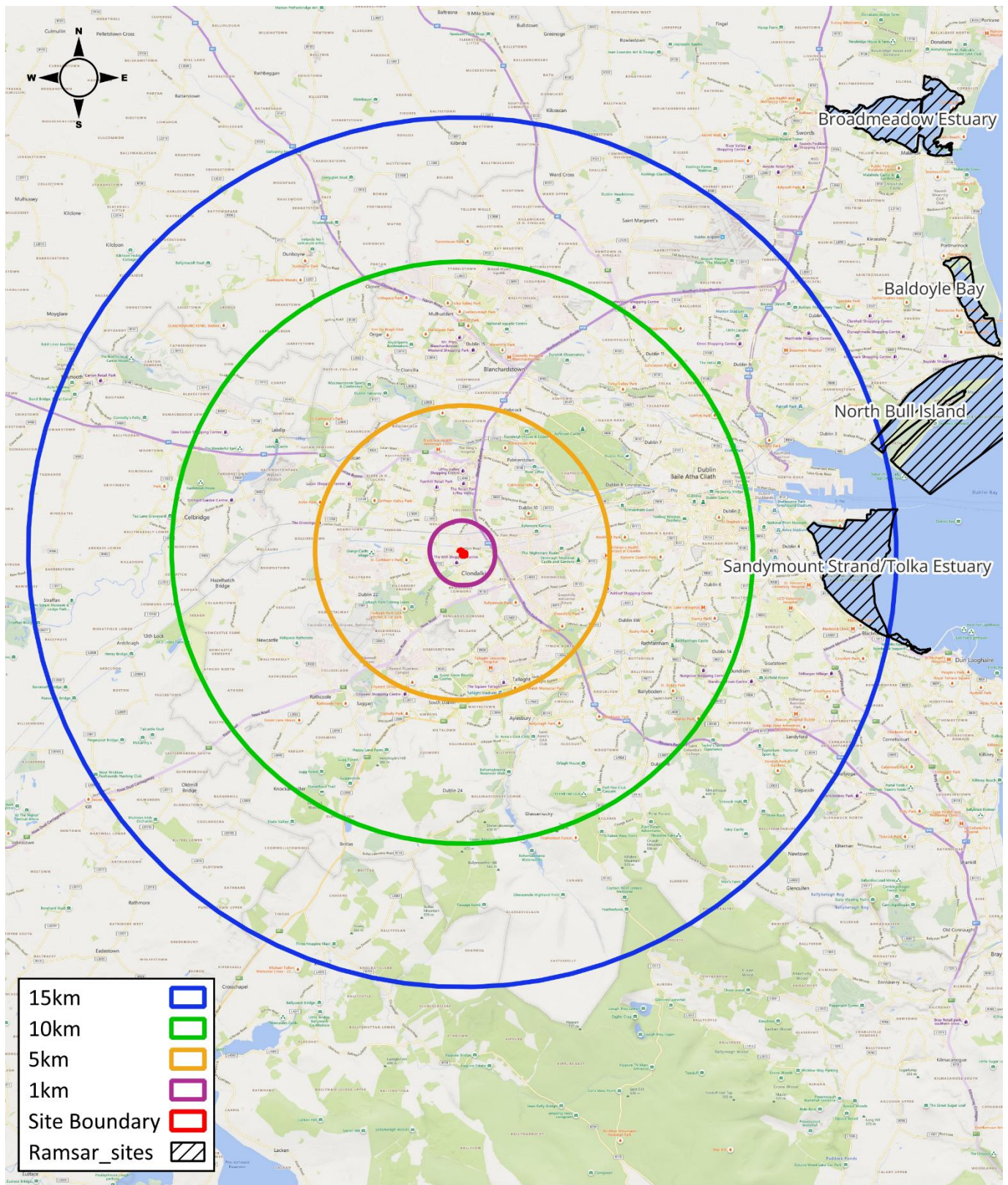


Figure 15. Special Protected Areas (SPA) within 15 km of the proposed development

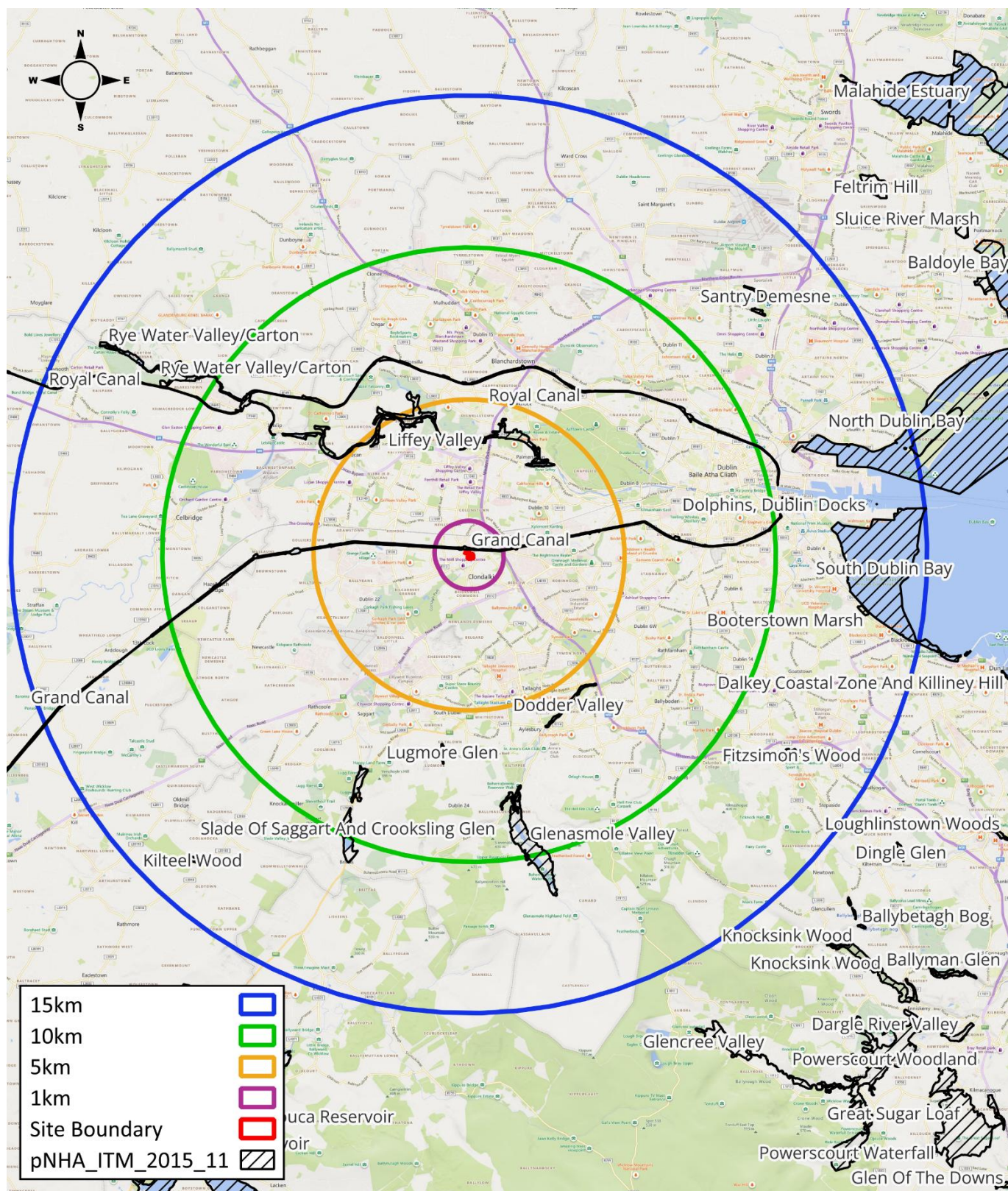


Project: Elmfield
Location: Ninth Lock Road, Co. Dublin
Date: 20th August 2026
Drawn By: Hugh Butler (Altamar)

ALTEMAR
Marine & Environmental Consultancy



Figure 16. Ramsar sites within 15km of proposed development



Project: Elmfield
Location: Ninth Lock Road, Co. Dublin
Date: 20th August 2026
Drawn By: Hugh Butler (Altamar)

