



# **ENVIRONMENTAL IMPACT ASSESSMENT REPORT**

## **VOLUME 1 – NON-TECHNICAL SUMMARY**

LARGE SCALE RESIDENTIAL DEVELOPMENT (LRD) AT  
DALGUISE HOUSE, MONKSTOWN ROAD, MONSKTOWN, BLACKROCK,  
COUNTY DUBLIN



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**24 November 2022**



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## 1.0 INTRODUCTION

Chapter 1 introduces the project and describes the scope and methodology of the EIA process. The consultation process which was undertaken is outlined and the competencies of the environmental assessment team are provided. The description of the proposed project is provided in Chapter 5 and the consideration of alternatives is provided in Chapter 4.

### 1.1 Outline Details

This Environmental Impact Assessment Report (EIAR) relates to a Large Scale Residential Development (LRD) application by the GEDV Monkstown Owner Limited<sup>1</sup> (referred to as the Applicant throughout) for the redevelopment of lands at Dalguise House (Protected Structure RPS No. 870), Monkstown Road, Monkstown, Blackrock, County Dublin, A94 D7D1; and the lands including A94 N3A1 Garage; A94 R9T1 Gate Lodge; A94 TP46 Dalguise Lodge (No. 71 Monkstown Rd); A94 V6V9 White Lodge; and on-street car parking in front of Nos. 6 and 7 Purbeck (A94 C586 and A94 HT99, respectively), with the provision of vehicular and pedestrian access and egress at two points on Monkstown Road: the existing entrance to Dalguise; and at Purbeck.

This EIAR provides an assessment of the environmental impact and associated mitigation measures arising as a result of the proposed development. It has been prepared in accordance with the requirements of the *Planning and Development Act 2000* (as amended), the *Planning and Development Regulations 2001* (as amended) and the relevant guidance documents.

The LRD application site measures c.3.58 ha and is lies on an existing residential property within the built-up area of Monkstown approximately 1.5 km west of Dún Laoghaire town centre and c. 1.5 km southeast of Blackrock village. The proposed LRD comprises 491 No. residential units, consisting of 484 No. new build units and 7 No. residential units within existing structures (the latter repurposed from Dalguise House, Gate Lodge and Coach House).

The residential provision will comprise: 3 No. two storey 2-bed terraced houses (GFA 569 sq m), and 488 No. Build-to-Rent units (consisting of 2 No. studio units; 289 No. 1-beds; 31 No. 2-beds/3 persons; 153 No. 2-beds/4-persons; and 13 No. 3-beds) (with an option for the use of 4 No. of the BTR Units to cater for short-term stays of up to 14 days to cater inter alia for visitors and short-term visits to residents of the overall scheme) residential amenities and residential support facilities; a childcare facility; and restaurant/café.

Vehicular and pedestrian access and egress is provided at two points on Monkstown Road: the existing entrance to Dalguise; and at Purbeck. Alterations will be made at Purbeck including the relocation of 4 No. existing car parking spaces to facilitate the construction of a new vehicular and pedestrian bridge over the Stradbrook Stream.

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## 1.2 EIA Process

This EIAR sets out the results of the environmental assessments which have been completed for the proposed development to inform the planning consent process.

The EIAR has been completed as a statutory environmental assessment. The environmental impact assessment process has been completed in accordance with Directive 2011/92/EU, as amended by Directive 2014/52/EU (together, the EIA Directive). The primary objective of the EIA Directive is to ensure that projects that are likely to have significant effects on the environment are subjected to an assessment of their likely impacts.

EIA forms part of the planning consent process and is carried out by the Competent Authority. An EIAR is prepared by/ on behalf of an Applicant in respect of a project seeking planning consent. The EIAR thus becomes an integral informing element in the Competent Authority's EIA. The 2014 Directive has introduced new requirements in respect of the competency of experts responsible for the preparation of the EIAR (see Table 1.3 of Chapter 1 of Volume 2-Main Report for details on the experts involved in the preparation of this document).

The EIA process may be summarised as follows:

- Screening – Is EIA Required?
- Scoping – If EIA is Required, what aspects of the Environment should be considered?
- Preparation of EIAR
- EIAR informs EIA (as part of the consent process)

## 1.3 The Need for EIA

The proposed development has been screened for EIA in accordance with the *European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018*, in accordance with the EIA Directive.

Section 172(1) of the Acts sets out the requirement for EIA. Mandatory EIA is required for Projects listed in Part 1 of Schedule 5 of the *Planning and Development Regulations 2001-2020* (“the Regulations”), referred to as Annex I Projects, in accordance with the EIA Directive.

The Project is not listed within Part 1 of Schedule 5 of the Regulations and therefore mandatory EIA is not required in this instance.

With respect to Part 2 of Schedule 5 (Annex II Projects), the Project has been assessed against the following relevant criteria:



## **Class 10 – Infrastructure Projects**

Subsection 10(b)(i):

*“Construction of more than 500 dwelling units”*

This Project comprises a large-scale residential development including 491 No. residential units comprising: 3 No. two storey 3-bed terraced houses (GFA 569 sq m), and 488 No. Build-to-Rent units (consisting of 2 No. studio units; 288 No. 1-beds; 32 No. 2-beds/3 persons; 153 No. 2-beds/4-persons; and 13 No. 3-beds) (with an option for the use of 4 No. of the BTR Units to cater for short-term stays of up to 14 days at any one time to cater inter alia for visitors and short-term visits to residents of the overall scheme) residential amenities and residential support facilities; a childcare facility; and restaurant/café.

The Project lies just below the 500-dwelling unit threshold and therefore a mandatory EIA is not required in the context of this Class of the Regulations.

## **Part 2 Class 10 – Infrastructure Projects**

Subsection 10(b)(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 LRD Project relates to a site of c.3.58 hectares and is located within an area which comes within the definition of “other parts of a built-up area”. The Project therefore does not exceed the threshold of 10 hectares, with respect to site area of the proposed development.

The proposed residential development does not exceed the criteria as set out to determine the need for a mandatory EIA. However, section 172 of the Planning & Development Act 2000, as amended, also sets out the basis for EIA for developments which do not equal or exceed, the relevant quantity, area or other limit specified in Part 2 of Schedule 5, i.e., “sub-threshold development”. Thus, an EIA is required where sub-threshold development is likely to have significant effects on the environment and therefore should be subject to EIA.

Given that the proposed development for 491 units is almost equal to the “Construction of more than 500 dwelling units”, it was deemed prudent to undertake an EIAR in relation to the subject development to ensure that the proposal does not negatively impact on the environment.



## Part 2 Class 14 – Works of Demolition

*“Works of demolition carried out in order to facilitate a project listed in Part 1 or Part 2 of this Schedule where such works would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7”.*

The development will consist of the demolition and part-demolition of existing structures (total demolition area 967 sq m), including: White Lodge a 2 storey house (192 sq m); Swimming pool extension to the southeast of Dalguise House (250 sq m); Residential garage and shed to the southwest of Dalguise House (285 sq m); Lean-to structures to the south of the walled garden (142 sq m); Part-demolition of Lower Ground Floor at Dalguise House (9 sq m); Demolition of single storey extension to the south of the Coach House (29 sq m) and three ancillary single-storey structures (8 sq m, 8 sq m, and 31 sq m) within the yard; Demolition of potting shed (13 sq m); Removal of 2 no. glasshouses; and alterations to, including the creation of 3 No. opes and the removal of a 12.4 m section of the walled garden wall to the east.

