

EIA Screening Report

Strategic Housing Development Application at Redforge Road, Blackpool, Cork.

September 2021



Prepared on behalf of
Bellmount Developments Limited

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1 Introduction

McCutcheon Halley Planning has prepared this EIA Screening Report on behalf of Bellmount Developments Limited to accompany a planning application for a Strategic Housing Development application at Millfield Service Station, Redforge Road, Blackpool, Cork.

The proposed development will comprise an application for a for a 5-year permission for the following;

- J the demolition of existing structures on site including a single storey building, pump island canopy, 4 no. fuel pumps and the decommissioning/removal of 4 no. underground fuel tanks;
- J the construction of 114 no. Build to Rent apartments (comprising a mix of 1 and 2 bed apartments) in 2 no. blocks, ranging in height from 4 to 9 storeys;
- J 1 no. 313 sqm retail unit;
- J residential amenity facilities including a reception, residents gym, lounge area and shared workspace;
- J the provision of landscaping and amenity areas including an enclosed courtyard and 1 no. rooftop garden;
- J the provision of public realm improvements on Redforge Road including widened footpaths and pavement improvements, pedestrian crossing, tree planting, raised tables/planters and seating areas and;
- J all associated ancillary development including pedestrian/cyclist facilities, lighting, drainage, boundary treatments, bin and bicycle storage, ESB Sub-station and plant.

A detailed description of the proposed development is provided in Section 3.1.

This Screening for EIA Report has been prepared by qualified and accredited experts as follows;

Emer Sexton holds a Masters in Planning and Sustainable Development from University College Cork and a MSc in Ecology from the University of Wales. Emer has extensive experience of preparing EIA Screening and Scoping reports and works as part of multi-disciplinary teams providing input to Environmental Impact Assessment Reports.

The criteria for determining whether development listed in Part 2 of Schedule 5 should be subject to an EIA are set out under Schedule 7. The information to be provided by the applicant or developer for the purposes of screening sub-threshold development for environmental impact assessment is set out under Schedule 7A of the Planning and Development Regulations, 2001, as amended by the 2018 Regulations. Paragraph 4 of Schedule 7A requires that: *'The compilation of the information at paragraphs 1 to 3 shall take into account, where relevant, the criteria set out in Schedule 7.'*

In this report, the information has been set out under the more detailed headings provided for under Schedule 7. In effect, this ensures that all of the information required under Schedule 7A has been furnished. It also presents the information in a manner that facilitates the competent authority in its screening assessment.

1.1 Methodology

This Screening Report has regard to the following guidance;

- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (Department of Housing, Planning, Community and Local Government, 2018);
- Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR) (EPA 2017);
- Environmental Impact Assessment of Projects Guidance on Screening (EU, 2017);
- Interpretation of definitions of project categories of Annex I and II of the EIA Directive (EU, 2015).

The pre-planning discussions with Cork City Council's Planning, Architectural and Engineering Departments, as well as feedback from the pre-application consultation meetings with An Bord Pleanála and their subsequent Notice of Pre-Application Consultation Opinion have informed this EIA Screening (ABP Reference 308537-20). Key design aspects have been shaped directly by feedback and comments received from both parties, with the design and in particular the layout having been amended and altered throughout the design process.

2 Legislative Context

Environmental Impact Assessment (EIA) requirements derive from EU Directives. The EIA Directive, Council Directive 2014/52/EU, amended Directive 2011/92/EU. The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 came into effect in September 2018, transposing Directive 2014/52/EU and giving further effect to Directive 2011/92/EU. This Screening Report is drafted based on the requirements of EU Directive 2014/52/EU. The objective of the Directive is *"to ensure a high level of protection of the environment and human health, through the establishment of minimum requirements for environmental impact assessment (EIA), prior to development consent being given, of public and private developments that are likely to have significant effects on the environment"*¹.

EIA provisions in relation to planning consents are currently contained in the Planning and Development Act, 2000, as amended, (Part X) and in Part 10 of the Planning and Development Regulations, 2001, as amended.

Projects requiring EIA are listed in Schedule 5 (Parts 1 and 2) of the Planning and Development Regulations 2001. In cases where a project is mentioned in Part 2 but is classed as "sub-threshold development", planning authorities are required under article 103 of the 2001 Regulations to request an EIS where it considers that the proposed development is likely to have significant environmental effects.

2.1 Requirement for EIA

The subject development does not fall within development classes set out in Part 1 of Schedule 5. The following development classes included in Part 2 of Schedule 5 are relevant to the development proposal;

10. Infrastructure Projects;

- b) (i) Construction of more than 500 dwellings
- (iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere. (In this paragraph, "business district" means a district within a city or town in which the predominant land use is retail or commercial use).

The proposed development does not trigger a requirement for a mandatory EIA for the following reasons;

-) 10 a (iii) The project comprises construction of 114 "build to rent" apartments;
-) (iv) The footprint of the site is circa. 0.75 ha, which is below the threshold of 2 ha.

2.2 Screening for Sub-threshold EIA

In cases where a project is mentioned in Part 2 but is classed as "sub-threshold development", it is necessary for a planning authority to undertake a case-by-case examination about whether the development is likely to be associated with significant effects on the environment. In other words, screening for whether EIA is needed, must be undertaken.

¹ Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment https://www.housing.gov.ie/sites/default/files/publications/files/guidelines_for_planning_authorities_and_an_bord_pleanala_on_carrying_out_eia_-_august_2018.pdf

While it is clearly demonstrated above that the subject proposal does not trigger mandatory EIA, it is considered prudent to establish that the proposed development would not be likely to have significant effects on the environment and by extension would not require a sub-threshold EIA.

Schedule 7 of the Planning and Development Regulations 2001, sets out the criteria for determining whether a development would, or would not be likely to have significant effects on the environment, and this was transposed directly from Annex III of the 2011 Directive. These criteria are defined as follows:

1. Characteristics of the proposed development;
2. Location of the proposed development, in terms of the environmental sensitivity of geographical areas likely to be affected by the proposed development;
3. Characteristics of the proposed impacts, in terms of the potential significant effects of the proposed development.