ALTEMAR
Marine & Environmental Consultancy



Figure 17. pNHA sites within 15 km of proposed development

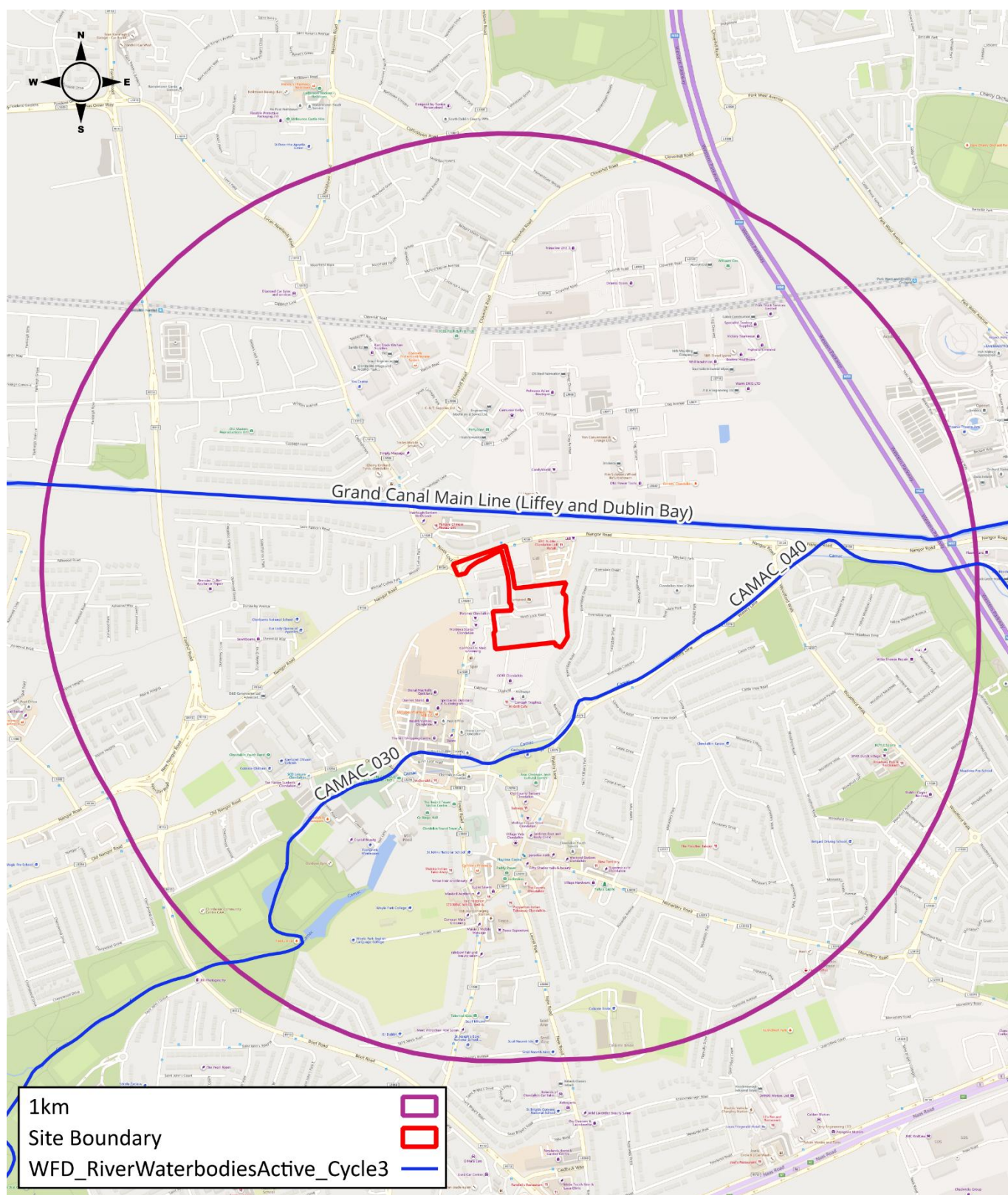
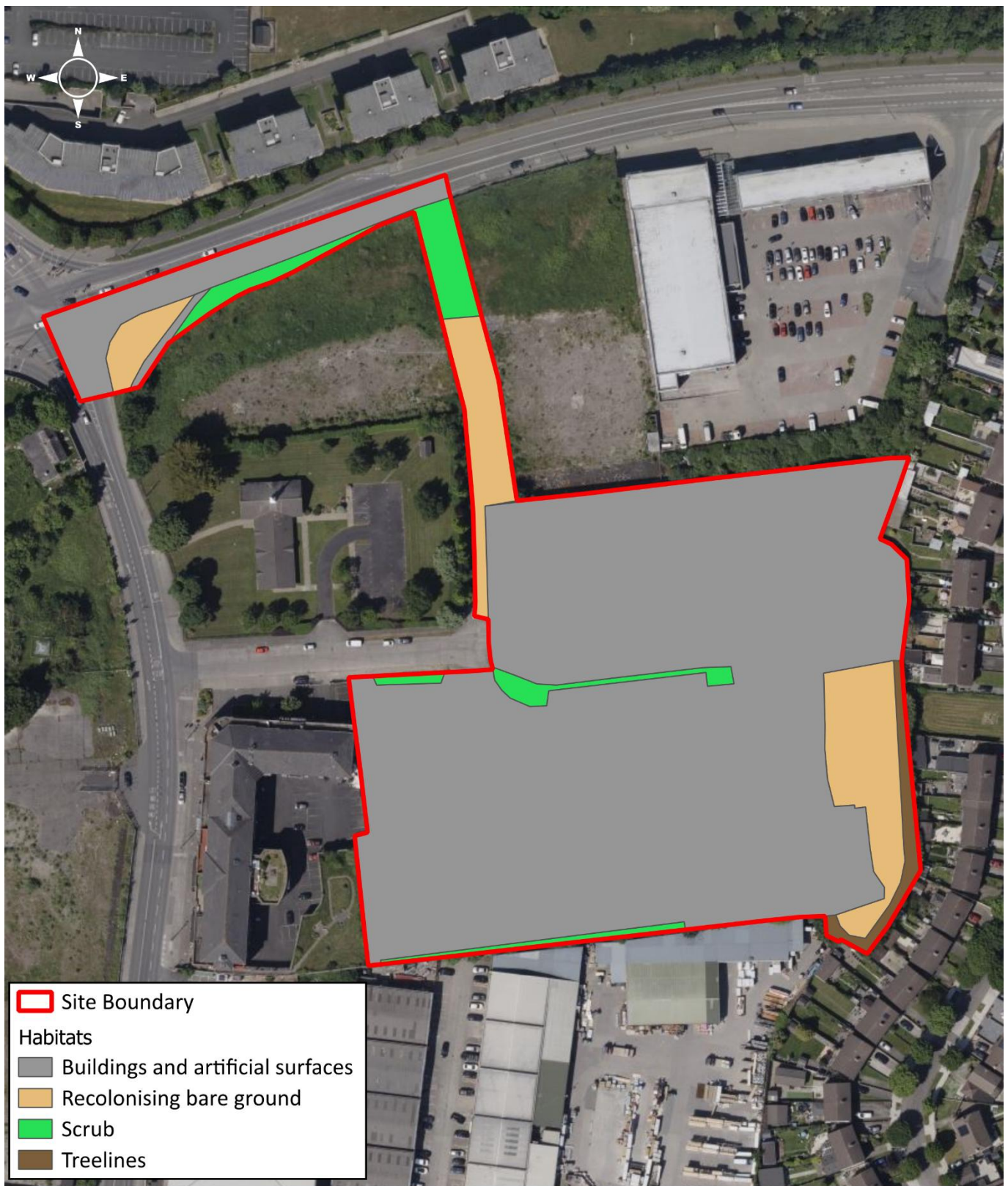


Figure 18. Watercourses within 1 km of the proposed development.



Project: Elmfield
 Location: Ninth Lock Road, Co. Dublin
 Date: 20th August 2026
 Drawn By: Hugh Butler (Altamar)

ALTEMAR
 Marine & Environmental Consultancy

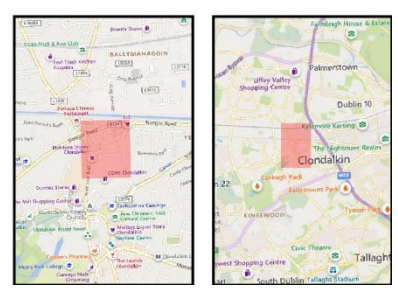


Figure 19. Habitats based on Fossitt Classification within the proposed development site

Habitats and Species

A site assessment was carried out on the 2nd September 2025. Habitats within the proposed site were classified according to Fossitt (2000) (Figure 19).

BL3 - Buildings and artificial surfaces

Buildings and artificial surfaces form the primary habitat type on site, consisting of extensive areas of hardstanding associated with the logistics yard, including paved and concreted surfaces, loading bays, and access routes. Structures within the site include corrugated metal and canvas clad buildings, along with a red brick retail building located along the western side of the site. Vegetation within this habitat is generally absent, with only occasional ornamental species planted in beds at the front of the red brick building, or pioneer species present along cracks in hardstanding. The habitat is of low ecological value.



Plate 1. Southern face of Securispeed warehouse.



Plate 2. Western face of Securispeed warehouse.



Plate 3. Area of recolonising bare ground.



Plate 4. Southwestern treeline.



Plate 5. Southeastern loading port at VSDirect warehouse.



Plate 5. Eastern face of VSDirect warehouse.



Plate 7. Northern face of VSDirect warehouse.



Plate 8. Front façade of red brick retail building.



Plate 9. Western loading port at VSDirect warehouse.

WS1 – Scrub

Areas of scrub are present as encroaching vegetation along the southern boundary of the site, occurring between an existing building and the boundary wall, and extending along a central fence line. This habitat is dominated by bramble (*Rubus fruticosus agg.*) with frequent butterfly bush (*Buddleja davidii*). The scrub is linear and fragmented in nature and shows signs of ongoing encroachment onto adjacent hardstanding.



Plate 10. Butterfly Bush encroachment along southern boundary.

ED3 – Recolonising bare ground

An area of recolonising bare ground is present within the site, with exposed soil with early successional vegetation. The habitat is dominated by pioneer species, primarily thistles (*Cirsium spp.*) with sparse overall vegetation cover. Localised bramble scrub encroachment is evident at the base of a pylon structure within this area.



WL2 – Treelines

Treelines are present along the south-western boundary of the site, consisting of a mature line of cypress (*Cupressus* sp.). The treeline forms a boundary feature with limited understory development.

Evaluation of Habitats

No rare or protected habitats were noted on site during the field survey.

Plant Species

The plant species encountered at the various locations on site are detailed above. No protected species were noted on site or in the records of rare and threatened species from NPWS. The closest records of protected plant species in proximity to the subject site are for opposite-leaved pondweed (*Groenlandia densa*) within the Grand Canal north of the site. . No invasive species subject to restrictions under Regulations 49 and 50 of the European Communities (Birds and Natural Habitats) Regulations 2011 were noted on site during the field survey. Butterfly Bush (*Buddleja davidii*) was noted on site which is a noxious weed and is considered a medium impact non-native invasive species according to the National Biodiversity Data Centre.

Mammals

A single attempted mammal burrow was recorded within the survey area. The feature comprised a partially formed tunnel extending to a depth of approximately 1m. The entrance measured approximately 40cm in height and 20 cm in width and narrowed with depth before coming to an end. The burrow was irregular in form and was not associated with a spoil heap, bedding material, worn mammal paths, latrines, or any other mammal field signs.

Based on the nature of the burrowing attempt, its incomplete narrowing form, and the absence of associated signs of badger, the feature is considered likely to be the result of a fox (*Vulpes vulpes*). The lack of key sett characteristics indicates that the feature is unlikely to be a badger sett. Insufficient evidence was present to confirm the species that attempted to burrow at this location.



Plate 11. Attempted mammal burrow



Plate 12. Internal structure of attempted mammal burrow.

Amphibians

The common frog (*Rana temporaria*) or newts (*Triturus vulgaris*) were not observed on site. There is not suitable habitat for these species on the subject site. Several records of frogs are held by the NPWS within 1 km of the proposed development site.

Bats

A bat assessment and detector survey was carried out and is seen in Appendix I.

Birds

The site is located within an urban and industrial landscape. Suitable habitat for birds is limited to areas of scrub and the cypress treeline along the southwestern boundary. These habitats have the potential to support a small number of common and widespread bird species typical of urban environments, such as robin (*Erithacus rubecula*), wren (*Troglodytes troglodytes*), and wood pigeon (*Columba palumbus*).

This site is 11.9 km from South Dublin Bay and River Tolka SPA. The NPWS rare and protected species data did not contain any records of qualifying interests within the area of the proposed development. No qualifying interests of SPA's recorded by the National Biodiversity Data Centre within the 2km grid square that the proposed development falls within. The proposed development site consists almost entirely of built land and would not be used as an *ex-situ* foraging site for any other qualifying interest of any other SPA. The habitats on site would not be deemed of importance to birds of international conservation importance.

Historic Records of Biodiversity

The National Biodiversity Data Centre's online viewer was consulted in order to determine the extent of biodiversity and/or species of interest in the area. First, an assessment of the site specific area was carried out and it recorded no species of interest in the site area. Following this a 2km² grid (O03Q) was assessed. Table 3 below provides a list of all species recorded in the grid area that possess a specific designation, such as Invasive Species or Protected Species.

Table 3. Recorded species, associated designations and grid references

Date of Record	Species Name	Designation
16/02/2013	Badger (<i>Meles meles</i>)	Protected Species: Wildlife Acts
13/08/2020	Butterfly-bush (<i>Buddleja davidii</i>)	Invasive Species: Medium Risk Invasive Species (2013 Report)
03/07/2019	Common Frog (<i>Rana temporaria</i>)	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex V Protected Species: Wildlife Acts
15/08/2023	Common Pipistrelle (<i>Pipistrellus pipistrellus sensu stricto</i>)	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
28/08/2008	Daubenton's Bat (<i>Myotis daubentonii</i>)	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
31/12/2011	Goldcrest (<i>Regulus regulus</i>)	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
31/12/2011	Greenfinch (<i>Chloris chloris</i>)	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
05/07/2022	Grey Squirrel (<i>Sciurus carolinensis</i>)	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 Invasive Species: Regulation S.I. 477/2011 (Ireland) Invasive Species: High Risk Invasive Species (2013 Report) Invasive Species: Regulation S.I. 374/2024 (Ireland)
07/10/2017	Grey Wagtail (<i>Motacilla cinerea</i>)	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
25/10/2025	Harlequin Ladybird (<i>Harmonia axyridis</i>)	Invasive Species: Regulation S.I. 477/2011 (Ireland) Invasive Species: High Risk Invasive Species (2013 Report) Invasive Species: Regulation S.I. 374/2024 (Ireland)
18/11/2023	Hedgehog (<i>Erinaceus europaeus</i>)	Protected Species: Wildlife Acts
01/03/2021	House Sparrow (<i>Passer domesticus</i>)	Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
22/06/2016	Jenkins' Spire Snail (<i>Potamopyrgus antipodarum</i>)	Invasive Species: Medium Risk Invasive Species (2013 Report)
31/12/2011	Kestrel (<i>Falco tinnunculus</i>)	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
15/08/2023	Leisler's Bat (<i>Nyctalus leisleri</i>)	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
19/06/2021	Little Egret (<i>Egretta garzetta</i>)	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species
12/04/2018	Mallard (<i>Anas platyrhynchos</i>)	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List