Given the scale and nature of buildings to be demolished, it is not envisaged that likely significant effects on the environment arising from the demolition will occur. Nevertheless, the likely impacts arising with respect to the demolition of these building will be assessed in full as part of the EIA, in the context of Material Assets – Waste, Material Assets - Traffic and Transportation, Noise and Vibration, Air Quality and Climate, Human Health, and as part of the Construction Environmental Management Plan. On this basis, it is considered that the Project does not require the preparation of an EIAR with respect to this Class.

### 1.4 Purpose of the Environmental Impact Assessment Report

As noted, the 2014 Directive has redefined EIA as a process, whereby an EIAR is a key informing element. An EIAR's purpose is to predict and assess likely significant effects (direct and indirect) on the environment arising from the proposed development. It is used during the consent process to inform EIA.

As per Article 5(1) of the amended Directive, an EIAR should provide the following information:

- Description of Project
- Description of Baseline Scenario
- Description of Likely Significant Effects
- Description of Avoidance / Mitigation Measures
- Description of Reasonable Alternatives (and rationale for chosen option)
- A Non-Technical Summary

Annex IV of the Directive sets out a more detailed outline of the information required in an EIAR. The subject EIAR has been prepared in full accordance with these stated requirements of Annex IV.

The preparation of the *Environmental Impact Assessment Report* has been co-ordinated by Tom Phillips + Associates, Town Planning Consultants, in association with other members of the Project Team as identified in Table 1.3 of Chapter 1 of Volume 2-Main Report.





## 1.5 Scoping of the Environmental Impact Assessment

An informal EIA scoping exercise was undertaken by TPA in May 2022, with respect to the proposed development. The purpose of the EIA scoping exercise was to inform consultees of the proposed development, having regard to the extent of information to be contained within the EIAR for the project.

The scope of the EIAR has been prepared in consultation with the respective specialists within the EIA team. The Report set out a detailed justification relating to the environmental aspects to be considered in detail in the EIAR for the proposed development on the basis of the potential for significant effects.

The non-statutory scoping exercise was documented within the *Environmental Impact Assessment Scoping Report (and Summary of Possible Effects)* that accompanied the pre-application submission to Dún Laoghaire-Rathdown County Council.

## 1.6 EIAR Format

In addition to the 2014 Directive, the subject EIAR has been informed by:

- *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (2022);
- *Advice Notes for Preparing Environmental Impact Statements, Draft*, (EPA September 2015);
- *Environmental Impact Assessment of Projects: Guidance on Screening* (European Commission, 2017);
- *Environmental Impact Assessment of Projects: Guidance on Scoping* (European Commission, 2017);
- *Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report* (European Commission, 2017);
- *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*, (August 2018).

### 1.6.1 Baseline Environment

This section provides a description of the current state of the environment related to the subject site.

### 1.6.2 Likely Potential Effects of the Proposed Development

This section allows for a description of the direct and indirect impacts that the proposed development is likely to have on aspects of the environment affected. This is done with reference to both the Baseline Environment sections and the Description of the Proposed Project chapter, while also referring to the magnitude, duration, consequences (including use of natural resources) and significance of any impact.



### **1.6.3 Mitigation Measures**

This section provides a description of the measures envisaged to prevent, reduce and (where possible) offset any significant adverse effects on the environment that are practicable or reasonable, having regard to the potential impacts.

### **1.6.4 Monitoring**

This section outlines monitoring measures (for both construction and operational stages), where appropriate, in cases where significant adverse impacts have been identified.

### **1.6.5 Consideration of Alternatives**

This part of the EIAR describes the reasonable alternatives considered and provides a rationale for the chosen option, having regard to environmental factors listed at Article 3(1) of the EIA Directive.

### **1.6.6 Interactions**

This section provides an overview of the inter-relationship between each of the different environmental aspects assessed, as identified by each of the specialists within their respective chapters.

### **1.6.7 Cumulative Impacts**

This chapter has regard to the potential cumulative impact upon the environment arising from the proposed project, in combination with other developments (committed or planned projects) in the surrounding area. The other projects assessed in combination with the proposed development are outlined in Chapter 17 of this NTS.

## **1.7 EIAR Project Team and Guarantee of Competency and Independence**

The Environmental Impact Assessment Report was completed by a project team led by Tom Phillips + Associates, who also prepared a number of the chapters.

In accordance with amended EIA Directive (Directive 2014/52/EU), we confirm that the experts involved in the preparation of this EIAR are fully qualified and competent in their respective fields. Each has extensive proven expertise in the relevant field concerned, thus ensuring that the information provided herein is complete and of high quality. The individual members of the team and their respective inputs and competency are detailed in Table 1.3 of Chapter 1 of Volume 2-Main Report.





## 2.0 DESCRIPTION OF THE PROPOSED PROJECT

### 2.1 Introduction

This Chapter, in accordance with Article 5(1)(a) of the EIA Directive, provides: “...information on the site, design, size and other relevant features of the project”.

The assessment provided in the following Chapters, undertaken by the various specialists, is underpinned by the description of the project as set out below.

### 2.2 Background to the Site

#### 2.2.1 Site History

One previous application, lodged under ABP Reg. Ref. 30694920, has been made in respect of the subject site: a Strategic Housing Development (SHD) of 300 No. units, subsequently reduced by ten in the Permission to comprise 266 No. apartment units across 8 No. blocks, ranging in height from 5 to 9 storeys, and 24 No. houses, including within the existing structures on the site (total 290 No. units). A creche was also provided under the application, as well as communal recreational facilities and 314 No. car parking spaces and 654 No. bicycle parking spaces.

In addition to the existing vehicular and pedestrian access, it was proposed to provide a further access to Monkstown Road, via Purbeck, and to facilitate additional pedestrian/cycle connects to adjoining roads to the east and west. The scheme was for ‘conventional’ residential units – not BTR.

The Application was granted by An Bord Pleanála, subject to 31 No. conditions. This included a condition requiring a reduction in height (by one storey) of 2 No. blocks. The condition meant the removal of 10 No. apartments, reducing the overall number of dwelling units to 290 No. The decision was subject to Judicial Review and was subsequently overturned by the High Court. According to the Judgment, the Judge found that ABP had erred in their conclusion that the submitted EIA Screening Report adequately described the effects that the proposed development would have on the environment. He also found that ABP had not given adequate reasons for its EIA Screening decision that the proposed development would have an insignificant effect on cultural heritage. The Judge further held that in its decision to grant permission ABP erred by relying on a Specific Planning Policy Requirement concerning building height guidelines and found that the height of the proposed development did materially contravene Dún Laoghaire-Rathdown’s building height policy.

In light of the foregoing, the Design Team have reviewed the previously permitted development in order to improve the design where possible, and to ensure that the development can be constructed as proposed and can adapt the principles of the development to meet their requirements as the owner and developer of Build to Rent developments. Furthermore, the Design Team have carefully reviewed the High Court judgement on the previous scheme and is preparing this comprehensive EIAR to ensure that the application provides a robust assessment of any potential environmental effects of the proposed development on the environment. In relation to the Building Heights, the *Dún*



*Laoghaire Rathdown Development Plan 2022-2028* Building Height Strategy acknowledges that greater height can be provided on lands where it can be demonstrated that the proposal complies with criteria outlined in Table 5.1 under Section 5 of Appendix 5, Building Height Strategy. The accompanying Town Planning Report, prepared by TPA provides a detailed assessment of the proposed development in relation to the 'Performance Based Criteria' outlined in Table 5.1 of the Building Height Strategy to ensure that the proposed heights are in accordance with the Development Plan.