Article 4(4) of 2014/52/EU introduces a new Annex IIA to be used in the case of screening determination (i.e. information to be provided by the developer on projects listed in Annex II, which consists of:

1. A description of the project, including in particular:
 - a. A description of the physical characteristics of the whole project and, where relevant, of demolition works;
 - b. A description of the location of the project, with particular regard to the environmental sensitivity of geographical areas likely to be affected.
2. A description of the aspects of the environment likely to be significantly affected by the project.
3. A description of any likely significant effects, to the extent of the information available on such effects, or the project on the environment resulting from:
 - a. The expected residues and emissions and the production of waste, where relevant;
 - b. The use of natural resources, in particular soil, land, water and biodiversity.

The criteria of Annex III shall be taken into account, where relevant, when compiling the information in accordance with points 1 to 3.

The Directive also amends Annex III "Selection Criteria referred to in Article 4(3)". The details to be considered in the new Annex III are as follows:

1. Characteristics of proposed development

The characteristics of project, with particular regard to:

- the size and design of the whole project,
- cumulation with other existing and / or approved development,
- the use of natural resources, in particular land, soil, water and biodiversity;
- the production of waste,
- pollution and nuisances,
- the risk of major accidents and / or disasters which are relevant to the project concerned, including those caused by climate changes, in accordance with scientific knowledge

- the risk to human health (for example due to water contamination or air pollution).

2. Location of proposed development

The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to

- the existing and approved land use,
- the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground,
- the absorption capacity of the natural environment, paying particular attention to the following areas:

- (a) wetlands, riparian areas, river mouths;

- (b) coastal zones and the marine environment;

- (c) mountain and forest areas,

- (d) nature reserves and parks,

- (e) areas classified or protected under national legislation, including Natura 2000 areas designated by Member States pursuant to Directives 92/43/EEC and 2009/147/EC,

- (f) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure,

- (g) densely populated areas,

- (h) landscapes and sites of historical, cultural or archaeological significance.

3. Type and Characteristics of potential impacts

The likely significant effects on the environment proposed development in relation to criteria set out under paragraphs 1 and 2 of this Annex, with regard to the impact of the project on the factors specified in Article 3(1), taking into account:

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

- the nature of the impact;

- the transboundary nature of the impact,

- the intensity and complexity of the impact,

- the probability of the impact,

- the expected onset, duration, frequency and reversibility of the impact.

- the cumulation of the impact with the impact of other existing and / or approved projects;

- the possibility of effectively reducing the impact.

In compliance with the requirements of the 2014 Directive, this Screening Report provides details of the information specified in Annex IIA, taking account of the criteria in Annex III, and also provides the information required under Schedule 7A of the 2001 Regulations.

2.3 Section 299B of The Regulations

The proposed project comprises a Strategic Housing Development. Under Section 299B of The Regulations where an application for a subthreshold SHD development has been made to An Bord Pleanála, and where a determination as to whether or not an EIA is required has not been given under Section 7 of the 2016 Act, the Board must carry out a screening for EIA of the proposed development.

Section 299B(1)(b) of the Regulations states that;

(b)(i) "The Board shall carry out a preliminary examination of, at the least, the nature, size or location of the development.

(ii) Where the Board concludes, based on such preliminary examination, that—

(I) there is no real likelihood of significant effects on the environment arising from the proposed development, it shall conclude that an EIA is not required,

(II) there is significant and realistic doubt in regard to the likelihood of significant effects on the environment arising from the proposed development, it shall satisfy itself that the applicant has provided to the Board

(A) the information specified in Schedule 7A,

(B) any further relevant information on the characteristics of the proposed development and its likely significant effects on the environment, and

(C) a statement indicating how the available results of other relevant assessments of the effects on the environment pursuant to the European Union Legislation other than the Environmental Impact Assessment Directive have been taken into account.

The Statement referred to accompanies this report. Section 299B(1)(b)(ii)(II)(C) of The Regulations requires that the statement must indicate “*how the available results of other relevant assessments of the effects on the environment carried out pursuant to European Union legislation other than the Environmental Impact Assessment Directive have been taken into account.*”

Table 1 provides an identification of the results of the relevant assessments and how these have been taken into account in preparing the EIA Screening Statement. The formal names and a brief description of the relevant legislation are provided in Appendix 1 to that report (Table 2).

3 Information Required by Annex II(A) of 2014/52/EU

3.1 Physical Characteristics of the whole project and demolition works

The proposed site is located on Redforge Road, to the immediate north of Blackpool Retail Park, c. 200m from Blackpool Shopping Centre and approximately 2km from Cork City Centre. The site is irregular in shape with a total gross site area of 0.46 hectares. It is currently occupied by a service station, including a single storey building, pump island canopy, 4 no. fuel pumps and underground fuel tanks.

The site is accessible via Redforge Road which runs along the eastern boundary of the site and is within easy walking distance of a number of commercial and community facilities, including local shops, churches and schools. The major employment of Cork City and Blackpool are within close proximity and both are well connected by public transport.



Fig 3.1 Site location with block perimeter marked in red (Site location map prepared by Hogan and Associates Architects).

3.1.1 Size & Design

The proposed development will consist of the following components:

-) the demolition of existing structures on site including a single storey building, pump island canopy, 4 no. fuel pumps and the decommissioning/removal of 4 no. underground fuel tanks;
-) the construction of 114 no. Build to Rent apartments (comprising a mix of 1 and 2 bed apartments) in 2 no. blocks, ranging in height from 4 to 9 storeys;
-) 1 no. 313 sqm retail unit;
-) residential amenity facilities including a reception, residents gym, lounge area and shared workspace;
-) the provision of landscaping and amenity areas including an enclosed courtyard and 1 no. rooftop garden;
-) the provision of public realm improvements on Redforge Road including widened footpaths and pavement improvements, pedestrian crossing, tree planting, raised tables/planters and seating areas and;

-) all associated ancillary development including pedestrian/cyclist facilities, lighting, drainage, boundary treatments, bin and bicycle storage, ESB Sub-station and plant.