12/04/2018	Mistle Thrush (<i>Turdus viscivorus</i>)	Protected Species: Wildlife Acts
02/08/2019	Moss Carder Bee (<i>Bombus muscorum</i>)	Threatened Species: Near threatened
01/04/2012	New Zealand Flatworm (<i>Arthurdendyus triangulatus</i>)	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 Invasive Species: High Risk Invasive Species (2013 Report)
15/09/2015	Pygmy Shrew (<i>Sorex minutus</i>)	Protected Species: Wildlife Acts
24/01/2015	Red Squirrel (<i>Sciurus vulgaris</i>)	Protected Species: Wildlife Acts
15/07/2025	Red-tailed Bumblebee (<i>Bombus lapidarius</i>)	Threatened Species: Near threatened
11/01/2021	Robin (<i>Erithacus rubecula</i>)	Protected Species: Wildlife Acts
31/12/2011	Rock Dove (<i>Columba livia</i>)	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species
15/07/2011	Siberian Chipmunk (<i>Tamias sibiricus</i>)	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 Invasive Species: Regulation S.I. 477/2011 (Ireland) Invasive Species: High Risk Invasive Species (2013 Report) Invasive Species: Regulation S.I. 374/2024 (Ireland)
15/08/2023	Soprano Pipistrelle (<i>Pipistrellus pygmaeus</i>)	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
17/04/2023	Sparrowhawk (<i>Accipiter nisus</i>)	Protected Species: Wildlife Acts
11/01/2021	Starling (<i>Sturnus vulgaris</i>)	Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
18/08/2013	White-clawed Crayfish (<i>Austropotamobius pallipes</i>)	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex II Protected Species: EU Habitats Directive >> Annex V Protected Species: Wildlife Acts
30/10/2023	Black-headed Gull (<i>Chroicocephalus ridibundus</i>)	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
10/06/2023	Herring Gull (<i>Larus argentatus</i>)	Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
10/06/2023	House Martin (<i>Delichon urbicum</i>)	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
25/06/2022	Lesser Black-backed Gull (<i>Larus fuscus</i>)	Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
18/05/2023	Stonechat (<i>Saxicola rubicola</i>)	Protected Species: Wildlife Acts
25/06/2022	Swallow (<i>Hirundo rustica</i>)	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
19/05/2023	Swift (<i>Apus apus</i>)	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
31/12/1969	Irish Whitebeam (<i>Sorbus hibernica</i>)	Threatened Species: Vulnerable
31/12/1920	Red-tailed (Hill) Cuckoo Bee (<i>Bombus rupestris</i>)	Threatened Species: Endangered

Potential Impacts

This report has been prepared to outline the construction and operational phase measures in addition to detailing the potential impacts on sensitive receptors within the Zone of Influence (ZOI).

Construction Impacts

The overall development of the site is likely to have direct negative impacts upon the flora and fauna of the site. Direct negative effects will be manifested in terms of the removal of the site's internal habitats. The removal of these habitats will result in a loss of species of low biodiversity importance. The area is not deemed to be an important foraging area for terrestrial mammals or birds. However, it does provide some potential low-quality nesting and roosting habitat for urban bird and bat species. The site is primarily an area of built land.

Designated Conservation sites within 15km

The proposed development does not overlap with any designated conservation sites. The nearest designated conservation site is the Grand Canal pNHA (51m), and the nearest Natura 2000 site is Rye Water Valley / Carton SAC (7.3 km). There are no direct hydrological pathways to designated sites and all surface water drainage from the site will discharge into a combined sewer where it will be treated before discharging into Dublin Bay. Additionally, the proposed development site is far enough away that any noise, vibration or light spill arising from the construction of the development will not extend as far as any of these designated conservation sites. Therefore, it can be concluded that the proposed development will not give rise to any negative impacts on any designated conservation sites.

Impacts: Negligible / international / neutral impact / imperceptible / short-term

No mitigation required.

Biodiversity

Due to the built nature of the site, the construction of the proposed development will only result in the loss of low-quality artificial habitats that have potential to support a limited number of urban-adapted species of bats and birds.

Terrestrial mammalian species

An incomplete mammal burrowing attempt was noted on site. Insufficient evidence was present to confirm the species that made the attempt. However considering the nature and size of the burrowing attempt, it is unlikely to be badger (*Meles meles*) and is suspected to be fox (*Vulpes vulpes*). Nevertheless, it is possible that terrestrial mammals could establish themselves within the site of the proposed development in advance of the commencement of construction works. Therefore, there is a risk of any mammals that move into the site could be harmed as a result of the proposed development.

Impacts: Low adverse / national / negative impact / moderate effect / short-term.

Mitigation is required in the form of a pre-construction/demolition survey.

Flora

No protected flora was noted on site. Site clearance will remove the limited pioneer species on site. No invasive species subject to restrictions under the European Communities (Birds and Natural Habitats) Regulations 2011 were noted on site.

Impacts: Negligible adverse / site / negative impact / imperceptible / short-term

No mitigation required.

Bat Fauna

Two bats were noted on site during the detector surveys in 2025: one Leisler's Bat and one Common Pipistrelle. The Leisler's Bat was observed briefly foraging along the southern boundary of the site, and the Common Pipistrelle was observed briefly passing over the buildings to the south. Two bats were also noted during the 2026 surveys, both of which were Common Pipistrelles commuting along the western treeline. No bats were detected emerging from any of the onsite structures in 2025 or 2026 and no roosting behaviour was observed on site. While activity was low, it is possible that bats could establish a roost before demolition or construction activities commence.

Impacts: Low adverse / international / negative impact / not significant / short-term.

Mitigation required in the form of a pre-construction/demolition survey.

Aquatic Biodiversity

Due to the lack of any watercourse or drainage ditch within the site boundary, and the lack of a direct hydrological pathway to a watercourse, there is little potential for downstream impacts on biodiversity from any silt, wet cementitious materials, or petrochemicals. Frogs were not observed on site, and given that there is no waterbody or pond within the site boundaries, it is unlikely that there are any present.

Impacts: Negligible adverse / local / negative impact / imperceptible / short-term

No mitigation required.

Bird Fauna

The loss of limited areas of low-quality scrub and treeline will result in a minor temporary reduction in potential nesting and foraging habitat for common bird species. There is a risk of nesting birds to establish within this vegetation or within the onsite structures in advance of the construction of the proposed development. Should the works be undertaken within the nesting bird season, there is a risk of harm to breeding birds.

Impacts: Low adverse / national / negative impact / not significant / short-term.

Mitigation is required in the form of a pre-construction/demolition survey.

Operational Impacts

Designated Conservation sites within 15km

The proposed development includes a sustainable drainage strategy. All surface and foul water will discharge to a combined sewer and will be treated before discharge into Dublin Bay.

Impacts: Negligible / International / neutral Impact / imperceptible / long-term

No mitigation required.

Biodiversity

Biodiversity value of the site will improve as landscaping matures.

Terrestrial mammalian species

The provision of open green spaces as part of the development will have a slight positive impact on terrestrial mammals in the long term as it provides foraging habitat.

Impacts: Low beneficial / site / positive impact / Not significant / long-term.

No mitigation required.

Flora

No protected flora or invasive species subject to legal restrictions were noted on site. Considering the provision of green spaces with native and pollinator-friendly species, the development will have an overall positive effect on flora within the site as landscaping matures.

Impacts: Medium beneficial / site / positive impact / slight effect / long-term

No mitigation required.

Bat Fauna

The proposed development will change the local environment as new structures are to be erected and open green spaces with native planting will be provided. The buildings are comprised of solid materials consisting of a solid material on the exterior which includes sections of concrete and glass. These buildings would be clearly visible to bats and would not pose a significant collision risk. While the provision of pollinator friendly planting will increase the abundance of prey, the proposed lighting will continue to deter bats from using the site. Therefore, no significant change is foreseen in relation to bat activity within the site as a result of the development.

Impacts: Negligible adverse / international / negative impact / imperceptible / long-term.

No mitigation required.

Aquatic Biodiversity

Due to the lack of any watercourse or drainage ditch within the site boundary, the lack of a hydrological pathway to a watercourse, and the fact that a sustainable drainage system will discharge to a combined sewer, there is little potential for downstream impacts on biodiversity from silt, wet cementitious materials or petrochemicals. Standard controls will be in place.

Impacts: Negligible adverse / local / negative impact / imperceptible / long-term

No mitigation required.

Bird Fauna

The proposed development will change the local environment as new structures are to be erected. The buildings are comprised of solid materials consisting of a solid material on the exterior which includes sections of concrete and glass. These buildings would be clearly visible to bird species and would not pose a significant collision risk. Additionally, the provision of pollinator friendly native planting will increase the abundance of available food and nesting habitat.

Impacts: Medium beneficial / national / positive impact / slight effect / long term.

No mitigation required.

Mitigation Measures & Monitoring

Direct negative impacts upon the existing built ground and vegetation within the site are not regarded as being significant due to the absence of species of conservation importance and, as a result do not, require mitigation. However, mitigation measures should be put in place to ensure that bats, birds, and mammals are not impacted during construction. The following mitigation measures will be implemented.

Table 4. Sensitive Receptors/Impacts and mitigation measures.

Sensitive Receptors	Potential Impacts	Mitigation
Birds (National Protection)	• Removal nesting habitat. • Destruction and/or disturbance to nests (injury/death).	• Relevant guidelines and legislation (Section 40 of the Wildlife Acts, 1976 to 2012). Should this not be possible, a pre-works check by a qualified ecologist should be undertaken to ensure nesting birds are absent. • Should any nesting birds be found in any on site structure or tree in advance of works commencing, they will need to be left undisturbed until their breeding attempt is complete before proceeding with the works.
Bats (International Protection)	• Removal of potential roosting and foraging habitat.	A Bat Report has been prepared by Altemar Ltd. to accompany this planning application. This report outlines the following mitigation measures in relation to bats: <i>“The following lighting design measures outlined in the Bat Conservation Ireland “Bats & Lighting” Guidance Notes for: Planners, engineers, architects and developers are recommended to enhance the suitability of the site for foraging and roosting bats.</i> <i>“Planning conditions in relation to lighting are an important way for planning authorities to influence the design of light installations and potentially mitigate their impacts. Such conditions could include:</i> <i>1. Hours of illumination – provide some hours of darkness.</i> <i>2. Light levels – install lighting that meets the lowest light levels permitted under health and safety. Specification and colour of light treatments Use low-pressure sodium lights instead of high-pressure sodium lights or mercury lamps. If mercury lamps are to be used, fit them with UV filters.</i> <i>3. Column heights of lamp posts – reduce the amount of light spillage where it is not needed by restricting the height of lamp columns (e.g. <8m where possible).</i> <i>4. Type of lamps and luminaries to be installed – directional lighting means lighting is directed to where it is needed and thus prevent light spillage and light pollution.</i> <i>5. Using modern light technology that restricts the horizontal plane of the luminaries thereby directing the lighting to where required (e.g. HiLux Projectors). Use luminaries that ensure light is not directed at an angle greater than 70o from the vertical plane (i.e. using flat glass protector).</i> <i>In addition, attention could also be given to:</i> <i>• Sensor lighting to reduce energy wastage</i> <i>• Use of planting to reduce impacts of lighting</i> <i>• Use of demountable columns</i> <i>• Screening to reduce impacts of lighting</i> <i>• Assessment of lighting regime after installation</i> <i>• Greater use of the solar clock to control timing of lighting””</i>

Terrestrial Mammals	• Destruction and/or disturbance to mammal resting places (i.e. badger sett).	• A pre-construction mammal survey will be undertaken by a suitably qualified ecologist prior to commencement of works. Should evidence of a badger sett be identified, works will cease and NPWS will be consulted, and any required mitigation or licensing will be implemented in accordance with relevant legislation and guidance.
----------------------------	---	---

Cumulative Impacts

A review of the online planning system (www.myplan.ie) was carried out. It was found that the majority of approved planning permissions located within the area of the subject site relate to small-scale residential developments, such as single-storey extensions to residential units and attic conversions. The table below outlines a number of planning applications located within and in close proximity to the subject site that are of note.