## 2.2.2 Current Site Use

The site currently accommodates '*Dalguise House*' (Protected Structure RPS No. 870), which sits in the middle of a rectangle of grounds bounded on all sides by a belt of woodland. The house was occupied as family home until recent years and is now vacant. Dalguise House is described as a 5 bay, two storey over basement house. The front facade is symmetrical with a projecting entrance portico, render pilasters supporting a segmented pediment above, and flanked at either end with narrow pedimented wings, complete with ground floor wyatt windows. A large two-storey projection is located to the western end of the house. Historically, the house grew from a modest single storey over basement villa to the large house that exists today, resulting in an unusual and incoherent shape. The house is one room deep with circulation running along the northern façade, leading to large rooms. These rooms are housed within the pedimented wings, which were added to the east and west sides of the original villa. A servant's quarter was added to the west of the house as a later addition.

The external walls are rendered and painted with expressed quoins to the front, north-eastern elevation. The external render is primarily sand-cement, possibly over earlier lime-based render layers. The elevation includes a continuous cornice, quoins to the wings and a plattband incorporated into first floor window cills, which appear to be in reasonable condition. The roof is clad in natural slate, with ceramic ridge tiles. The windows are generally one over one timber sliding sash windows, with two large Wyatt windows to the front of the wings. There are also a small number of stained-glass windows dating from late 19<sup>th</sup> or early 20<sup>th</sup> centuries. External doors are generally 20<sup>th</sup> century and of poor quality, the major exception is the four panelled entrance door with its elaborate sunken fields. The late 19<sup>th</sup>/early 20<sup>th</sup> century cast iron rainwater goods are in reasonably good condition; and the late 19<sup>th</sup> century cast iron railings and urns to the front of the house are retained and in good condition.

A number of associated structures are also located within site including two gate lodges, one at the entrance from Monkstown Road, (therein referred to as '*Dalguise Lodge/Entrance Lodge*') and another located inside the main portion of the site, (therein referred to as '*Gate Lodge/Brick Lodge*'). The Dalguise Lodge/Entrance Lodge on the Monkstown Road is a two storey, gabled cottage with natural slate roof, cast iron rainwater goods, harled masonry walls and timber casement windows. The exterior of the lodge is in reasonable, if neglected condition. The interior is in a poor state of repair with few original features retained. The Gate Lodge/Brick Lodge is a small, single storey brick building with three projecting bays. The original external fabric, slate roof, brick walls, decorative joinery have survived in reasonable condition. Internally little original fabric has been retained. A modern two-storey house known locally as '*White Lodge*', is located inside the entrance avenue, a wide single lane estate road running from Monkstown Road to the front entrance of Dalguise House. White Lodge is a modern structure with no architectural or conservation significance.



A coach house/stable block is located to the southwest corner of the site, and a modern garage is located to the rear of Dalguise House. The former stable building which has a pitched roof and is two storey in part, has been the subject of various alterations over the years. The coachman's cottage is partly ruinous and overgrown. There is a walled garden immediately south of the house with a number of small, derelict outhouses attached to its southern end. Directly to the east of Dalguise House are a number of ancillary buildings of differing ages, including a delapidated vinehouse, a 19<sup>th</sup> Century green house, a modern swimming pool enclosure and a tennis court.

### 2.2.3 Site Location and Surrounding Area

The subject site of c. 3.58 hectares lies on an existing residential property within the built-up area of Monkstown approximately 1.5 km west of Dún Laoghaire town centre and c. 1.5 km southeast of Blackrock village. The site is within walking distance of Monkstown Village, c. 250 m, which provides a range of local services.

The site is connected to Monkstown Road to the north via an avenue of c. 80m which serves as the vehicular and pedestrian access. It is bounded to the north by modern residential dwellings at Drayton Close, Purbeck and Heathfield; to the south by rear gardens of houses at Brook Court; to the east by the rear gardens and sides of houses at Richmond Park and family hub housing; and residential developments to the west, Southdale, Arundel and The Orchard. The housing in the area is a mix of ages, with more modern infill developments to the rear of large older structures along Monkstown Road.

In terms of statutory designations, Dalguise House is the only Protected Structure (RPS No. 870) on the site according to the *Dún Laoghaire- Rathdown County Development Plan 2022-2028*.

The site is located within 500m (5 minutes' walk) from the Salthill and Monkstown Dart Station. This station provides service for Dart suburban rail service direct to Connolly Station, where it connects to the national rail network. There are also a number of bus stops within 200 metres of the site, served by routes 7 and 7A, which connect the site to Mountjoy Square to the north to Brides Glen Luas/Loughlinstown. A further bus stop at Temple Hill (c. 800 m to the west) is served by routes 4; 46E; 84; 84A. Furthermore, as per the *Dún Laoghaire- Rathdown County Development Plan 2022-2028*, there are existing and proposed bus priority routes within 1km of the site.

The proposed development will be fully accessible for pedestrians, cyclists, and the mobility impaired and disabled. All the surrounding main roads have adequate width footpaths on both sides and crossing facilities at junctions. Along the R119 Monkstown Road footpath width on the south side is approximately 1.8m and between 2-2.5m on the northern side. In terms of cyclist accessibility, cycle facilities are present along the R119 Monkstown Road. These connect to express routes to the city centre along both the Blackrock Road and Coast Road corridors. These major routes are subject to ongoing improvement as part of the implementation of the GDA Cycle Network Plan and the BusConnects programme.

The site is served by an existing schools' network of 16 No. primary schools (incl. 7 No Special education schools) and 8 No. post-primary schools, as well as 31 No. existing childcare facilities within c. 2km of the proposed development. A total of 31 No. operational childcare facilities



were identified within a c. 2km radius of the subject site (equivalent to a c. 15-minutes' drive time). Other adult education and training facilities such as the Lumen Dominican Centre, Dun Laoghaire Community Training Centre, Tivoli Training Centre, and Blackrock Education Centre are also available to local residents. Additionally, there are also third level institutions such as the National Film School, UCD Michael Smurfit Graduate Business School and the Dun Laoghaire Institute of Art, Design, and Technology which are located within 1-2km from the subject lands.

The subject site is supported by a number of local community facilities, including the Urban Junction, Central Dun Laoghaire Senior Citizens, The Beat Youth Café, Blackrock Community Men's Shed, Kill o' the Grange Parish Hall, Boylan Community Centre, Foxrock Parish Pastoral Centre, Holy Family Parish Resource Centre, Mountown Community Facility. The Blackrock Library and the DLR Lexicon are located just over 1km from the subject site.

Extensive open space and recreational grounds are located in the area, including several parks such as Dunedin Park, Vesey Gardens, Temple Park, De Vesci Gardens, Soldiers and Sailors Park, Longford Park, Belgrave Square, and Apna Park (Picnic site) along with the Soldiers and Sailors playground which are located under 1km from the subject lands.

There are also a number of sports facilities such as the Monkstown Pool & Fitness Centre, Blackrock College RFC, Newpark School Sports Centre, Newpark Swimming Pool, Harbour Splash and the Monkstown Swimming Pool in close proximity the subject lands.

The study area is located within c.2km from a number of larger retail centres such as Dún Laoghaire Shopping Centre, Bloomfields Shopping Centre, Frascati Shopping Centre, Blackrock Village Centre, and the Park Pointe Retail Centre along with a few marketplaces such as the Blackrock Market The People's Park Sunday Market and the Blackrock Food Market.

There are also a number of supermarkets and greengrocers in close proximity including, Tesco, SuperValu, ALDI, Lidl, Avoca Food Market, Dunnes Stores, and T. Murphy along with a number of local convenience shops.

#### **2.2.4 Site Specific Flood Risk Assessment (SSFRA)**

As stated in Section 10.3.2 and Section 10.4.2.2 of Chapter 10 (Hydrology), a Stage 3 Flood Risk Assessment was carried out by McCloy Consulting in 2021 for the proposed development site. This flood risk assessment has been carried out in accordance with the OPW publication *"The Planning System and Flood Risk Assessment Guidelines for Planning Authorities"*.