A schedule of apartment types and accommodation is provided as part of the Application documentation. A range of apartment types and sizes are provided, comprising 75 no. 1 bed apartments (46%), 85 no. 2 bed apartments (52%) and 1 no. 3 bed apartment (0.6%).

The timescale currently in place for the construction of the proposed works is scheduled to commence in early 2022 with an expected completion date of December 2024.

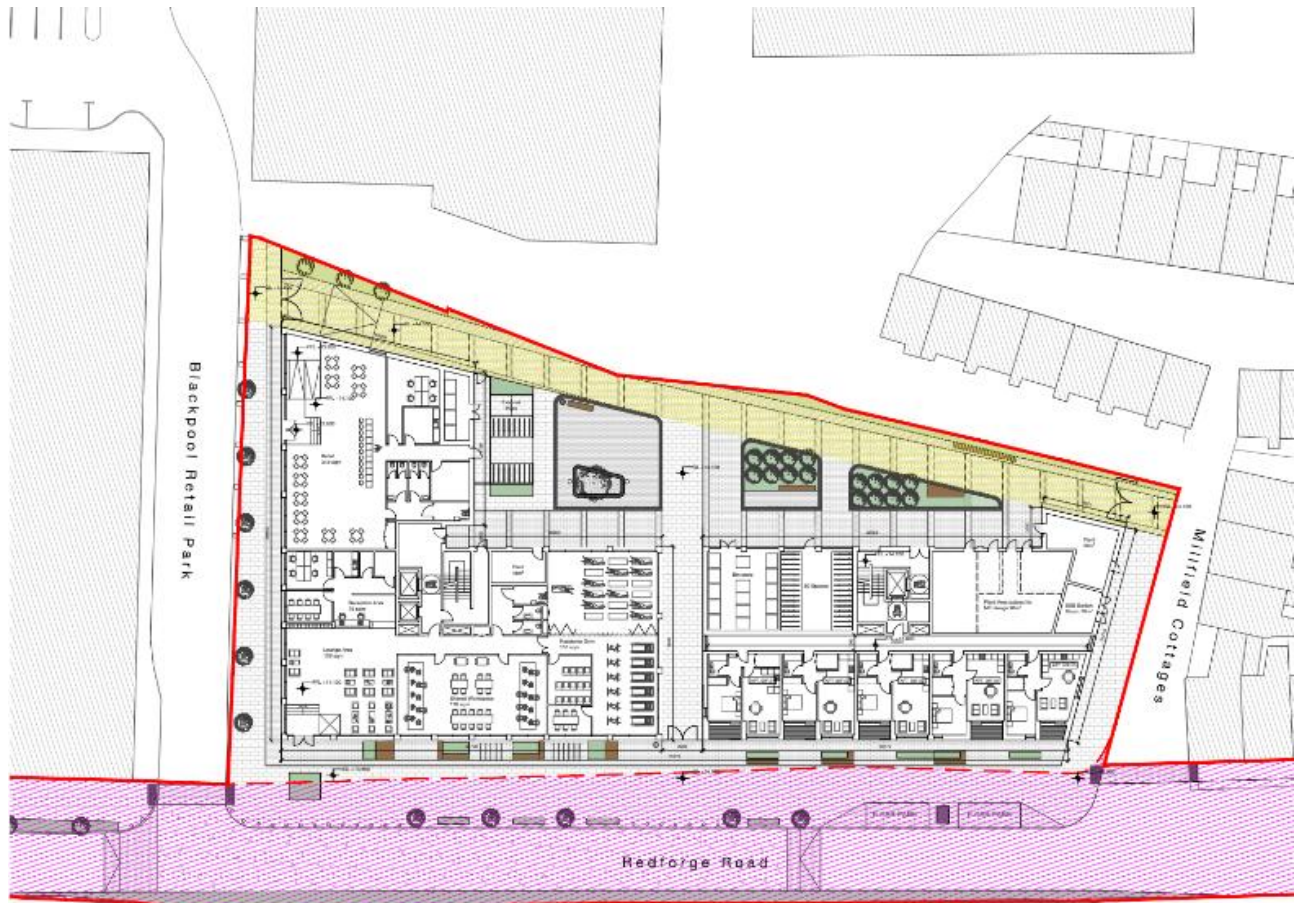


Fig 3.2 Proposed Site Layout and ground floor plan (Architectural Drawing No. A10-01 prepared by Butler\Cammoranesi.

3.1.2 Cumulation with other Existing &/or Approved Plans and Projects

The search of the Cork City Council Planning Database did not reveal any other existing or approved consents within the immediate catchment of the subject site that together with the construction and operation of the proposed project would result in significant impacts to the environment. However, the project is located within Cork City, and It is reasonable to assume that there will be ongoing urban development, both residential and commercial, in proximity to the site. All development consents would incorporate conditions requiring protection of the environment during the construction and operational phase as incorporated in the policies and objectives of the Cork City Development Plan and as per national and European legislation and regulations.

Cumulative impacts on the environment with other identified projects are not considered likely and overall, it is considered that the proposed development will have a significant positive impact as it will provide much needed high standard accommodation.

3.1.3 Natura of any demolition works

The existing site is comprised of buildings and hardstanding. The existing topography generally falls from north to south. The project comprises the demolition of the existing buildings, fuel pumps and removal of all underground tanks and services. A CEMP has been prepared for the proposed development by Malone O'Regan. This outlines the demolition and construction procedures, and the objective of the CEMP is to achieve compliance with environmental objectives set for the project, which include;

-) Zero pollution incidents
-) Minimising disruption to residents
-) Reduce/avoid impacts on biodiversity
-) Minimise waste sent to landfill

The CEMP identifies that any impacts relating to the demolition of existing structures will be short term and localised, and that the process will comply with all relevant legislation and construction industry guidelines. Potential environmental impacts relating to the demolition phase will be addressed in the Construction and Demolition Waste Management Plan (C&DWMP) prepared by Malone O'Regan (MOR), which is submitted with this application and further discussed in Section 3.1.4 of this report. Earthworks to remove the subsurface fuel tanks and services will be supervised by an environmental consultant and any contaminated soils or material will be segregated, sampled and removed off site in accordance with relevant waste legislation. Subject to maintaining best practice construction procedures on-site, and the implementation of the measures set out in the C&DWMP and the CEMP no significant negative impacts are anticipated.