Table 5. Proximate developments to the subject site

Ref. No.	Address	Proposal
SD23A/0156	New Nangor Road, Ballymanaggin, Dublin 22	Modifications to the ground floor layout and shop facade and will include for: (a) Single-storey extension to front of the existing store to provide a DRS facility to allow customers to return plastic beverage bottles to a reverse vending machine in store; (b) The removal of the existing entrance/exit pod; (c) The removal of the existing trolley bay; (d) Proposed free-standing trolley bay; (e) Proposed alteration works to store elevation; (f) Alteration works to car park area; (g) All ancillary works required to complete to the required Building Regulations standards.
SD25A/0072W	Gaelscoil na Camóige agus Gaelscoil Chluain Dolcáin, Old Nangor Road, Dublin 22	Construction of a new three-storey extension and alterations to Gaelscoil na Camóige agus Gaelscoil Chluain Dolcáin, previously granted planning permission (Ref: SD22A/0352) and currently under construction. The development will consist of providing 2no. Classroom suites of Special Educational Needs accommodation for each school. Both Special Educational Needs units will be inclusive of 2 no. class base rooms, en-suite toilets, withdrawal room associated with each class base, central activity spaces, staff toilets, pupil toilets and shower facilities, storage and office, all at ground floor level, along with the relocation of 2 no. classrooms and en-suite toilets from the ground floor of both schools ground to first and second floor of the proposed three-storey extension. The development will also consist of an extension at first floor level, along with minor alterations to Stair Core 4 to the north elevation of Gaelscoil na Camoige and an extension at second floor level along with minor alterations to Stair Core 3 to the west elevation of Gaelscoil Chluain Dolcáin. The development will also consist of the provision of new soft play external areas for both Special Educational Needs units, connections to the existing drainage layout and all ancillary site development works. The total area for the development is 630m ²
SD25A/0082W	Units A1 & A2, Oakfield Industrial Estate, Ninth Lock Road, Clondalkin, D22 WA24	Change of use from warehouse to self-storage use; • The demolition of the existing mezzanine floor (c. 53 sqm); • The construction of an additional floor measuring 797 sqm at 1st floor level, increasing the total gross floor area from 874.7 sqm to 1,618 sqm; • Associated site signage measuring at 9 sqm; • Minor internal and external alterations to facilitate the change of use from warehouse to self-storage use; • All associated site development works including cycle parking provision
SD25A/0069W	Unit B4, Oakfield Industrial Estate, Ninth Lock Road, Clondalkin, Dublin 22, D22 XD28	Development of a ground floor extension (approx. 104 sqm GFA and 4.4m in height) and all other associated site development works above and below ground.
SD20A/0242	3-4, Crag Avenue, Clondalkin Industrial Estate, Clondalkin, Dublin 12	The provision of alternate entrance and access arrangements from Crag Avenue to serve the permitted data storage centre, energy centre and substation development permitted under Reg. Ref. SD18A/0068, as amended by Reg. Ref. SD19A/0185 including the provision of ducted services connections between the permitted substation on site (permitted under Reg. Ref. SD18A/0068 as amended by Reg. Ref. SD19A/0185) and existing services to the south of the Grand Canal. The proposed ducted services connections will exit the permitted substation

		compound and run southward, crossing beneath the Grand Canal by way of a horizontal directional drill, before proceeding east and west to connect to existing services located to the south of the Grand Canal. This proposed development is also located on lands within the Grand Canal Corridor to the north of the R134 Regional Road, Clondalkin, Dublin 22.
309646, SD23A/0214	Clondalkin Enterprise Centre, Watery Lane, Clondalkin, Dublin 22	309646 Demolition of enterprise and retail buildings on site grocery store, construction of a mixed use development comprising of 1 five storey and 1 six storey apartment block comprising 86 apartments, and 4 commercial units at ground floor level in Block A. SD23A/0214 Modifications to previously approved application granted by An Board Pleanála, grant reference ABP-309646-21, at the site of Clondalkin Enterprise Centre. The proposal consists of two additional one bed apartments on the second floor of Block B east side of the site. Apartment 1. (67.5 sq.m) is located on the north side of Block B and apartment 2. (45 sq.m) is located on the south side of Block B. the gross sq.m of the proposed works is 112.5 sq.m.
SD20A/0234	Clondalkin Enterprise Centre, Watery Lane, Clondalkin, Dublin 22	Demolition of existing two storey and single storey enterprise and retail buildings on site including a car repair and maintenance garage, hair and beauty salon, grocery store, pet store and sports facility; 2 first floor level apartments; construction of a mixed use development comprising of 1 five storey and 1 six storey apartment block comprising 86 apartments (48 two bedroom and 38 1 bedroom; 4 commercial units at ground floor level in Block A (525sq.m); 96 bicycle parking spaces (88 basement level and 8 surface level); 81 car parking spaces and 5 motorcycle parking spaces at basement level; all engineering, landscaping, lighting and site works necessary to facilitate the development; each apartment will be served by communal landscaped open space at surface level (1600sq.m) and private amenity space in the form of a balcony; vehicular access will be provided to the basement car park from Watery Lane.
318442	Watery Lane, Clondalkin, Dublin 22	Proposed development of basement car parking, ground floor retail and 60 apartments across 2 blocks.
SD23A/0158	3-4, Crag Avenue, Clondalkin Industrial Estate, Clondalkin, Dublin 22	Alterations to the development permitted under Reg. Ref.: SD18A/0068, as previously amended under Reg. Ref.: SD19A/0185 and Reg. Ref.: SD20A/0242, and to the development permitted under Reg. Ref.: SD20A/0309, as previously amended under Reg. Ref.: SD22A/0093. The proposed alterations in summary comprise the provision of an altered energy centre design and all associated development, along with minor alterations to the permitted site layout, provision of a gas AGI, and all ancillary works. The development, for which a 5-year planning permission is sought, will comprise the following: Construction of a revised energy centre in the western part of the subject site, to accommodate alternate generation technology, including 10 no. gas generation turbines (all with associated flues, 8 no. c. 33 metres (m) in height and 2 no. c. 15 m in height), 2 no. steam turbines including 2 no. steam turbine generator enclosure buildings with a gross floor area (GFA) of 219 sq.m each and a height of c. 6.2 m, associated steam turbine generator distribution and control structure with a GFA of 84 sq.m and an overall height of c. 4.2 m, and 2 no. steam turbine / air cooled condenser structures with a height of c. 25.4 m. Construction of 8 no. 33/20kV transformer bays to the southeast of the energy centre, with a further 12 no. gas / steam transformers to serve the proposed turbines to the west of the energy centre. Provision of 3 no. 13.6 m high fuel storage tanks, a fuel oil enclosure building (with a GFA of 50 sq.m and an overall height of c. 3.8m), a fire pump enclosure building (with a GFA of 65 sq.m and an overall height of c. 3.2 m) along with 3 no. c. 14.1 m high sprinkler tanks, a c. 14.5 m high water tank, and a water treatment plant building (with a GFA of 218 sq.m and a maximum height of c. 17 m including rooftop plant). Provision of 6 no. black-start / emergency generators to the south

		of the energy centre with an overall height of c. 5 m; Provision of a single storey over basement level powertrunk building (with a GFA of 932 sq.m and an overall height of c. 4.1 m) to the southeast of the proposed energy centre. Provision of a 3-storey over basement medium voltage / low voltage building (with a GFA of 3,161 sq.m and an overall height of c. 16.3 m) to the southwest of the proposed energy centre. Provision of 2 no. transformers adjacent to the substation constructed under Reg. Ref.: SD18A/0068, as amended by Reg. Ref.: SD19A/0185 (located to the southwest of the proposed energy centre). Provision of a guard hut with a GFA of 21 sq.m and with a height of c. 3.2m, to the west of the medium voltage / low voltage building. Provision of a Gas AGI (above-ground installation) to the southwest of the subject site within a fenced compound, accommodating a single storey control room building with a GFA of 10 sq.m and overall height of c. 3 m, a plant kiosk with a GFA of 17 sq.m and an overall height of c. 3 m, and a boiler house with a GFA of 13 sq.m and an overall height of c. 3m. Reorientation of permitted ICT Facility Building No. 4 to accommodate the revised energy centre layout (with no other change to this permitted building). Associated and ancillary alterations to the site layout relating to landscaping, parking (including 18 no. car parking spaces, and bicycle parking within a covered bicycle shelter to serve the energy centre) and roads layouts, lighting and services, boundary treatments, drainage, landscaping, and all associated and ancillary works. An Environmental Impact Assessment Report (EIAR) will be submitted to the Planning Authority with the planning application and the EIAR will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy at the offices of the Planning Authority. An EPA-Industrial Emissions Directive (IE) licence will be applied for to facilitate the operation of the proposed development.
SD25A/0016W	Greyhound Recycling & Recovery LTD, Crag avenue, Clondalkin Industrial Estate, Dublin 22, D22 E718	The development will consist of the construction of an extension of c.650 sq.m to an existing industrial unit and all associated site development works. The proposed extension shall be used for storage of dry mixed recyclable waste prior to shipping.
SD21A/0185	Unit 19, Crag Avenue, Clondalkin Industrial Estate, Dublin 22	Full demolition of existing two storey 463sq.m building to make way for future development, subject to future separate planning application.
301692, SDZ20A/0021	Clonburris, Co. Dublin	301692 Balgaddy-Clonburris Strategic Development Zone Planning Scheme SDZ20A/0021 10 year permission for roads and drainage infrastructure works as approved under the Clonburris Strategic Development Zone Planning Scheme (2019) to form part of the public roads and drainage networks providing access and services for the future development of the southern half of the overall Strategic Development Zone (SDZ) lands; the roads infrastructure works are for the construction of c. 4.0km of a new road, known as Clonburris Southern Link Street, generally consisting of 7m wide single carriageway, plus on either side of the carriageway landscaped verges, 1.75m wide off-road cycle tracks and 2m wide footpath including public lighting, trees, 288 on-street car parking spaces (including 26 disabled parking spaces), pedestrian crossings, bus stops, a number of vehicular access spurs to facilitate future development of adjoining lands, a total of 8 new junctions (including 3 junctions to facilitate future road developments within the SDZ; 2 junctions with proposed local access roads and 3 new junctions with Hayden's Lane, Lynch's Lane and Ninth Lock Road) and alterations to 4 existing junctions on Newcastle Road (R120), Grange Castle Road (R136), Fonthill Road (R113) and also to the existing access road to Park and Ride facilities at both Kishoge Station and at Fonthill Station; alterations to the existing public roads Newcastle Road (R120), Hayden's Lane Access Road, Hayden's Lane, Lynch's Lane, Grange Castle Road (R136), Fonthill Road (R113) and Ninth Lock Road arising from new junctions with the Clonburris Southern Link Street consisting of