The analysis shows that the majority of the site will not be affected by a 1 in 100 or 1% AEP (Annual Exceedance Probability) year storm event or a 1 in 1000 or 0.1% AEP year storm event and as such is located in Flood Zone C. Small areas to the north of the site lie within the 0.1% AEP floodplain of the Stradbroom Stream (Flood Zone B) and the 1% AEP floodplain (Flood Zone A) as defined in the Flood Risk Management Guidelines. This has been confirmed with the most recent OPW flooding maps (available on [www.floodinfo.ie](http://www.floodinfo.ie)). The development design has taken this into account and the 'sequential approach' has been applied to the existing flood scenario at the site as follows (McCloy Consulting, 2021):



- Highly vulnerable development (residential) has been wholly located in Flood Zone C / outside the 0.1% AEP floodplain (with the exception of 6 m<sup>2</sup> of Block B). It is noted that Block B lies entirely outside the post-development 0.1% AEP floodplain.
- Less vulnerable development (access roads) has been located in Flood Zone C with the exception of the section crossing the watercourse to accommodate site access. It is noted that proposed levels of the watercourse crossing will ensure it lies outside / above the 0.1% AEP flood level.
- Less vulnerable development (car parking) has been site in Flood Zone C as much as possible but sections in the north of the site are by necessity located in Flood Zone A / 1% AEP and Flood Zone B / 0.1% AEP. Finished levels in those areas are subsequently raised relative to adjacent flood levels and have a post-development probability of flooding equivalent to Flood Zone C.
- Open green space (non-amenity) areas are sited within Flood Zone A but are considered appropriate as such under the OPW guidelines.

Furthermore, the site-specific hydraulic modelling has shown that the proposed development will not have any off-site effect / increase in flood risk elsewhere.

### 2.2.5 Existing Site Access

The site is currently accessed via the vehicular entrance to Dalguise House off the R119 Monkstown Road. The site is currently served by a single access point only.

## 2.3 The Need for the Proposed Project

The proposed project, a large-scale residential development, is supported by planning policy at all tiers. The project delivers a significant number of new homes as required to meet housing objectives outlined throughout the relevant policy documents. The relevant national, regional and local planning policy is outlined in Chapter 3 (Planning and Development Context) and further in the supporting planning documentation.

The Applicant GEDV Monkstown Owner Limited will operate the proposed scheme as part of the Greystar group. Greystar is the global leader in rental housing; it provides a full suite of services from design, development and operation of high-quality residential assets worldwide, with developments in Europe, North and South America, Asia and Australia. With over 750,000 units managed globally, Greystar has been delivering residential rental opportunities for over 30 years and has been operating in Ireland since 2019.

Greystar currently operates two schemes in Ireland:

- Griffith Wood, Dublin 9 (342 No. units) operational since December 2021; and
- Dublin Landings, North Wall Quay (268 No. units) operational since December 2019.

Dalguise will be the first scheme in Ireland that Greystar have brought from design to operation. The scheme will reflect Greystar's long-term experience as a world class operator and will deliver the quality of residential units and associated amenities that residents of Greystar's schemes expect within an accessible, high-quality environment all of which result in an exceptional living experience.



Greystar are long term operators and holders of residential communities. This is a very different approach to other developers in the market whose investment ethos is to sell on completion. Greystar is highly motivated by the long-term success of the scheme as a high quality, well integrated residential community that is directly managed by a team of on site, directly hired personnel.

Greystar's central management system is critical to its success. Each development has dedicated on-site staff, who provide a 24-hour service. This ensures that any repairs or operational difficulties can be addressed promptly. Management staff are familiar with the specific development and residents, which also improves residents' experiences and supports Greystar's high-quality services. The on-site management also ensures that car, motorcycle and cycle parking can be managed effectively, and that mobility measures set out in a Travel Plan can be implemented successfully.

The provision of publicly accessible services such as the Restaurant, Childcare Facility and public open space accords with Greystar's goals to integrate their developments with the local community and area.

The Applicants for this scheme are market leaders in the delivery and operation of Build-to-Rent (BTR) developments and they consider this development will be their flagship development in Ireland and that it will set the standard for BTR developments in the country.

Furthermore, the Applicant (GEDV Monkstown Owner Limited) is making a significant positive contribution towards enabling an affordable housing sector in Ireland. As part of the proposed development, the applicant is providing 20% of units for social and affordable homes in accordance with the Affordable Housing Act 2021.

## **2.4 Overview of Construction Phase and Construction Works**

For full construction related details, refer to the *Construction Environmental Management Plan (CEMP)* prepared by ByrneLooby and Roughan & O'Donovan Consulting Engineers. A summary is provided below.

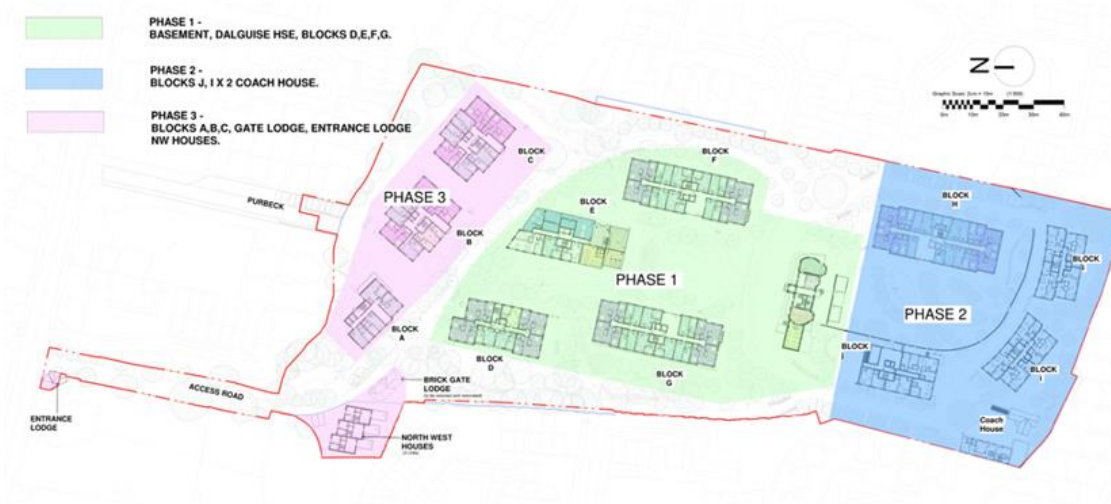
### **2.4.1 Construction Phase**

The construction of the project is planned to take between 36 to 42 months. The current phasing suggests that the project will be split into three phases, with the accompanying infrastructure and green spaces being constructed with each phase. Please refer to Figure 5.1 of the CEMP for proposed indicative construction phasing details.

The substructure works in Phase 2 will commence once the excavations of the basement within Phase 1 have advanced. The proposed bridge at Purbeck shall be constructed during Phase 1. The refurbishment works to Dalguise House and the Coach House buildings will be in Phase 1, with the works in parallel by a specialist contractor with suitable experience working on Protected / Historic structures. The installation of buried services and landscaping works shall be coordinated with the building substructure works, and the programming of the works shall be scheduled depending on the dismantling of scaffolds to buildings, the suitable planting period etc.



The final phasing and associated Construction Traffic Management Plans shall be submitted by the appointed Contractor to Dún Laoghaire Rathdown County Council for approval prior to commencement.