3.1.4 The use of natural resources

The site is currently developed, and is of low ecological value. The proposed project comprises development of residential units, and will connect to existing services. Irish Water have supplied a connection agreement as set out in the Engineering Report prepared by JODA Engineering (Irish Water Confirmation of Feasibility and Statement of Design Acceptance attached as Appendix A and B of that report).

During the construction stage the use of natural resources will be minimised through sourcing goods and services locally where practical and, through efficient purchasing, that will seek to reduce the amount of waste generated. The C&DWMP outlines the strategy for reducing and minimising waste and recycling of materials where appropriate.

Irish Water have advised that the existing 100mm diameter watermain on Redforge Road is not sufficient for supplying the proposed development. Therefore, In order to accommodate the proposed connection to Irish Water network at the premises, approx. 175m of the existing 100mm watermain needs to be upgraded to 150mm diameter.

In accordance with best practice, new water saving devices (low water usage appliances and aerated taps etc.) will be fitted as standard into the proposed new units to minimise usage during operation.

Overall, it is considered that the proposed development would not have a significant effect on natural resources.

3.1.5 The production of waste

The construction process will result in the demolition of existing single storey building, pump island canopy, fuel pumps and the removal of underground tanks and services. A C&DWMP has been prepared by MOR which outlines the manner in which C&D waste will be managed in order to achieve compliance with the relevant waste legislation and to ensure that waste management activities at the site will not have an adverse impact on the environment.

Section 3 of the C&DWMP identifies the main waste streams that are predicted to be generated by the demolition and construction works. The main non-hazardous waste will include:

-) Stones/bedrock, topsoil and subsoil;
-) Concrete, brick, tiles and ceramics;
-) Bituminous mixtures, tar and tar products;
-) Roofing slates, tiles, felts and membranes
-) Resins, paints, and adhesives
-) Plasterboard;
-) Scrap Metal;
-) Cardboard (packaging)
-) Plastic (packaging and wrapping)
-) Waste timber
-) Paper

Hazardous waste streams may include the following:

-) Asbestos
-) Batteries;
-) Soils and stones containing dangerous substances
-) Wastes from groundwater and soil remediation
-) Wood preservative
-) Oils/fuels from machinery and equipment

JODA Engineering have estimated the quantities of waste likely to arise following the completion of the planned demolition at the site. It is estimated that c. 1154m³ of waste material will be generated from demolition activities.

The demolition phase will include;

-) Protection of adjacent structures
-) A survey of salvageable and potentially hazardous material, including asbestos, PCBs etc.
-) Removal of hazardous material
-) Removal of salvageable material
-) Demolition of buildings
-) Removal of underground tanks and structures
-) Removal of potentially contaminated soils

Below ground contamination has been identified at the site. This is below the existing concrete surface and will be removed after the buildings have been demolished to ensure safety (refer to Preliminary Site Investigation Report by MOR).

Waste materials generated during construction will be segregated on site, where it is practical. Where the on-site segregation of certain wastes types is not practical, off-site segregation will be carried out. During the construction phase segregation bays will be formed at the site for the duration of the construction phase. The bays will include segregated areas for recyclable waste streams such as gypsum (plasterboard), cardboard, timber, concrete, blocks, tiles etc.

All waste receptacles leaving site will be covered or enclosed. All waste will be documented prior to leaving the site. Contractors who remove waste materials from the site will be compliant with the Waste Management Act of 1996 & 2001 and also the Waste Management (Collection Permit) Regulations of 2001, i.e. any contractor removing waste from the site will have a waste collection permit issued by Cork City Council.

The foreman on the site will have a copy of the waste collection permits. Waste will be handled by an approved waste contractor holding a current waste collection permit. The appointed contractor will collect and transfer the wastes as receptacles are filled. Any waste requiring disposal off-site will be reused, recycled, recovered or disposed of at a facility holding the appropriate registration, permit or licence, as required.

Operational Waste

The proposed development comprises construction of 114no. 1 and 2 bedroomed Build-to-Rent apartments. Operational waste will comprise of general household waste, and all waste will be disposed of by suitably licensed waste contractors in accordance with Cork City Council policy. Once the development is constructed and occupied, emissions will be linked to air conditioning and heating systems and will fall within regulated standards for modern residential developments.

It is not anticipated that the production of waste during construction and operation will result in significant negative environmental impacts.

3.1.6 Pollution and nuisances

A Construction and Environmental Management plan (CEMP) has been prepared by MOR which sets out the specific environmental measures and procedures to be followed for the duration of the construction phase, proposing mitigation measures for inter alia, managing noise, dust, and accidental spillages. The CEMP proposes measures to mitigate any potential impacts and minimise disturbance to adjacent businesses.

There may be some increase and disruption to traffic as a result of construction, including movement of plant, delivery vehicles and site personnel. pedestrians. However any disruption will be temporary for the duration of the construction phase of the project, which is anticipated to commence in Q1 2022, with an estimated completion date of December 2024. The most impactful element of the works on the local road network is during the initial transport of groundworks machinery and delivery of fill materials and also in the delivery of the prefabricated apartment pods in the later stages.

An Outline Construction Traffic Management Plan (CTMP) has been prepared by MHL Consulting Engineers, to regularise the traffic movements within the applicant's site and on the approach to the proposed development, ensuring safety for all road users during the planning construction works. The CTMP provides details on site operating hours, site access and outlines the risk management measures that should be undertaken by the appointed Contractor.

Construction phase impacts relating to traffic are likely to be negative but temporary and not significant.

During operation no significant impacts as a result of traffic are anticipated. A Mobility Management Plan has also been prepared by MHL Consulting Engineers. It is proposed to provide set down vehicle spaces along the Redforge Road and provide cycle spaces number in line with best practice, as part of the application. The elimination of parking spaces aligns with an established trend to limit parking in urban apartment complexes. From a sustainable travel perspective, limiting vehicular parking spaces serves to force end users to adopt alternative travels modes, different to the single-occupant private car. This strategy supports national transport policy and with the objectives of the Cork City Development Plan 2015-2021.