		reconfiguration of a c.165m long section of Newcastle Road (R120) including road widening and revisions to layout of junction with Hayden's Lane Access Road; incorporation of Hayden's Lane Access Road into proposed Clonburris Southern Link Street; provision of new junction with Hayden's Lane and Clonburris Southern Link Street; incorporation of a c. 26m long section of Lynch's Lane into proposed Southern Link Street and provision of a new junction with Clonburris Southern Link Street; reconfiguration of a c. 260m long section of Grange Castle Road, including road widening and replacement of existing roundabout with signalised junction; reconfiguration of a c. 250m long section of Fonthill Road, including road widening and replacement of existing roundabout with signalised junction; reconfiguration of a c.125m long section on Ninth Lock Road including road widening and provision of a new junction with Clonburris Southern Link Street; construction of 2 local access roads, consisting of c. 110m long road extending north from Clonburris Southern Link Street and providing access to proposed foul pumping station and generally consisting of a 6m wide single carriageway plus on either side of the carriageway 2m wide footpath including public lighting , 2 set-down parking spaces and vehicular access to proposed foul water pumping station; north/south Link Street (c. 240m in length) extending north from southern Link Street to the Kildare-Cork railway line and generally consisting of a 7m wide single carriageway plus on either side of the carriageway 1.3m wide landscaped verge, 1.75m wide off-road cycle lane, 2m wide footpath including public lighting and 2 vehicular access spurs to facilitate future development of adjoining lands; the drainage infrastructure works include 8 attenuation systems (with outfalls to Griffeen River, Kilmahuddrick Stream and existing storm sewers) including 4 ponds , 2 modular underground storage systems and 2 detention basins combined with modular underground storage systems all adjacent to proposed Clonburris Southern Link Street; surface water drainage culverts to existing watercourses; flood water compensation area adjacent to Griffeen River; surface water drainage and water supply trunk infrastructure within proposed road corridors; wastewater infrastructure including a foul pumping station and pipe network within proposed road corridors to facilitate drainage connections to future wastewater drainage infrastructure within the adjoining SDZ lands (including future Irish Water pumping station) and to connect to the existing sewer network in Cappaghmore housing estate; ducting for public electrical services and utilities and the diversion of existing utilities is provided for within the proposed road corridor; Permission is also sought for all ancillary site and development and landscape works associated with the development including hard and soft landscaping, boundary treatments, road markings and signage, enabling works and temporary construction works (including site accommodation, site compounds and temporary boundary fencing); the application is made in accordance with Clonburris Strategic Development Zone Planning Scheme 2019 and relates to a proposed development within the Clonburris Strategic Development Zone Planning Scheme Area as defined by Statutory Instrument No. 604 of 2015; an Environmental Impact Assessment Report accompanies the application.
SD23A/0156	New Nangor Road, Ballymanaggin, Dublin 22	Modifications to the ground floor layout and shop facade and will include for: (a) Single-storey extension to front of the existing store to provide a DRS facility to allow customers to return plastic beverage bottles to a reverse vending machine in store; (b) The removal of the existing entrance/exit pod; (c) The removal of the existing trolley bay; (d) Proposed free-standing trolley bay; (e) Proposed alteration works to store elevation; (f) Alteration works to car park area; (g) All ancillary works required to complete to the required Building Regulations standards.

Given that there are few developments of significance proximate to the proposed development site, it can be concluded that the proposed development at the Elmfield site, in combination with surrounding granted developments, outlined above, will have no impact on the designated European sites or any species or habitats of conservation interest.

Residual Impacts and Conclusion

The construction and operational mitigation proposed for the development satisfactorily addresses the mitigation of potential impacts on the sensitive receptors through the application of standard construction and operational phase controls. The overall impact on the ecology of the proposed development will result in a long term low beneficial slight impact on the ecology of the area and locality overall. This is primarily a result of the creation of additional biodiversity features including new greenspaces with pollinator friendly native planting.

References

1. **Collins, J. (ed.) (2016).** *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1
2. **Marnell, F., Kelleher, C. & Mullen, E. (2022).** *Bat mitigation guidelines for Ireland V2. Irish Wildlife Manuals, No. 134.* National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.
3. **Chartered Institute of Ecology and Environmental Management (2021).** *Bat Mitigation Guidelines: A guide to impact assessment, mitigation and compensation for developments affecting bats. Beta version.* Chartered Institute of Ecology and Environmental Management, Winchester.
4. **Chartered Institute of Ecology and Environmental Management (2018).** *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal, and Marine.* Chartered Institute of Ecology and Environmental Management, Winchester.
5. Institution of Lighting Professionals (2018). *Bats and Artificial Lighting in the UK – Bats and the Built Environment Series: Guidance Note 08/18.* Institution of Lighting Professionals and the Bat Conservation Trust.
6. **Department of Housing, Planning and Local Government (December, 2018).** *Urban Development and Building Heights Guidelines for Planning Authorities.*
7. **Bat Conservation Trust (May 2022).** *Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys.* The Bat Conservation Trust, London.
8. **Bat Conservation Ireland 2004** on-going, *National Bat Record Database.* Virginia, Co. Cavan
9. **Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1982**
10. **Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) 1979**
11. **EC Directive on The Conservation of Natural habitats and of Wild Fauna and Flora (Habitats Directive) 1992**
12. **Marnell, F., Kingston, N. and Looney, D. 2009** *Ireland Red List No. 3: Terrestrial Mammals.* National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin
13. **Marnell, F., Kelleher, C., & Mullen, E. (2022),** BAT MITIGATION GUIDELINES FOR IRELAND – V2 <https://www.npws.ie/sites/default/files/publications/pdf/IWM134.pdf>
14. **Racey, P.A. and Swift, S.M. 1986** The residual effects of remedial timber treatments on bats. *Biological Conservation* **35**: 205 – 214
15. **Smal, C.M. 1995** *The Badger & Habitat Survey of Ireland.* The Stationery Office, Dublin
16. **Wildlife Act 1976 and Wildlife [Amendment] Act 2000.** Government of Ireland.
17. NPWS (2021) Conservation Objectives: Rye Water Valley / Caton SAC 001398. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
18. NPWS (2013) Conservation Objectives: South Dublin Bay SAC 000210. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
19. NPWS (2013) Conservation Objectives: North Dublin Bay SAC 000206. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
20. NPWS (2021) Conservation Objectives: Glenasmole Valley SAC 001209. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
21. NPWS (2017) Conservation Objectives: Wicklow Mountains SAC 002122. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
22. NPWS (2015) Conservation Objectives: North Bull Island SPA 004006. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
23. NPWS (2021) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 0004024. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
24. NPWS (2021) Conservation Objectives: Wicklow Mountains SPA 004040. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Bat fauna impact assessment for a proposed large scale development on lands at Elmfield, Clondalkin, Dublin 22.



21st August 2026

Prepared by: Bryan Deegan (MCIEEM) of Altemar Ltd.

On behalf of: Thornmeadow Developments

Altemar Ltd., 50 Templecarrig Upper, Delgany, Co. Wicklow. 00-353-1-2010713. info@altemar.ie

Directors: Bryan Deegan and Sara Corcoran

Company No.427560 VAT No. 9649832U

www.altemar.ie

Document Control Sheet			
Client	Thornmeadow Developments Limited		
Project	Bat fauna impact assessment for a proposed large scale development on lands at Elmfield, Clondalkin, Dublin 22.		
Report	Bat Fauna Assessment		
Date	21 st August 2026		
Version	Author	Reviewed	Date
Planning	Kalvin Townsend-Smyth	Bryan Deegan	21 st August 2026

SUMMARY

Structure:	The site extends to approximately 2.25 hectares. There is currently a mix of buildings and uses on the site including the Securispeed courier service warehouse, the VSDirect marketing company, and the JM Work Wear retail building, all surrounded by car parking spaces as well as some recolonising bare ground and treelines.
Location:	Clondalkin, Dublin 22.
Bat species present:	None Roosting. No activity noted within the structures on site. One Leisler's bat and one Common Pipistrelle were observed briefly passing along the southern boundary of the site.
Proposed work:	Proposed large scale development on lands at Elmfield, Clondalkin, Dublin 22.
Impact on bats:	Low beneficial, slight effect.
Survey by:	Kalvin Townsend-Smyth
Survey dates:	2 nd & 9 th September 2025, 27 th April & 5 th May 2026

Competency of Assessor

This report has been prepared by Bryan Deegan MSc, BSc (MCIEEM). Bryan has over 31 years of experience providing ecological consultancy services in Ireland. He has extensive experience in carrying out a wide range of bat surveys including dusk emergence, dawn re-entry and static detector surveys. He also has extensive experience reducing the potential impact of projects that involve external lighting on Bats. Bryan trained with Conor Kelleher author of the Bat Mitigation Guidelines for Ireland (Kelleher and Marnell (2007)) The desk and field surveys were carried out having regard to the guidance: Bat Surveys for Professional Ecologists – Good Practice Guidelines 3rd Edition (Collins, J. (Ed.) 2016) and Kelleher and Marnell (2007), Bat Mitigation Guidelines for Ireland.

The survey was conducted by Calvin Townsend-Smyth (BSc). Calvin is an experienced ecologist with over 6 years' in ecological consultancy, including extensive experience in conducting bat roost suitability inspections as well as detector surveys including activity and emergence/re-entry surveys.

Legislative Context

Wildlife (Amendment) Act 2000.

Bats in Ireland are protected by the Wildlife (Amendment) Act 2000. Based on this legislation it is an offence to wilfully interfere with or destroy the breeding or resting place of any species of bat. Under this legislation it is an offence to *“Intentionally kill, injure or take a bat, possess or control any live or dead specimen or anything derived from a bat, wilfully interfere with any structure or place used for breeding or resting by a bat, wilfully interfere with a bat while it is occupying a structure or place which it uses for that purpose. “*

Habitats Directive- Council Directive 92/43/EEC 1992 on the conservation of natural habitats and of wild fauna and flora transposed into Irish Law i.e. European Communities (Natural Habitats) Regulations, 1997 (SI No. 64/1997).

Annex II of the Council Directive 92/43/EEC 1992 on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) lists animal and plant species of Community interest, the conservation of which requires the designation of Special Areas of Conservation (SACs); Annex IV lists animal and plant species of Community interest in need of strict protection. All bat species in Ireland are listed on Annex IV of the Directive, while the Lesser Horseshoe Bat (*Rhinolophus hipposideros*) is protected under Annex II which related to the designation of Special Areas of Conservation for a species.

Under section 23 of SI No. 64/1997 all bats are listed under the first schedule of Section 23 which makes it an offence to:

- deliberately capture a bat
- deliberately disturb a bat,
- damage or destroy a breeding site or resting place of a bat.

Project Description

Thornmeadow Developments Limited intend to apply for permission for a Large-Scale Residential Development on lands at the Securispod Logistics site, Elmfield, Ninth Lock Road, Clondalkin, Dublin 22.

The proposed development will consist of the demolition of the existing warehouses and structures on site and the construction of a mixed-use residential-led development comprising a total of 408 no. residential units (comprising 24 no. studio units, 230 no. 1 bedroom units, 149 no. 2 bedroom/3 persons units and 5 no. 3 bedroom/5 person units) and 1 no. childcare facility. The residential units will comprise a mixture of apartments and own-door houses and range in height from 2-9 storeys. The proposed development will also comprise all associated car parking (203 no. spaces), cycle parking, refuse and storage areas, plant, landscaping, open space, boundary treatment, public lighting, ESB substations, and site and infrastructural works necessary to facilitate the proposed development. There are existing industrial warehouse's & concrete hard standing on the site, which will be demolished to facilitate the new development.

The proposed site outline, location, site plan, and elevations are demonstrated in Figures 1 – 7.

Landscape

This application is accompanied by a Landscape Design Report prepared by Austen Landscape Architects. The report states the following in relation to the landscape plan:

“2.2 –Biodiversity Net Gain Statement

This landscape design has been developed to achieve measurable Biodiversity Net Gain by ensuring that the development leaves biodiversity in a better state than it was before. Impacts on existing ecological features have been carefully considered, with a focus on protecting valuable assets, enhancing existing habitats, and introducing new ecological features to increase overall biodiversity value.