**Figure 2.1: Illustrative Plan showing proposed construction phasing.**

### 2.4.2 Proposed Construction Works

The proposed development will be divided into a number of phases as set out in the preceding section. Works in each phase will consist of the following:

#### Phase 1:

Phase 1 will incorporate the construction of the basement. As noted in the site investigation, bedrock should not be encountered during excavations. The majority of the excavations can utilise battered excavations, but some vertical temporary retaining walls will be required along the northern and western boundaries in close proximity to existing trees to be retained. The temporary retaining walls will include bored piles. All excavation banks shall be protected and inspected regularly. The foundations in the basement area will be integral to the basement slab. Some anti-flotation anchors may be necessary at basement level, below podium areas, and this will be subject to further monitoring of the groundwater levels over the coming period. The superstructure will then be constructed from the podium level, as outlined in the following sections.

Access to this phase will be via the existing roadways, with a cellweb build-up provided on roadways that overlay with the tree Root Protection Zone (RPZ). The bridge crossing at the Stradbroom Stream will also be constructed in this initial phase.

#### Phase 2:



The excavations at Phase 2 will overlap with the completion of excavations at Phase 1. As noted in the site investigation, bedrock should not be encountered during excavations, and the bulk dig in Phase 1 shall be achieved using battered slopes to a safe angle of repose. All excavation banks shall be protected and inspected regularly. Excavations near trees to be retained shall incorporate specific construction techniques as outlined by the Arborist.

The foundations in Phase 2 shall consist of shallow reinforced concrete strips or pad foundations. The superstructure will then be constructed from the foundation, as outlined in the following sections. Access to this phase will be via the existing roadways. An existing septic tank serving Dalguise House will be removed at the footprint of Block J. The site investigations to date do not indicate any contamination in the area, however, a Remediation Plan as set out in the Engineering Services Report shall be implemented for the removal of the tank and backfill.

### **Phase 3:**

Phase 3 will include the construction of the final blocks. As with Phase 1, some of the excavations are adjacent to existing trees to be retained, and as a result, a temporary retaining wall shall be employed along the southern boundary of Block A, B and C. The foundations in the basement area will be integral with the basement slab. Some anti-flotation anchors may be necessary at the undercroft level, below podium areas, and this will be subject to further monitoring of the groundwater levels over the coming period. The superstructure will then be constructed from the podium level, as outlined in the following sections. Access to this phase shall be via a new temporary roadway constructed with a CellWeb buildup over RPZs. Finally, any temporary piling platforms will be agreed in advance with the Arborist.

### **2.4.3 Construction Working Hours**

Unless required otherwise by Dún Laoghaire-Rathdown County Council, it is proposed that standard construction working hours should apply, i.e.: 7am to 7pm Monday to Saturday. No works shall take place on site on Sundays or Bank Holidays.

If there is any occasion where work may be carried out outside normal daytime working hours, Dún Laoghaire-Rathdown County City Council, local residents and businesses in the area which are likely to be affected by the proposed works will be notified in advance.

The Project Supervisor Construction Stage (PSCS) will liaise with the Client to agree specific arrangements for activities outside of normal working hours that will minimise the risk and disruption to residents and members of the public. All reasonable precautions will be taken for the operation of plant and equipment to avoid nuisance and excess noise impact on the surrounding residents.

## 2.4.4 Construction Traffic

The works associated with the new development will result in additional traffic on the neighbouring road network, with vehicle movements associated with the removal of excavated material, demolition waste, construction waste, and the delivery of new materials, concrete trucks etc.

The primary access routes to the site shall be determined by the Contractor in their Construction Traffic Management Plan (CTMP). Primary vehicle movements shall be limited to access/egress via the existing access to the Dalguise House lands off Monkstown Road. The Contractor will identify primary access routes that provide the most direct access to the M50 and limit access along local roads. Based on the quantities of excavation and fill to be moved to or from the site, construction waste removal, and general site deliveries for the intended construction works, HGV traffic is estimated to be a maximum of 10 movements per hour. The figures below identify two routes to/from the site to the M50.

- Route 1 (Accessing the site, same return trip): Via the M50 onto the N31 at Leopardstown, left onto the N11 (Stillorgan Road), right onto N31 (Mount Merrion Avenue), right onto Frascati Road, left on to R119 (Monkstown Road).

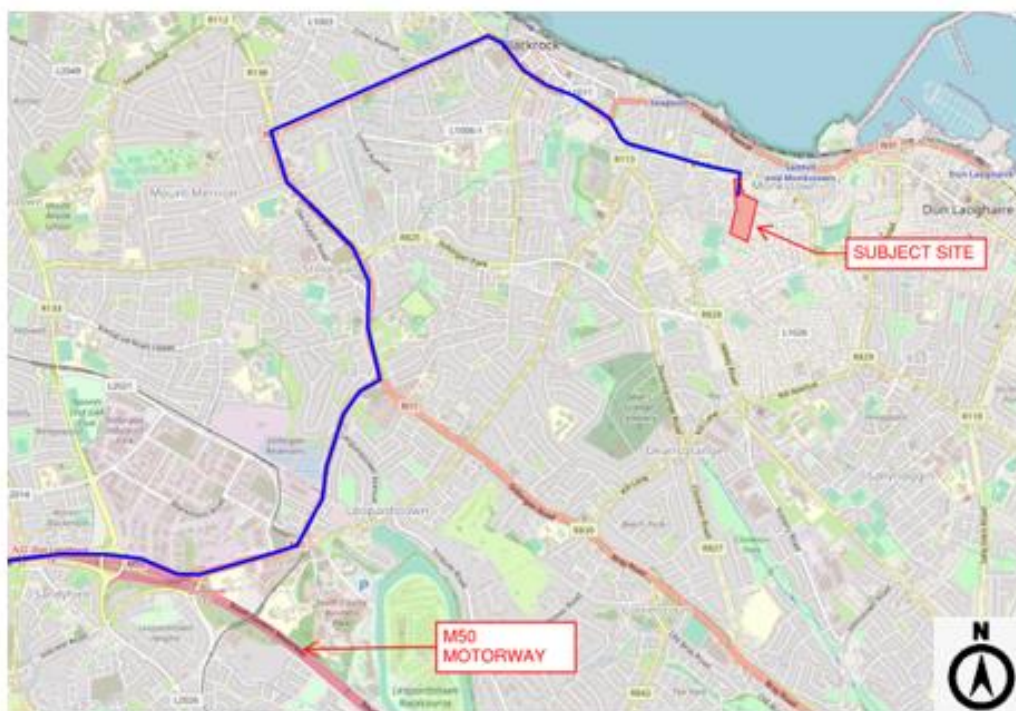


Figure 2.2: Construction Route 1 (Source EPA Maps).

- Route 2 (Accessing the site, same return trip): Via M11/M50 to the south, onto the N11 (Bray Road) through Cherrywood / Cornelscourt onto the Stillorgan Road, right onto N31 (Mount Merrion Avenue), right on to Frascati Road, left on to R119 (Monkstown Road).