Noise

A detailed noise assessment has been prepared by MOR in line with best practice guidance. The noise assessment informed the acoustic design for the project, and enhanced glazing systems with a sound reduction quality of up to 37dBA will be utilised to ensure a good internal acoustic environment when windows are closed.

Operational noise associated with the proposed development is not predicted to have significant negative effects on offsite noise sensitive receptors (NSRs) or future onsite NSRs. The proposed design will present some acoustic shelter from the road, and the private amenity areas will be screened by buildings and the roof garden design.

Air Quality

Information on air quality was accessed from the EPA website and interactive mapviewer². The Environmental Protection Agency manages the ambient air quality monitoring network. In order to protect our health, vegetation and ecosystems, EU directives set down air quality standards in Ireland and the other member states for a wide variety of pollutants. These rules include how we should monitor, assess and manage ambient air quality.

The Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) was published in May 2008. It replaced the Framework Directive and the first, second and third Daughter Directives. The CAFÉ Directive was transposed into Irish legislation by the Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011). It replaces the Air Quality Standards Regulations 2002 (S.I. No. 271 of 2002), the Ozone in Ambient Air Regulations 2004 (S.I. No. 53 of 2004) and S.I. No. 33 of 1999. The fourth Daughter Directive was transposed into Irish legislation by the Arsenic, Cadmium, Mercury, Nickel and Polycyclic Aromatic Hydrocarbons in Ambient Air Regulations 2009 (S.I. No. 58 of 2009).

The EPA air quality index identifies that the site is located within an area where the air quality is rated as “1 – Good” and the burning of coal is restricted. Cork City is located in Zone B.

The design of the project incorporates energy efficiency measures to meet the standards of the recently introduced NZEB Part L Regulations and will thus positively contribute to a reduction in fossil fuel use and associated greenhouse gas emissions.

In terms of dust nuisance during the construction phase, the site is surrounded by existing industrial, commercial and residential development. Standard dust mitigation measures will be integrated into the construction and demolition phases as set out in the CEMP and it is considered that any impact would be short-term and not significant.

During the operational stage it is considered that the proposed development would not have any negative impact in terms of pollution or nuisance. The site is located proximate to a host of public transport services easily accessible to future occupants. The need to travel by car would be reduced and local air quality would benefit.

Operational

The site is not in close proximity to sites designated for nature conservation. The closest site is the Lough proposed Natural Heritage Area (pNHA) and wildfowl sanctuary, located approximately 3.4 km to the southwest. There is no risk of impacts to sensitive habitats or species.

Standard best practice site development controls and the design and layout of the building will ensure that there is no significant change in air, noise or vibration emissions as a result of the proposed development and thus no significant environmental impacts are predicted.

As the site is located in a busy urban area the noise levels during construction are not expected to be significantly higher than existing background levels and will therefore not result in significant negative impacts to amenity.

3.1.7 The risk of accidents, having regard to substances or technologies used.

The site at Redforge Road is not located in an area considered to be of high environmental sensitivity. It is surrounded by existing built environment. The design and construction of the development will be carried out in accordance with building and fire regulations.

There are no identified SEVESO sites or sites regulated by COMAH in proximity. The site is located within a retail district zoned as a “District Centre” in the CDP, residential development) and the risk of accidents and/or

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disasters is negligible. A Flood Risk Assessment (FRA) has been prepared by JODA Consulting Engineers which concludes that there are no risks of fluvial or tidal flooding, and the risks of flooding as a result of pluvial and onsite flooding are low. The FRA found that the existing site is not acting as part of the floodplain to the River Bride. The site is deemed to be within Flood Zone A, due a minor area of external ground levels on Redforge Road being below the 1% AEP MRFS flood level. The ground floor level for the proposed building has been determined based on the 1% AEP for the mid-range future scenario of 13.62m OD for the Bride River and applying a freeboard of 0.48m gives a final level of 14.1m OD. No further mitigation measures are proposed.

The proposed development is residential in nature and is not at risk of major accidents, nor is the development as designed likely to increase the risk of a major accident in this location.

3.1.8 Risk to Human Health

Construction sites pose potential risk to the health and safety of the public. Health & Safety issues will be the primary concern for the appointed contractor. This will apply in respect of persons working on the site and in respect of passing pedestrians, motorists or other transport carriers. In this regard the highest possible care will be taken in providing a detailed Construction Stage Health and Safety Plan in advance of works commencing on site. The site will be closely managed on a day to day basis by construction site management.

The CEMP proposes measures to mitigate any likely impacts associated with noise, dust or pollution from the construction process. There is no known asbestos at the site (refer to C&DWMP).

A preliminary Site Investigation has been carried out by MOR to determine if past activities at the site have impacted the underlying soils to an extent that future land uses may be at risk. The soil analysis indicated elevated Chromium across the Site at all probe hole locations at concentrations above the residential generic soil assessment criteria (GAC). An exceedance in lead was identified at one location, within the shallow fill material. Hydrocarbon contamination is considered to be restricted to the forecourt area in the centre of the Site and in the south/ south-eastern portion of the Site (full details are provided in the Site Investigations Report prepared by MOR).

The site investigations found that the site is generally in good condition and there was no visual evidence of surface contamination identified on the Site. Remediation measures are proposed, including removal of concrete slabs, replacement of drainage network, new radon barrier beneath the proposed buildings and reinstating the site with clean fill material by approximately 0.4m. The entire surface of the Site will be hardstanding, as it will be either beneath buildings or hardscaping with the exception of a small landscaped area in the northern portion of the Site.

The Site Investigation Report concluded that subject to the implementation of the remedial measures outlined in Section 7 of that report, the potential for the identified contamination to impact on future human health and environmental receptors will be removed and as such the Site will be suitable for the proposed development.

The Construction Stage of the scheme is expected to result in an impact on the surrounding roads network primarily due to construction related deliveries and removals from site. An Outline Construction Traffic Management Plan (CTMP) has been prepared by MHL which outlines the risk management and mitigation measures to be put in place by the appointed works contractor in accordance with the phased development of the site. The Contractor shall be responsible for the planning, design, implementation, maintenance and removal of traffic safety and management measures required in order to facilitate and complete the works.