	Existing Site	Proposed Design
Trees	None of crucial significance or retention	395no.
Native and biodiverse Hedgerow	None of crucial significance or retention	1756 lin.m
Biodiversity and Pollinator Friendly Planting	30m2	8978 m2

The design incorporates native and pollinator-friendly planting, the creation of diverse habitats, and green infrastructure that strengthens ecological connectivity within the site and its surroundings. The inclusion of green roof wildflower planting and perennial planting mixes further contributes to the ecological value of the scheme, enhancing pollinator resources and increasing the overall green factor across the development.

See Figure 8. for the Landscape Plan.



0 100 200 300 400 500 m

Project: Elmfield
 Location: Ninth Lock Road, Co. Dublin
 Date: 20th August 2026
 Drawn By: Hugh Butler (Altamar)

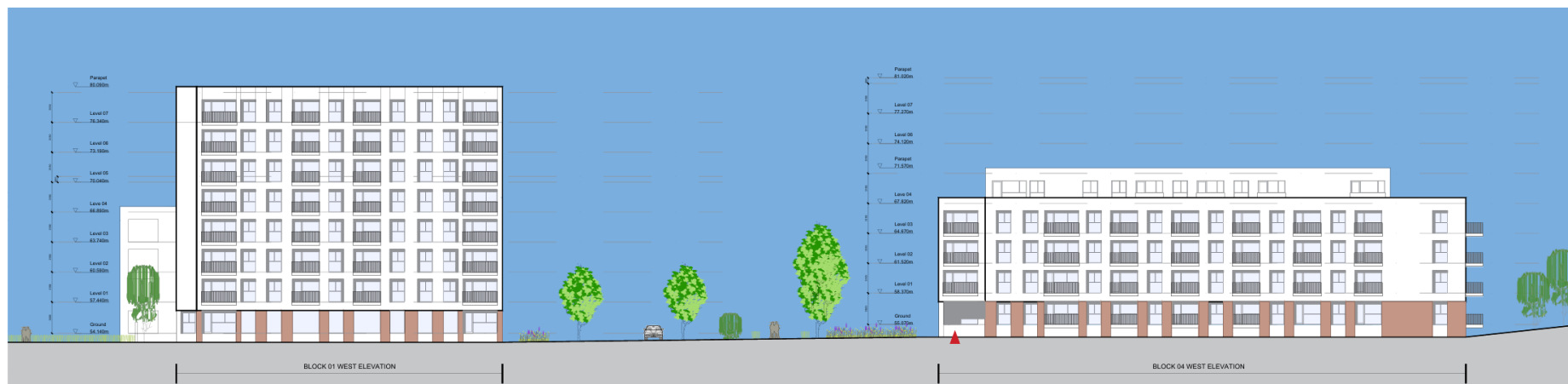
ALTEMAR
 Marine & Environmental Consultancy



Figure 1. Proposed site location.



Figure 3. Proposed site layout (ground level)



ELEVATION 1-1



ELEVATION 2-2

PROPOSED ELEVATIONS SHEET 01



Revision Description

Date

Rev. No.

Issued by

o'mahony pike

architecture | urban design
email: info@omahonypike.com
tel: +353 1 292 7400
fax: +353 1 292 0822
www.omahonypike.com

Project: Elmfield
Location: Ninth Lock Road, Clondalkin
Client: Thornmeadow Developments Limited

Drawing Title: Proposed Elevations Sheet 01
Drawing No.: 25018-OMP-ZZ-XX-DR-A-2000

Project Code: PRJ

Project Lead: MH

Drawn By: AD

Job No.: 25018

Purpose: S2

Scale @ A1: 1:200

Date Printed: 01.12.2025

Current Rev: A2

Status: S1

Any reference to fire safety design or performance is presented for coordination purposes only. Refer only to the granted Fire Safety Certificate, and fire consultant's information for fire safety design, specification and performance.
Figured dimensions only to be used. This drawing is copyright of O'Mahony Pike Architects Ltd. All information is shared as per approved use in accordance with ISO19650-2:2018, Table 5; Standard Codes for Suitability of Models and Documents and the BEP. If the 'Status' field is empty, this information has been shared at S0 - WIP.

Figure 4. Proposed site elevations (sheet 1 of 4)

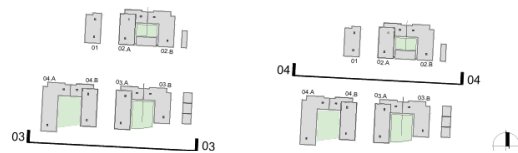


ELEVATION 3 - 3



ELEVATION 4 - 4

PROPOSED ELEVATIONS SHEET 02



Revision Description	Date	Rev. No.	Issued by			Project Code: PRJ	Scale @ A1: 1:200
						Project Lead: MH	Date Printed: 01.12.2025
			architecture urban design email: info@omahonypike.com tel: +353 1 292 7600 fax: +353 1 292 0822 www.omahonypike.com	Dublin The Chapel Mount St. Anne's Milltown, Dublin 6 Co. DUBLIN D06 W823 Ireland	Cork One South Mall Cork City Co. Cork T12 CCN3 Ireland	Drawn By: AD	Current Rev.: A2
						Job No.: 25018	Status: S1
						Purpose: S2	
			Project: Elmfield				
			Location: Ninth Lock Road, Clondalkin				
			Client: Thornmeadow Developments Limited				
Any reference to fire safety design or performance is presented for coordination purposes only. Refer only to the granted Fire Safety Certificate, and fire consultant's information for fire safety design, specification and performance.							
Figured dimensions only to be used. This drawing is copyright of O'Mahony Pike Architects Ltd. All information is shared as per approved use in accordance with ISO19650-2:2018, Table 5; Standard Codes for Suitability of Models and Documents and the BEP. If the 'Status' field is empty, this information has been shared at S0 - WIP.							

Figure 5. Proposed site elevations (sheet 2 of 4)

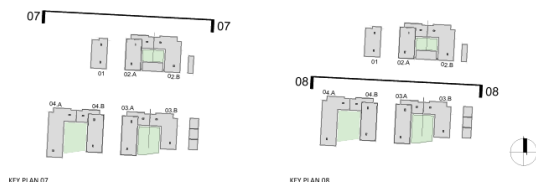


ELEVATION 7 - 7



ELEVATION 8 - 8

PROPOSED ELEVATIONS SHEET 04



Revision Description	Date	Rev. No.	Issued by		Project Code: PRJ	Scale @ A1: 1:200
					Project Lead: MH	Date Printed: 01.12.2025
					Drawn By: AD	Current Rev: A2
					Job No.: 25018	Status: S1
					Purpose: S2	
				Project: Elmfield		
				Location: Ninth Lock Road, Clondalkin		
				Client: Thornmeadow Developments Limited		
				Drawing Title: Proposed Elevations Sheet 03		
				Drawing No.: 25018-OMP-ZZ-XX-DR-A-2003		

Any reference to fire safety design or performance is presented for coordination purposes only. Refer only to the granted Fire Safety Certificate, and fire consultant's information for fire safety design, specification and performance.

Figured dimensions only to be used. This drawing is copyright of O'Mahony Pike Architects Ltd. All information is shared as per approved use in accordance with ISO19650-2:2018, Table 5; Standard Codes for Suitability of Models and Documents and the BEP. If the "Status" field is empty, this information has been shared as "As-Is".

Any reference to fire safety design or performance is presented for coordination purposes only. Refer only to the granted Fire Safety Certificate, and fire consultant's information for fire safety design, specification and performance.

Figured dimensions only to be used. This drawing is copyright of O'Mahony Pike Architects Ltd. All information is shared as per approved use in accordance with ISO19650-2:2018, Table 5; Standard Codes for Suitability of Models and Documents and the BEP. If the 'Status' field is empty, this information has been shared at SD - WIP.

Figure 7. Proposed site elevations (sheet 4 of 4)



Bat survey

This report presents the results of site visits carried out by Calvin Townsend-Smyth on 2nd and 9th September 2025, and 27th April & 5th May 2026. All of the accessible onsite structures were inspected for signs of bat use or presence, a bat detector survey was carried out and an ecological assessment of the site was made.

Survey methodology

A walkover assessment and a survey of bat fauna was carried by means of a thorough inspection of the structures using a powerful torch. The presence of bats is assessed with reference to their signs; principally staining, droppings, feeding signs such as invertebrate prey remains and the presence of bat fly *Nycteribiidae* pupae, although direct observations are also occasionally made. Bat detector surveys were carried out at dusk using a *Batbox Duet* detector to determine bat activity. Bats were identified by their ultrasonic calls coupled with behavioural and flight observations.

Survey constraints

The bat survey was undertaken during the active bat season in early September. Weather conditions were good with mild temperatures of 10-16°C after sunset. Winds were light and there was no rainfall. The survey was undertaken within the optimal survey period from April to September, where weather conditions were acceptable to carry out the survey¹.

Description of the Site from an Ecological Perspective

The site extends to approximately 2.25 hectares. There is currently a mix of uses on the site including the Securispd courier service warehouse, the VSDirect marketing company, and the JM Work Wear retail building, all surrounded by car parking spaces as well as some grasslands and treelines. It is bound to the north by a Lidl supermarket and mostly undeveloped open space lands of the Church of Jesus Christ Latter day Saints, to the west by a mixed-use development and further Ninth Lock Road, to the south by the Ardale Property Group industrial lands, and to the east by the back gardens of the Riversdale Road residential estate.

The buildings on site are considered to be largely unsuitable for roosting bats as they are either constructed of concrete brickwork and corrugated metal materials that do not offer sufficient grip or insulation for bats, or are well sealed and regularly maintained in the case of the red brick building in the south-western corner of the site (see Plates 1-10). No features that would allow bats to gain entry to any of these buildings were identified during the building inspections. The site is well lit at night with the darkest area being an area of recolonising bare ground adjacent to a treeline. While the trees themselves are not suitable for roosting bats due to the lack of any external potential roosting features, they do provide some low-quality habitat connectivity for foraging and commuting bats.

Native biodiversity on site was poor with opportunist species such as buddleia (*Buddleja davidii*) and bramble (*Rubus fruticosus*) present throughout the built areas of the site, and recolonising species such as thistles (*Cirsium spp.*) on bare ground adjacent to a treelines composed of cypress trees (*Cupressus sp.*). No flora or fauna of conservation importance were noted on site. No records of threatened or legally protected plant species are known to occur within the site (NBDC and NPWS data). Records of Common frog (*Rana temporaria*) and Badger (*Meles meles*) were found in the vicinity of (but not within) the proposed site. There are no surface water bodies on site. No evidence of badger, otter, or any other terrestrial mammal activity were noted on site.

¹ https://www.heritagecouncil.ie/.content/files/bat_survey_guidelines_2008_11mb.pdf
<https://www.npws.ie/sites/default/files/publications/pdf/IWM25.pdf>



Plate 1. Southern face of Securispeed warehouse.



Plate 2. Western face of Securispeed warehouse.



Plate 3. Area of recolonising bare ground.



Plate 4. Southwestern treeline.



Plate 5. Southeastern loading port at VSDirect warehouse.



Plate 5. Eastern face of VSDirect warehouse.



Plate 7. Northern face of VSDirect warehouse.



Plate 8. Front façade of red brick retail building.



Plate 9. Western loading port at VSDirect warehouse.

Bat assessment findings

Review of local bat records

The review of existing bat records (sourced from *Bat Conservation Ireland's* National Bat Records Database) within a 2km² grid (Reference grids O03Q) encompassing the study area reveals that four of the nine known Irish species have been observed locally (Table 1). The National Biodiversity Data Centre's online viewer was consulted in order to determine whether there have been recorded bat sightings in the wider area. This is visually represented in Figures 7-10. The following species were noted in the wider area: Brown Long-eared Bat (*Plecotus auritus*), Daubenton's Bat (*Myotis daubentonii*), Nathusius's Pipistrelle (*Pipistrellus nathusii*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Common Pipistrelle (*Pipistrellus pipistrellus sensu lato*), and Lesser Noctule (*Nyctalus leisleri*).