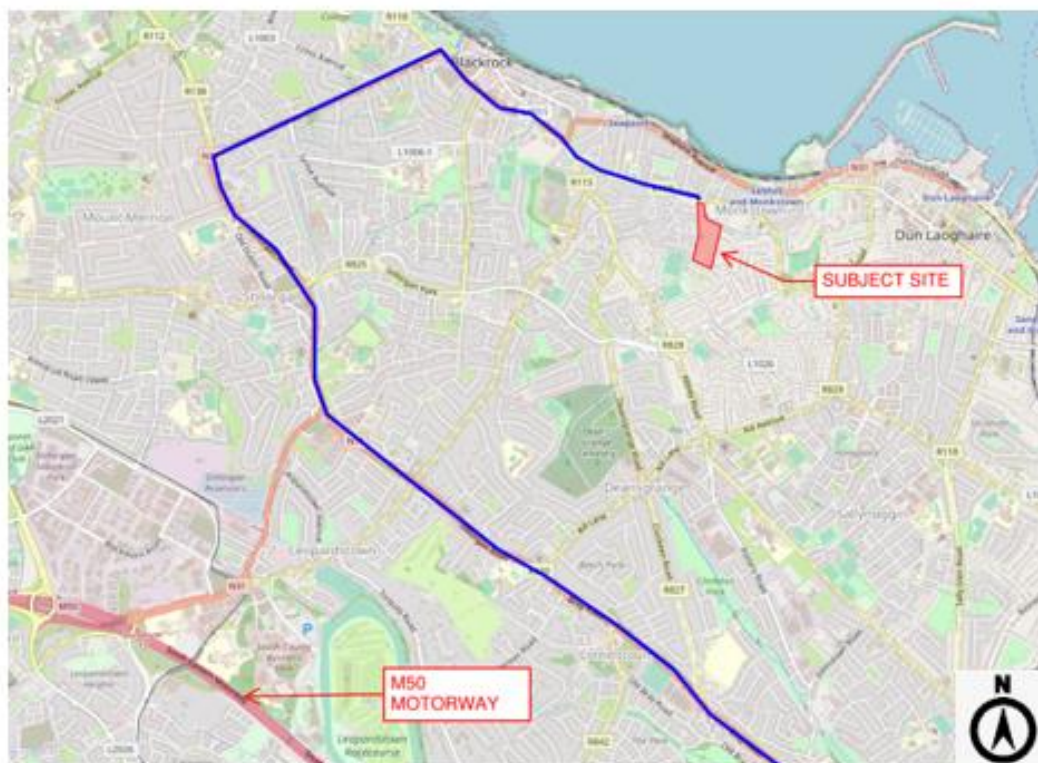


Figure 2.3: Construction Route 2 (Source EPA Maps)

The following are some measures that will be implemented to accommodate smooth traffic flows:

- Entrance will be wide enough to ensure two rigid-body vehicles can pass each other. Where this is not possible, suitable laybys with a temporary one-lane traffic light system shall be provided, with priority to vehicles entering the site.
- Site entrance gate will be set back a minimum of 18m from the footpath edge to ensure all vehicles leave the road before stopping.
- Appropriate sight lines will be provided;
- Advanced warning provided to all users on the road and directional signage for site traffic.

Detailed measures shall be developed further as part of the CTMP developed by the Contractor in consultation with the Design Team and Dún Laoghaire Rathdown County Council prior to commencement of works.

The principal objective of the CTMP is to ensure that the impacts of all building activities generated during the construction of the proposed development upon both the public (off-site) and internal (on-site) worker's environments, are fully considered and proactively managed/programmed respecting key stakeholders requirements thereby ensuring that both the public's and construction workers safety is maintained at all times, disruptions minimised and undertaken within a controlled hazard free / minimised environment. It is noted that the impact of the construction works will be temporary in nature.





The CTMP shall be prepared in accordance with the principles outlined below and shall always comply with the requirements of:

- Chapter 8 of the Department of the Environment Traffic Signs Manual, current edition, published by The Stationery Office, and available from the Government Publications Office, Sun Alliance House, Molesworth Street, Dublin 2;
- Guidance for the Control and Management of Traffic at Road Works (June 2010) prepared by the Local Government Management Services Board; and
- Any additional requirements detailed in the Design Manual for Roads and Bridges & Design Manual for Urban Roads & Streets (DMURS).
- In order to ensure satisfactory operation of the construction stage the following is proposed:
- Provision of sufficient on-site parking and compounding to ensure no potential overflow onto the local network.

Site offices and compound shall be located within the green space area just south of Dalguise House. The site will be able to accommodate employee and visitor parking throughout the construction period with construction of temporary hardstanding areas.

Finally, truck wheel washes will be installed and any specific recommendations regarding construction traffic management made by the Local Authority will be adhered to. The following mitigation measures shall be incorporated into the CTMP:

- During the pre-construction phase, the site will be securely fenced off from adjacent properties, public footpaths and roads.
- The surrounding road network will be signed to define the access and egress routes for the development.
- The traffic generated by the construction phase of the development will be strictly controlled in order to minimise the impact of this traffic on the surrounding road network.
- All road works will be adequately signposted and enclosed to ensure the safety of all road users and construction personnel.
- All employees' and visitors' vehicle parking demands will be accommodated on-site.
- A programme of street cleaning if/when required.
- Any associated directional signage
- Any proposals to facilitate the delivery of abnormal loads to the site
- Measures to obviate queuing of construction traffic on the adjoining road network.

#### **2.4.8 Health and Safety**

The site will be made secure during each phase by implementing the following measures:

- Operate a site induction process for all site staff.
- Ensure all site staff shall have current 'safe pass' cards.
- Install adequate site hoarding to the site boundary.
- Maintain site security staff at all times.
- Pedestrians will have right of way. If required, alternate pedestrian routes around the site will be created and clearly signed.
- Ensure restricted access is maintained to the works.



## 2.4.9 Construction Waste

Construction waste arising from the proposed development will be handled in line with the *Resource & Waste Management Plan for A Residential Development* prepared by AWN and enclosed as Appendix 18.1 of this EIAR.

## 2.5 Description of the Operational Phase of the Proposed Project

In summary, the proposed development is a Large Scale Residential Development comprising 3 No. two storey 3-bed terraced houses (GFA 569 sq m), and 488 No. Build-to-Rent units (consisting of 2 No. studio units; 288 No. 1-beds; 32 No. 2-beds/3 persons; 153 No. 2-beds/4-persons; and 13 No. 3-beds) (with an option for the use of 4 No. of the BTR Units to cater for short-term stays of up to 14 days at any one time to cater inter alia for visitors and short-term visits to residents of the overall scheme) residential amenities and residential support facilities; a childcare facility; and restaurant/café.

The table below provides the key development statistics.

Development Statistic	Proposed Development
Site Area	3.58 ha
No. of Residential Units	491 (488 no. apartments and 3 no. houses)
Density	137 units per hectare
Height	3 – 9 storeys
Dual Aspect	53%
Balconies	63%
Plot Ratio	1.31
Site Coverage	22%
Car and Cycle Parking	224 no. spaces (20 no. undercroft car parking spaces, 148 no. basement car parking spaces, 42 no. surface car parking spaces, 8 no. car spaces for food & Beverage, 6 no. Creche car parking spaces)  1, 071 no. Bicycle Spaces

### 2.5.1 Demolition

The demolition and part-demolition of existing structures (total demolition area 967 sq m), including:

- White Lodge a 2 storey house (192 sq m);
- Swimming pool extension to the southeast of Dalguise House (250 sq m);
- Residential garage and shed to the southwest of Dalguise House (285 sq m);
- Lean-to structures to the south of the walled garden (142 sq m);
- Part-demolition of Lower Ground Floor at Dalguise House (9 sq m);





- Demolition of single storey extension to the south of the Coach House (29 sq m) and three ancillary single-storey structures (8 sq m, 8 sq m, and 31 sq m) within the yard;
- Demolition of potting shed (13 sq m);
- Removal of 2 no. glasshouses; and
- Alterations to, including the creation of 3 No. opes and the removal of a 12.4 m section of the walled garden wall to the east.