The development will continue connect to existing public services for water and sewer infrastructure.. No emissions other than from air conditioning and heating units are anticipated during operation.

A Wind and Microclimate report has been prepared by B-Fluid in support of this SHD application. The building has been designed to create a high quality living environment, and the impact of wind has been considered

throughout, both internally and externally. Mitigation measures have been incorporated into the design where potential critical negative wind patterns were identified. Planting has been included at ground floor level to mitigate against any potential negative effects. The assessment found that once constructed, the proposed development will not give rise to negative or critical wind speeds on nearby roads or buildings.

Significant negative impacts on health and safety are not considered likely once mitigation measures are put into operation.

3.2 Location of the Project, with regard to Environmental Sensitivities of Geographical Areas Likely to be affected

3.2.1 The existing and approved land use

This development is proposed on lands zoned ‘District Centre’ in the 2015 Cork City Development Plan. The Planning Authorities objective for the area are defined by objective ZO 8 which states that the City Council objective it to:

“provide for and/or improve district centres as mixed use centres, with a primary retail function which also acts as a focus for a range of services.”

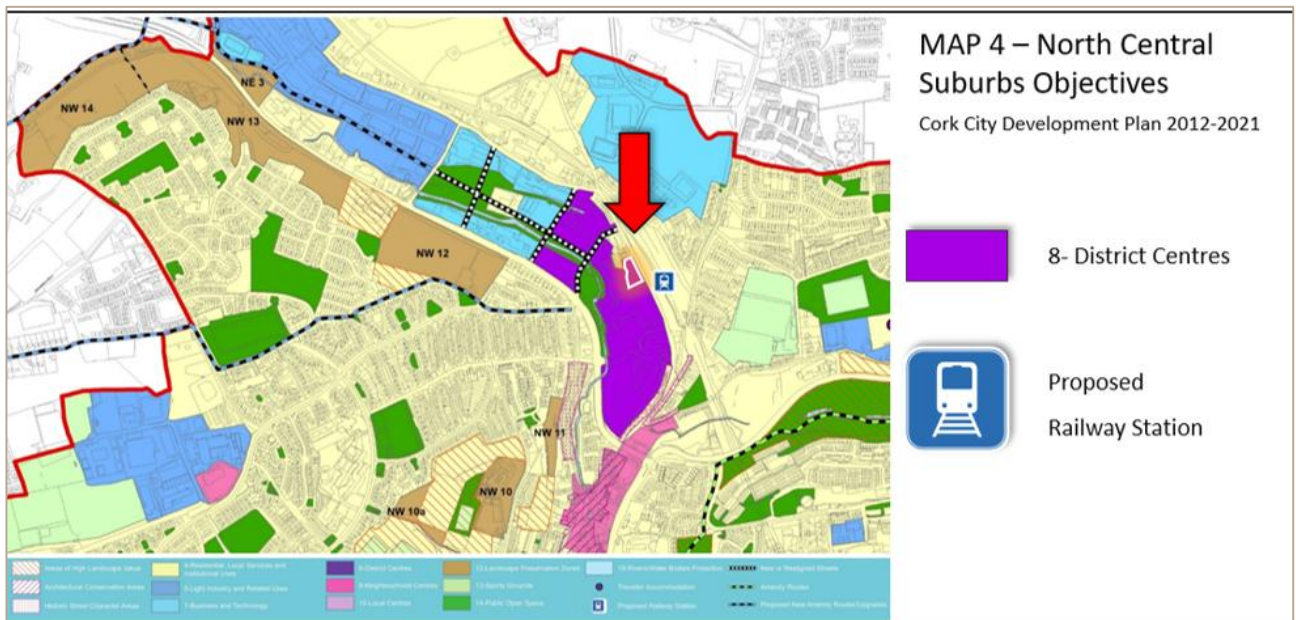


Fig 3.3: Site location in context of 2015 Cork City Development Plan (CCDP) zoning objectives.

A statement of Consistency has been prepared by McCutcheon Halley Planning and is submitted in support of the subject planning application. This Statement provides a comprehensive assessment of the proposed developments consistency with the relevant planning policy documents at national, regional and local levels and concludes that the proposed development is consistent with the general objectives of the Cork City Development Plan.

3.2.2 The relative abundance, quality and regenerative capacity of natural resources in the area.

The proposed project involves redevelopment of an existing service station, located within an urban centre, and there are no sensitive habitats, or landscapes located within the site boundary. The development will connect to existing services. Once operational, wastewater from the development will be treated at the Carrigrennan Wastewater Treatment plan, which services the wider Cork area and has sufficient capacity to service the proposed development (refer to Engineering Report prepared by JODA). The development will be

supplied from the existing public water mains as before. No significant impacts on natural resources are anticipated during construction and operation.

3.2.3 The absorption capacity of the natural environment, paying particular attention to the following areas:

- a) wetlands,
- b) coastal zones,
- c) mountain and forest areas,
- d) nature reserves and parks,
- e) areas classified or protected under legislation, including special protection areas designated pursuant to Directives 79/409/EEC and 92/43/EEC,
- f) areas in which the environmental quality standards laid down in legislation of the EU have already been exceeded,
- g) densely populated areas,
- h) landscapes of historical, cultural or archaeological significance.

Absorption capacity of the natural environment; The proposed development is not expected to result in significant impacts to biodiversity or to the existing environment. The site is located in Cork City and is not in close proximity to wetlands, coastal zones, mountain and forest areas or nature reserves and parks. An Ecological Impact Assessment (EclA) has been prepared by Malone O'Regan. The site is within 5 km of a number of proposed Natural Heritage Areas (pNHAs), including Blarney Bog, Lee Valley, Glanmore Woods and Dunkettle Shores (Fig 3.4). The EclA concluded that given the nature and scale of the development and the water quality protection mitigation measures which will be put in place, no significant impacts are likely to occur to these sites.