Table 1: Status of bat species within a 2km² grid encompassing the subject site (Reference no. O03Q)

Species name	Record count	Date of last record	Note
Common Pipistrelle (<i>Pipistrellus pipistrellus sensu stricto</i>)	5	15/08/2023	National Bat Database of Ireland
Daubenton's Bat (<i>Myotis daubentonii</i>)	1	28/08/2008	National Bat Database of Ireland
Leisler's Bat (<i>Nyctalus leisleri</i>)	5	15/08/2023	National Bat Database of Ireland
Soprano Pipistrelle (<i>Pipistrellus pygmaeus</i>)	6	15/08/2023	National Bat Database of Ireland

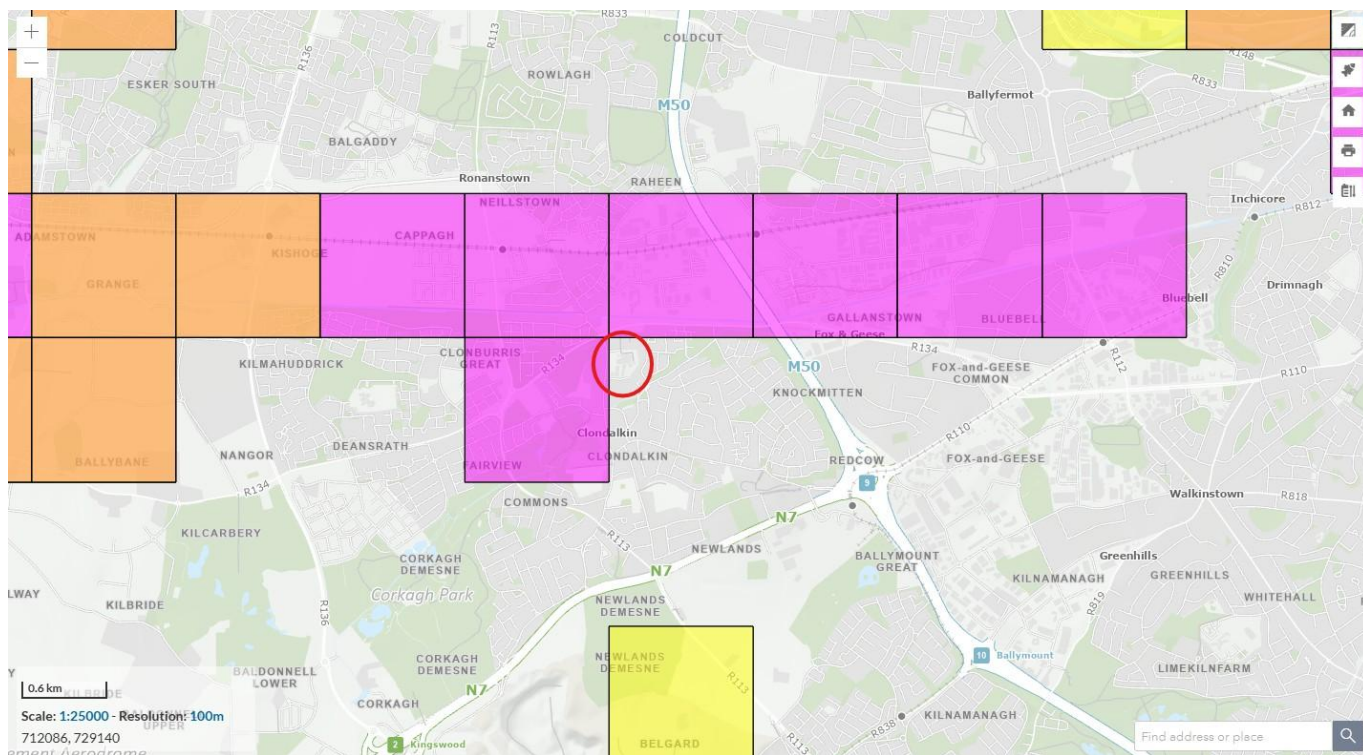


Figure 7. Brown Long-eared Bat (*Plecotus auritus*) (yellow), Daubenton's Bat (*Myotis daubentonii*) (purple), and both Brown Long-eared Bat and Daubenton's Bat (orange) (Source NBDC) (Site – red circle).

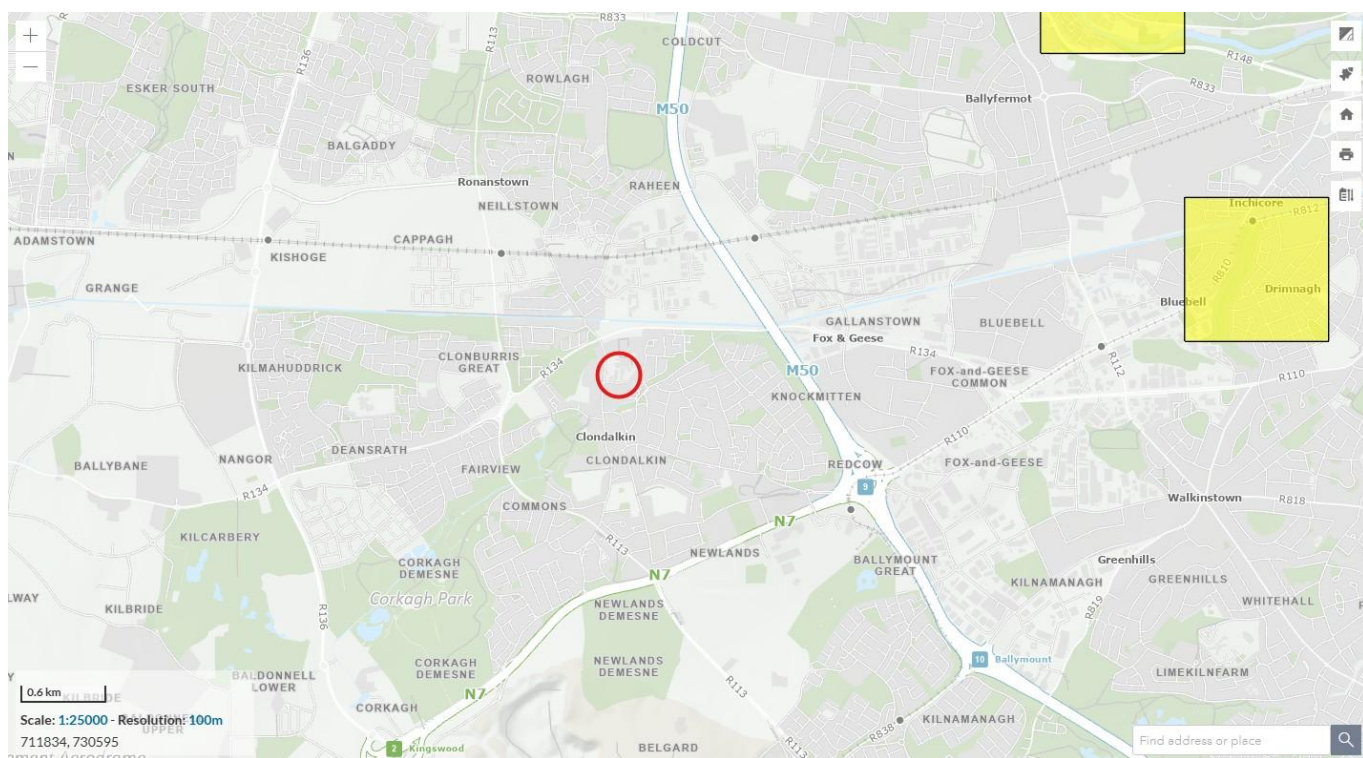
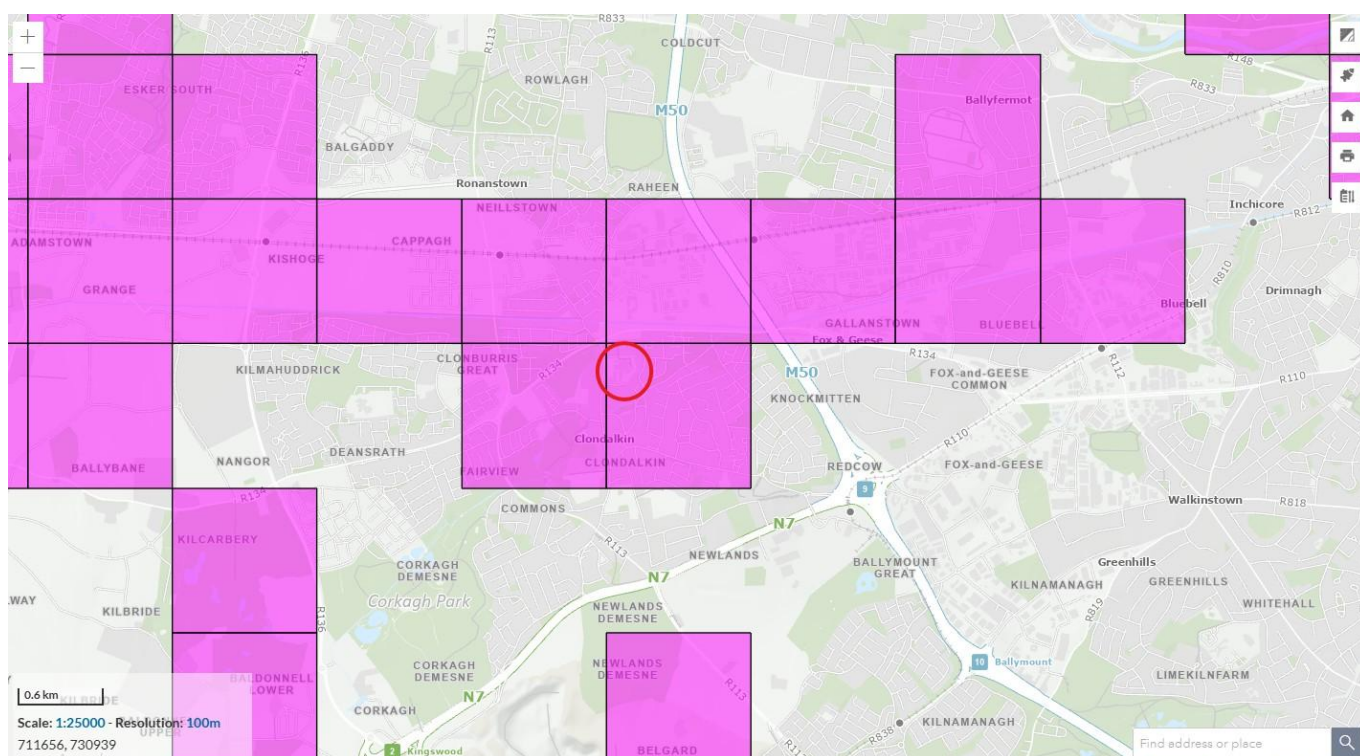
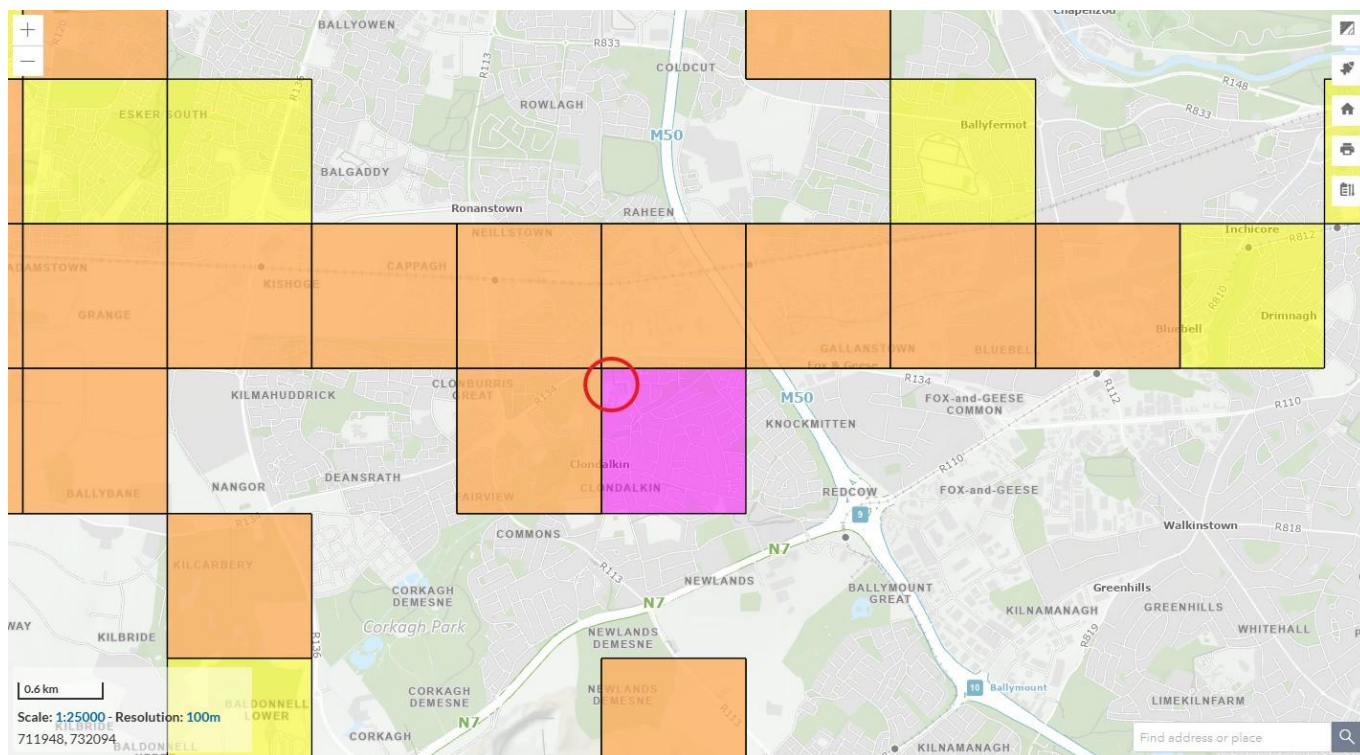