## 2.5.2 Residential Development

The development with a total gross floor area of approximately 46,940 sq m (including a basement of 5,230 sq m and undercroft parking 1,344 sq m; and 45,712 sq m of new build, excluding the retained existing buildings of 1,228 sq m), will consist 491 No. residential units, comprising:

- 3 No. two storey 3-bed terraced houses;
- 488 No. Build-to-Rent units, residential amenities and residential support facilities;
- A childcare facility; and restaurant/café.

The proposed housing mix is as follows:

	Apartments	Houses	Total	
<b>Studio</b>	2		<b>2 (0.4%)</b>	
<b>1 bed</b>	288		<b>288 (58.6%)</b>	
<b>2 bed</b>	78		<b>78 (15.8%)</b>	
<b>2 bed (3 person)</b>	27		<b>27 (5.4%)</b>	
<b>2 bed (4 person)</b>	80		<b>80 (16.3%)</b>	
<b>3 bed</b>	13	3	<b>2.6 (%)</b>	<b>3 (0.6%)</b>
	<b>488</b>	<b>3</b>	<b>491</b>	

The proposed residential units will be arranged as follows:

### **Northwest Houses**

The proposed development includes 3 No. 3-bed terraced houses located at the north west of the site at the main Dalguise House entrance. The 3 no. houses are two-storey in height and have a total gross floor area of 569 sq m.

### **Block A**

Block A is located at the Purbeck entrance to the south of the site and is 7 storeys in height. The building has a gross floor area of 2, 015 sq m and comprises a creche, which is 540 sq m



over Ground and First Floor Levels; and 19 no. apartment units, including 15 No. 1-beds and 4 No. 2-beds.

### ***Block B & Block C***

Block B & Block C are located to the south of the site at the main vehicular entrance and are 7 storeys over undercroft parking. Each building has a gross floor area of 3,695 sq m and comprises 48 no. apartment units (total 96 no. apartment units) including, 33 No. 1-beds, 6 No. 2-beds/3 persons, and 9 No. 2-beds/4-persons in each block.

### ***Block D***

Block D is located at the access to the site to the east and is 7 storeys over basement level car park. The building has a gross floor area of 4,150 sq m and 50 no. apartment units, including 24 No. 1-beds, 26 No. 2-beds.

### ***Block E***

Block E is located in the centre of the southern part of the site and is 9 storeys over a basement level car park. The building has a gross floor area of 5,904 sq m comprising:

- 66 No. apartment units including 40 No. 1-beds, 26 No. 2-beds;
- Residents' support facilities including a concierge/lobby (75 sq m);
- Residents' amenities (gym, yoga studio, residents' lounge/co-working space; lobby 494 sq m) at Ground Floor Level; and
- Residents' amenities (residents' lounge; games room; screen room; private lounge; kitchen 333 sq m) with roof terrace (106 sq m) at Eighth Floor Level.

### ***Block F and G***

Block F and G are the central blocks flanking the main lawn area creating a formal setting to Dalguise House. Each building is 7 storeys over basement level car park and has a gross floor area of 5,469 sq m. Each building contains 76 No. apartment units including 46 No. 1-beds, 5 No. 2-beds/3 persons, 23 No. 2-beds/4-persons, 2 No. 3-beds.

### ***Block H***

Block H is located at the southern end of the site and forms a courtyard with the walled garden. The building is 5 storeys over lower ground and has a gross floor area of 4,252 sq m. The building contains 54 No. apartment units including 30 No. 1-beds, 22 No. 2-beds and 2 No. 3-beds.

### ***Block I (1 & 2)***

Block I (1 & 2) are mews style apartment buildings located at the southern end of the site behind the Garden Wall. Each building is 3 storeys with a gross floor area of 1,038 sq m. Each building comprises 12 No. apartment units including 3 No. 1-beds, 2 No. 2-beds/3 persons, 7 No. 2-beds/4-persons.



### ***Block J***

Block J is a mews style apartment building located at the southern end of the site to the west of the Garden Wall. The building is 4 storeys in height and has a gross floor area of 1,844 sq m. It comprises of 20 No. apartment units including 13 No. 1-beds and 7 No. 3-beds.

### ***Dalguise House and other Historic Buildings***

The development includes the refurbishment, adaptation and reuse of the two storey Dalguise Lodge (Entrance Lodge) (GFA 55 sq m) comprising residential support facilities; a single storey Gate Lodge (GFA 55 sq m) comprising 1 No. 1-bed unit; and two storey Coach House and single storey Stableman's House (GFA 319 sq m) to provide 3 No. apartment units (1 No. 1-bed, 2 No. 2-bed/4 persons).

The refurbishment, adaptation and change of use of Dalguise House (GFA 799 sq m) from a single residential dwelling to provide: 3 No. apartment units (2 No. studios and 1 No. 2-bed/3 person) at First Floor Level; a restaurant/cafe at Lower Ground Floor Level (GFA 273 sq m); and residents' amenities at Ground Floor Level (library, residents' lounge, events space, bar/bookable room, 157 sq m).

Works to the existing structures include: removal of existing internal partitions and doors, alterations to internal layout including provision of new partitions and doors to Dalguise Lodge (Entrance Lodge); the removal of the western chimney and chimney breast, removal of existing internal partitions and doors, and alterations to internal layout including provision of new partitions and doors to Gate Lodge (Brick Lodge); replacement of existing roof, windows and doors, non-original mezzanine floor and stairs of Coach House, creation of new internal and external opes, reconstruction of chimney, construction of new stairs, provision of new internal partitions and doors, replacement of the demolished single storey structure to south of Coach House with a 42 sq m single storey extension, including construction of a link between Coach House and Stableman's House; replacement of existing roofs, windows, doors, creation of new external opes and provision of new internal partitions and doors to Stableman's House; restoration of Coach House yard walls; removal of security bars from windows, internal partitions, doors, two secondary staircases, non-original fireplaces; and the reconfiguration of internal layout including introduction of new partitions, doors and fireplaces, in-fill of former secondary staircases; removal of an existing window at rear facade of Lower Ground Level, alterations to ope and replacement with a new external door; reinstatement of external wall fabric in place of demolished lean-to at the rear facade; and removal of external door to swimming pool on eastern facade and closure of ope at Dalguise House).

### **2.5.3 Non-Residential Development**

The proposed development will deliver non-residential provision which includes the proposed café/restaurant (273 sq m) located at the Lower Ground Floor of Dalguise House at the center of the site, and the creche (540 sq m), located at the ground and first floor of Block A at the Purbeck entrance to the site.

The proposed non-residential uses will serve both the residents of the proposed development and be accessible to the existing community.



## 2.5.4 Landscape Strategy and Design

The proposed landscape strategy has been developed by the landscape architects in close collaboration with other disciplines in the design team. Focus was placed on retaining the existing trees on site where possible with minimal re-grading in root protection areas. Therefore, this has impacted the distribution of the communal open space and public open space.

The general landscape design objectives are to:

- Establish a high-quality parkland space that is in keeping with the historical era of Dalguise House.
- Retention and enhancement of existing historical features such as the tree lined avenue approach to Dalguise House, the house lodges, stable buildings and the walled garden.
- Retention of high-quality mature trees, and increased tree planting
- Maximise views towards the protected coastline and views towards the historical Dalguise House
- Create a predominantly public landscape with open space for locals and visitors to enjoy with greater permeability and accessibility to the wider townscape.
- Facilitate pedestrian/cycle links with the wider neighbourhood.
- Introduce environmental elements that residents and visitors can interact with and learn from.
- Increase biodiversity and management of the site.
- Introduce SUDS in a way that benefits amenity
- Minimal intervention is being sought with manicured areas only where it would be in keeping from a historical perspective.

### ***Proposed Tree Planting Species***

There are a large range of trees on site including native, ornamental varieties and complimentary species. There is also a range of tree ages and condition with the majority of trees being mature and of fair condition as per the submitted Tree Survey prepared by Leinster Tree Services.