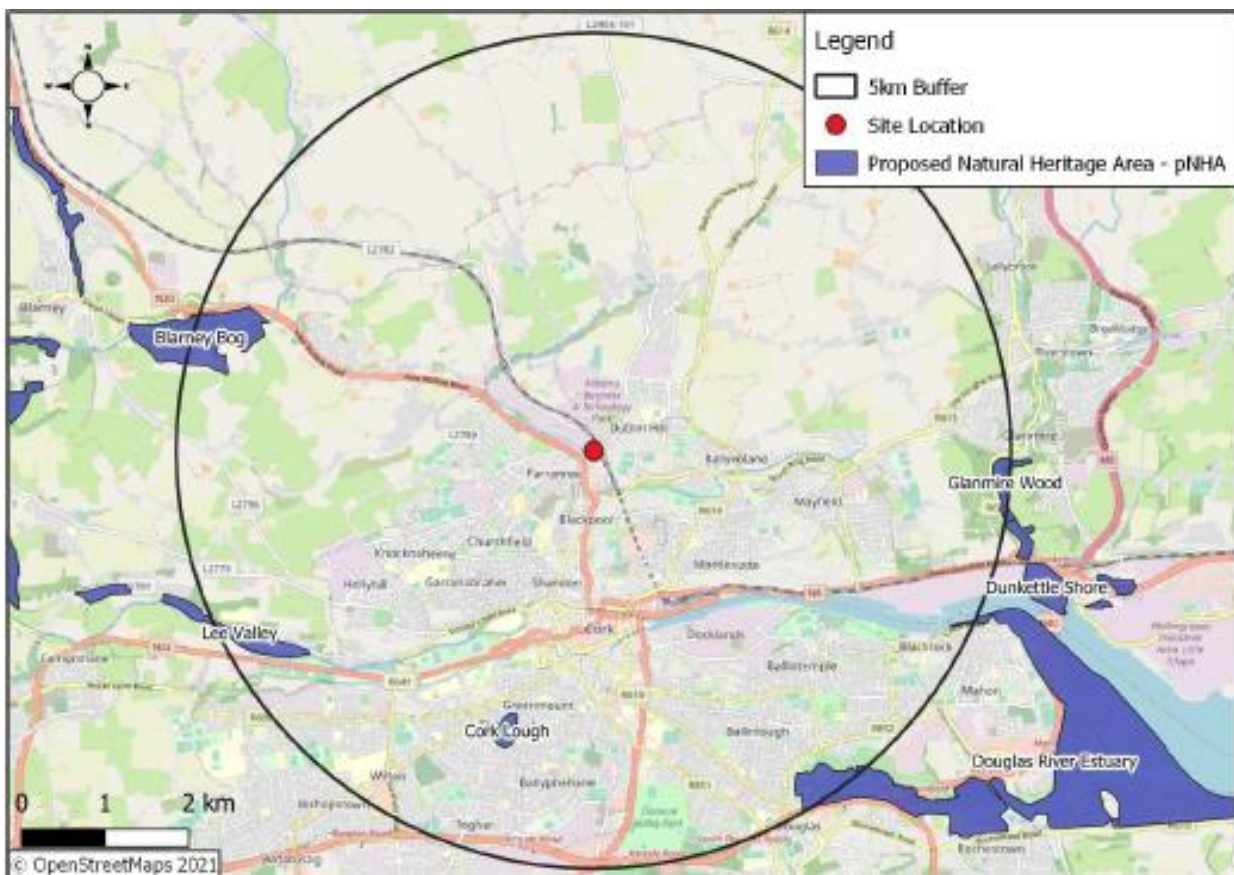


Fig 3.4: Proximity of site to pNHAs (figure from EclA prepared by Malone O'Regan).

The EclA concluded subject to mitigation measures, the development would not give rise to significant impacts on birds, flora or fauna. A bat survey was also undertaken, which concluded that given the recorded bat activity

in the area it was likely that there are bats roosting in the locality of the proposed development. The survey identified bats commuting along sections of the treelines/scrub areas to the northwest of the survey area and within the wider area. Overall the survey area is considered to be of low importance for roosting, commuting and foraging bats, as the majority of the site is heavily illuminated at night. Mitigation measures proposed include appropriate lighting and landscaping and an updated inspection of buildings prior to demolition/construction activities occurring on-site.

A NIS was prepared by Malone O'Regan which concluded that the proposed development would not cause any adverse effects on European designated sites (specifically Cork Harbour SPA and Great Island Channel SAC – refer to Fig 3.5) provided the mitigation measures incorporated within the NIS are adhered to.



Figure 3.5: Proximity of site (location circled in orange) to Natura 2000 Sites. Source – Fig 4.1 Section 4 of NIS prepared by Malone O'Regan.

Landscape and visual impact:

A Landscape and Visual Impact Assessment (LVIA) has been completed by Cathal O'Meara, in addition to Photomontages prepared by Pederson Focus. 18 viewpoints were selected to assess the significance of the predicted visual impact. Of the 18, the highest impact of “moderate to slight” were identified for 8 of the sites. None of the views or prospects identified in the City Development Plan will be affected (relevant views and prospects indicated in the City DP: Map 14 – Views and Prospects North-East and Map 15-Views and Prospects North West).

Overall, the LVIA concluded that the proposed development will not result in a significant change to the process of evolution already well underway at this District Centre/City Gateway. The broader landscape character area and visual context around Blackpool has the capacity to absorb the proposed alterations of this scale in landscape and visual terms. The development will have a positive impact to the locality due to the high quality architectural finishes to the buildings, the reorientation of a back land site into a vibrant streetscape and the provision of tree planting and open space provision.

Land and Soil: Information on underlying soil type and bedrock was provided by the Geological Survey of Ireland database and the EPA database and interactive mapviewer (<https://gis.epa.ie/EPAMaps/SEA>). Bedrock is paleozoic, Devonian, overlain with mudstone and siltstone, forming part of the Gyleen formation. Soil type is identified as “made ground”. The site does not form part of a geological heritage area.

Water Environment: The subject site is located within the built-up area of Cork City. Information on water features, water quality and Water Framework Directive (WFD) status of watercourses in proximity to the site was determined from the EPA website and interactive mapviewer <https://gis.epa.ie/EPAMaps>, and www.catchments.ie.