Figure 8. Nathusius's Pipistrelle (*Pipistrellus nathusii*) (yellow) (Source NBDC) (Site – red circle).



Detector survey

Two bats were noted on site during the detector surveys in 2025: one Leisler's Bat and one Common Pipistrelle. The Leisler's Bat was observed briefly foraging along the southern boundary of the site, and the Common Pipistrelle was observed briefly passing over the buildings to the south. Two bats were also noted during the 2026 surveys, both of which were Common Pipistrelles commuting along the eastern treeline. No foraging activity was observed in 2026. No bats were detected emerging from any of the onsite structures in 2025 or 2026. The flightlines of the observed bats are mapped and displayed below in Figure 11.

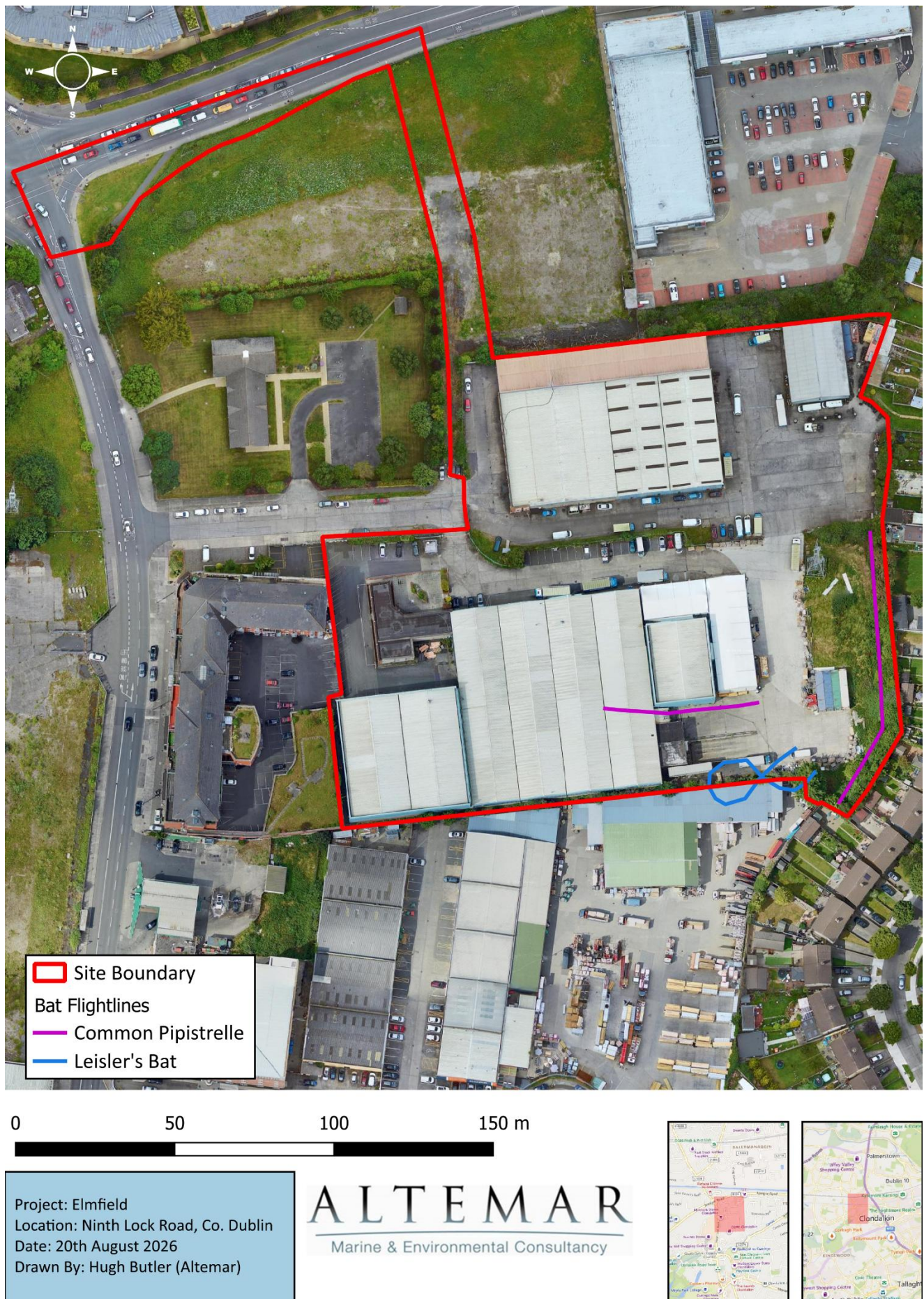


Figure 11. Location of bat activity noted on site during the bat detector surveys.

Potential Impacts of Proposed Redevelopment on Bats

The buildings on site are considered to be unsuitable for roosting bats as they are generally well sealed and recently maintained or are composed of unsuitable materials (i.e. corrugated metal). No roosts or bats emerging from the onsite structures were observed. Therefore, the proposed development does not have any potential to impact on bat roosts within the site of the proposed development.

The potential removal of the existing treeline will have a slight negative impact on commuting and foraging bats. However, the proposed native planting as outlined in the landscape masterplan will have an overall positive impact on commuting and foraging bats in the long-term as the established vegetation matures and increases prey availability.

The future lighting plan will also determine whether the development will better or worsen the on-site conditions for commuting and foraging bats. Bat-friendly lighting recommendations are outlined in the mitigation measures section below to guide the development of the lighting plan in order to improve on site conditions for bats post-development.

Mitigation measures

The following lighting design measures outlined in the Bat Conservation Ireland “Bats & Lighting” Guidance Notes for: Planners, engineers, architects and developers are recommended to enhance the suitability of the site for foraging and roosting bats.

“Planning conditions in relation to lighting are an important way for planning authorities to influence the design of light installations and potentially mitigate their impacts. Such conditions could include:

6. Hours of illumination – provide some hours of darkness.
7. Light levels – install lighting that meets the lowest light levels permitted under health and safety. Specification and colour of light treatments Use low-pressure sodium lights instead of high-pressure sodium lights or mercury lamps. If mercury lamps are to be used, fit them with UV filters.
8. Column heights of lamp posts – reduce the amount of light spillage where it is not needed by restricting the height of lamp columns (e.g. <8m where possible).
9. Type of lamps and luminaries to be installed – directional lighting means lighting is directed to where it is needed and thus prevent light spillage and light pollution.
10. Using modern light technology that restricts the horizontal plane of the luminaries thereby directing the lighting to where required (e.g. HiLux Projectors). Use luminaries that ensure light is not directed at an angle greater than 70° from the vertical plane (i.e. using flat glass protector).

In addition, attention could also be given to:

- Sensor lighting to reduce energy wastage
- Use of planting to reduce impacts of lighting
- Use of demountable columns
- Screening to reduce impacts of lighting
- Assessment of lighting regime after installation
- Greater use of the solar clock to control timing of lighting”

Predicted and residual impact of the proposal

There is no evidence of a current or past bat roost or activity within the structures on site. Therefore, no negative impacts on roosting bats are expected to result from the proposed development. Bat activity may be reduced due to potential increased illumination of the site, and the loss of an existing treeline. However, the Bat Conservation Ireland “Bats & Lighting” Guidance Notes for: Planners, engineers, architects and developers” provides a practical approach to limiting the impact of lighting on foraging activity, and the proposed native planting in the landscape masterplan will improve the quality of on site foraging habitat in the long-term.

Impacts: Low beneficial / international / positive impact / slight effect / long-term.

References

- Collins, J. (ed.) (2016).** *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1
- Marnell, F., Kelleher, C. & Mullen, E. (2022).** *Bat mitigation guidelines for Ireland V2. Irish Wildlife Manuals, No. 134.* National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.
- Chartered Institute of Ecology and Environmental Management (2021).** *Bat Mitigation Guidelines: A guide to impact assessment, mitigation and compensation for developments affecting bats. Beta version.* Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018).** *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal, and Marine.* Chartered Institute of Ecology and Environmental Management, Winchester.
- Institution of Lighting Professionals (2018). *Bats and Artificial Lighting in the UK – Bats and the Built Environment Series: Guidance Note 08/18.* Institution of Lighting Professionals and the Bat Conservation Trust.
- Department of Housing, Planning and Local Government (December, 2018).** *Urban Development and Building Heights Guidelines for Planning Authorities.*
- Bat Conservation Trust (May 2022).** *Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys.* The Bat Conservation Trust, London.
- Bat Conservation Ireland 2004** on-going, *National Bat Record Database.* Virginia, Co. Cavan
- Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1982**
- Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) 1979**
- EC Directive on The Conservation of Natural habitats and of Wild Fauna and Flora (Habitats Directive) 1992**
- Marnell, F., Kingston, N. and Looney, D. 2009** *Ireland Red List No. 3: Terrestrial Mammals.* National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin
- Marnell, F., Kelleher, C., & Mullen, E. (2022),** BAT MITIGATION GUIDELINES FOR IRELAND – V2 <https://www.npws.ie/sites/default/files/publications/pdf/IWM134.pdf>
- Racey, P.A. and Swift, S.M. 1986** The residual effects of remedial timber treatments on bats. *Biological Conservation* 35: 205 – 214
- Wildlife Act 1976 and Wildlife [Amendment] Act 2000.** Government of Ireland.