There are no known watercourses or drains located within the site. Given the built up nature of the area any watercourses in proximity have been previously modified. The EPA mapviewer indicates that the Bride River flows adjacent to the site boundary at the west of the site, however this is incorrect and the watercourse flows approximately 80m further to the west through a small park (Fig 3.6). The most recent WFD status of the River Bride is identified as “at Risk” and the water quality status for the period 2013 – 2018 is identified as “undetermined”.

The development is too distant for any pollutants such as silt, or hydrocarbons to be transferred to the watercourse during construction, however it is proposed to discharge surface water from the site to the River Bride during operation.



Fig 3.6: Watercourses in proximity to the site at Redforge Road.

The proposed project must ensure that a comprehensive sustainable urban drainage system (SUDS) is incorporated into the development as per Objective 12.3 of the CDP. The SuDs principles require a two-fold approach to address storm water management on new developments:

- 1) SuDS requires that post development run-off rates be maintained at the equivalent to, or lower than, the pre-development run-off levels.

- 2) Include Sustainable Urban Drainage Devices (e.g Attenuation, green roof, permeable paving system, etc)

The proposed surface water drainage system will collect storm-water run-off generated from the residential roofs and impermeable hard surfaces via gullies. The storm water will then drain to an on-site, below ground level attenuation facility. Attenuation capacity is designed for a 1 in 30 year storm event + 10% allowance for climate change. The attenuation tank capacity required is 40.8m³. Surface water outfall from the attenuation tank is to be restricted by a Hydrobrake to limit the flow to the existing public storm drainage system. (Refer to Appendix C of the Infrastructure Report for surface water drainage calculations and associated attenuation design).

Surface water will ultimately be discharged to the existing public drainage system, east of the site and subsequently to the River Bride. The proposed discharge rate from the site will be lower than the pre-development run-off levels in line with the SUDS requirement.

4 Screening Determination

The potential for impacts arising during the construction and operational phases have been considered above and the characteristics of the likely effects arising from the proposed development are rated using the descriptive terminology presented in the EPA (2017) *Guidelines on the Information to be contained in Environmental Impact Assessment Reports – Draft*.

4.1.1 Characteristics of Potential Impacts

We note the criteria of paragraph 3 of Schedule 7, *Characteristics of Potential Impacts*;

The potential significant effects of proposed development in relation to criteria set out under paragraphs 1 and 2 above, and having regard in particular to:

- *the extent of the impact (geographical area and size of the affected population),*
- *the transfrontier nature of the impact*
- *the magnitude and complexity of the impact,*
- *the probability of the impact,*
- *the duration, frequency and reversibility of the impact.*

These criteria are dealt with in the report above and the Table 4.1 below summarises the predicted **post-mitigation** significance, quality and duration of the identified likely effects.

It should be noted that given the nature and scale of the proposed development, there is no likelihood of transfrontier impacts arising from either the construction or operational phases.

Table 4.1 below demonstrates that post standard construction mitigation there is no significant negative effect predicted to result from either the construction or operational phases of the proposed development.

Table 4.1 Predicted effects post mitigation

Aspect	Phase	Possible Effect	Extent	Probability	Significance of Effect	Quality of Effect	Duration
Landscape	C	None predicted	-	-	-	-	-
	O	None predicted	-	-	-	-	-
Visual	C	None predicted	-	-	-	-	-
	O	None predicted	-	-	-	-	-

Aspect	Phase	Possible Effect	Extent	Probability	Significance of Effect	Quality of Effect	Duration
Biodiversity	C	None predicted	-	-	-	-	-
	O	None predicted	-	-	-	-	-
Land & Soil	C	Excavation of contaminated soils during site clearance	Local	Likely	Not significant	Negative	Short term
	O	None predicted	-	-	-	-	-
Human Health	C	Temporary risk during construction phase	Local	Not likely	Not significant	Negative	Temporary
	O	None predicted					
Water	C	Spills/leaks from plant entering the surface water drainage system.	Local	Not likely	Not significant	Neutral	Temporary
	O	None predicted	-	-	-	-	-
Air	C	Dust emissions	Local	Likely	Imperceptible	Negative	Temporary
	O	None predicted	-	-	-	-	-
Noise	C	Noise from plant and machinery	Local	Likely	Not Significant	Negative	Temporary
	O	None predicted	-	-	-	-	-
Cultural Heritage	C	None predicted	-	-	-	-	-
	O	None predicted	-	-	-	-	-

4.1.2 Cumulative Impacts

Additional traffic and activities during the construction phase may result in some negative impacts on passers-by and local businesses, however these impacts will be temporary, lasting only for the duration of the construction phase and will not be significant.

4.1.3 Residual Impacts

Once the proposed mitigation measures are implemented significant residual impacts are not anticipated.

5 Conclusion

Development of the site for residential use is appropriate in the context of the site's zoning objective and national policy. Likely positive effects are forecast as the development will provide much needed sustainable residential accommodation.

The most likely impacts on the environment, without appropriate mitigation measures are considered to be;

-) Dust, noise and traffic impacts associated with the demolition and construction process;
-) Removal of potentially contaminated soils;
-) Impacts to local amenity and potential risk to pedestrians or road users;

A number of measures are proposed to mitigate the identified potential impacts, including

-) Development of a Construction Management Plan to mitigate construction related impacts,
-) Preparation of a C&DWMP,
-) A Construction Traffic Management Plan to mitigate construction traffic impacts.

Having regard to the nature, extent, and the characteristics of the likely impacts identified for the construction and operational phases, it is considered that the proposed SHD development at Redforge Road will not give rise to a likely significant environmental effect and accordingly a sub-threshold EIA is not required.

6 References

Cork City Development Plan 2015 – 2021. Available at <https://www.corkcity.ie/en/existing-cork-city-development-plan-2015-2021>

Websites

Environmental Protection Agency www.epa.ie and mapviewer: <https://gis.epa.ie/EPAMaps/>

Geological Survey of Ireland www.gsi.ie and mapviewer:
<https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228>

National Biodiversity Data Centre <https://www.biodiversityireland.ie/> and mapviewer:
<https://maps.biodiversityireland.ie/Map>