The scheme proposes to use many of the same species as the existing trees with some additional complimentary species to increase biodiversity and sustainability of tree cover. Tree species were selected based on suitability to local soil conditions and microclimate, longevity and biodiversity.

Proposed trees have been categorised into different types for different positions/areas within the landscape masterplan. These include:

- Large parkland trees
- Native/naturalistic trees
- Ornamental trees
- Swale trees
- Edible trees
- Main avenue trees



Trees planted will be a combination of Mature and Semi-Mature species. Clear Stem Trees will be specified to have a range of sizes: 60-70 Girth for the Large Parkland Trees, 40-45 Girth 30-35 Girth for other categories. These will have a minimum of 2m clear stem.

Multi Stem Trees will be specified to be at least 4-5m high with canopy lifted by at least 1m. Espaliers will be 3-4m high.

Where possible trees will be planted in tree pits as part of the SUDs strategy and to increase the health of the trees. This will not be possible where there are root protection zones. Trees within the podium will either be planted in raised landscape mounds or within raised planters to ensure they receive enough build up for healthy, sustainable growth.

### ***Proposed Overall Planting Species***

The soft landscape strategy proposes seeding the majority of grass areas with a long meadow mixture with the exception of the central lawn area and grass within 1m of paths/roads, which will have a shorter flowering lawn mixture. Grass mixtures along swales and pond edges will consist of a suitable wetland species. Woodland floors will remain as is, apart from where there is too much disruption to the understorey. In these areas a woodland meadow mix will be seeded.

Along the main avenue there will be some bulb planting punctuating the route in areas and bulb planting will also be used selectively in the main garden areas and central lawn.

Along the periphery of the site native shrub planting and hedges will be introduced in areas that are free from root protection zones.

Edible plants (all edible forest layers) will be specified within the walled garden and climbers will be planted at the base of the walled garden wall and entrance archways to achieve a secret garden character.

Ornamental planting is proposed directly around the blocks, in some areas this will be low level planting to account for lower build ups and a no dig planting method within root protection zones. In other areas this will also include taller species to allow for more structural interest. Marginal (both dry and wet), emergents and submerged aquatics will be proposed around the pond area, whereas dry swale species will be used along the slopes of the dry swales. A mix of sedum and biodiverse roof planting will be planted within the green/blue roofs and sedum boxes will also be provided on the tops of bicycle sheds.

Specifications of healthy, full specimens at a density that allows for instant impact will ensure that the site feels like a mature landscape from the start. Species are selected based on their suitability of particular positions – dry swales / shade etc. in addition to their aesthetics and ecological criteria.

Refer to the Landscape Soft works drawings (C0135 L300 series) submitted for the planning application by Cameo+Partners.



### ***Hard Landscaping***

The hard landscape elements have been carefully selected to for their proposed function and durability, and their ability to enhance the space and honour its historical parkland character. In parts of the site where there are lots of existing trees and therefore root protection zones, paving that can be laid using a no dig construction method has been favoured. Sustainability has also been a key consideration with a desire to use as much of the high-quality materials on site as possible. Materials that will benefit the SUDs strategy have also been proposed where possible, such as permeable resin bound paving, permeable concrete blocks, gravel suds pavers and reinforced grass.

The main avenue will be resurfaced with a buff macadam over the existing tarmac, this will repair the surface and create a shared surface aesthetic that is fitting for its parkland setting, but also durable and fit for purpose. As it will be laid on top of the existing tarmac it will have less impact on root protection zones. Main paths closer to the residences will be permeable resin bound gravel, and woodland paths will be laid with loose bark chip and timber edging using a no dig construction to protect tree roots. Where raised decking, bridges and elevated walkways are necessary composite timber decking will be used to ensure longevity. With timber being used for structures within the woodland – such as the yoga platform, elevated bird hide and elevated tree walk.

The existing granite cobbles from the path that leads up to Dalguise House will be retained and used around the main house. These will be supplemented with new granite cobbles, (chosen to match existing), and used around the Coach House. Private terraces will be laid with granite flags. The two other feature paving areas, such as the area around the outdoor pavilion within the central lawn and the terraced gardens will consist of large high quality, polished concrete slabs with gravel joints. These materials should complement and further enhance the existing hard materials and natural surroundings.

Reinforced grass system will be used for the Fire emergency route that runs up the northern slopes in addition to various road widening passing bays along the main avenue to help retain the parkland character of the site at these points.

### ***Play Strategy***

The play strategy proposes three different types of play experience within the site:

- Play off the ground (160 sq m) - Play which is mainly elevated off the ground to ensure minimal disruption to root protection areas and a different level of interaction with the existing trees and canopy. This includes the tree top walk and elevated play nets.
- Natural looking & sculptural play (903 sq m) - Play made out of timber and stone which feels in keeping with its natural environment. This includes Stepping Stumps, Existing Fallen Logs, Timber Climbing Ramp, Logs, Play Boulders, Jumping Discs, Timber Stilted Balance Beam.
- Naturally occurring play (1344 sq m) - Play encouraged by landscape features - such as depressions and mounds, slopes, dry swales, woodland, wildflowers.

This amounts to 2,407 sq m of playable landscape across the masterplan, some of which is within the public open space and other areas that fall within the communal space. The play





areas are spread across the site, with most of the areas provide a variety of equipment that appeals to different ages - 0-5yrs, 5-11yrs, and 11yr plus. The exception to this is the smaller play areas to the north that only contain equipment for 0-11yrs. The elevated tree walk will not be restricted to certain ages, but adult supervision will be necessary for under 5yrs.

The proposed play equipment will be designed and manufactured in accordance with standards EN 1176 and EN 1177. There will be a mix of impact absorbing play surfaces including loose bark mulch in areas of root protection zones and bonded rubber mulch that looks like bark mulch within the gardens where root zones are not impacted. Within the walled garden a high quality artificial grass will be used as the play safety surface to ensure that it is fitting with the Walled garden character.

A list of all play equipment can be found within the landscape package prepared by Cameo+Partners and included in this planning application.

### ***Environment Strategy***

As per Criterion 4, in accordance with the requirements of DLRCC all new developments are to incorporate the principles of 'SuDs'. The aim of 'SuDs' inclusion across the development is to provide an effective system separate from the foul network to mitigate the adverse effects of storm water run-off on the environment, through enhanced quality systems and on local infrastructure to aid in preventing downstream flooding. The features proposed shall reduce runoff volumes, pollution concentrations and enhance groundwater recharge and biodiversity.

The proposed development 'SuDs' features shall consist of:

- a) **Green/Blue-roof** – The proposed system is a ACO Roofbloxx Blue roof system, this allows the roof areas of the proposed apartments to use a filter layer to direct rainfall events into a storage layer below. An 85mm space will be provided for rainfall to be retained in the storage layer. As more intense rain falls on the blue roof can overflow from the roof through down pipes and into the schemes main drainage runs. The storage area will be covered with a sedum topsoil to increase the water retention on each roof.
- b) **Permeable Paving** – This system allows rainwater to be directed into carparking bays whereby the rainwater can filter through gaps in the paving blocks and percolate into the subsoil or to swales. The area which can be drained is subject to the infiltration characteristics of the subsoil, (Reference Ground Investigation Report Appendix 9.2) which is established following ground investigation testing on site.
- c) **Tree Pits** – Tree pits will be located along the existing avenue to capture runoff for the existing hard standing area. It is proposed that the tree pits will be connected and act like an attenuation basin where the water can then be released slowly into the storm network.
- d) **Swales and pond** – It's proposed to allow storm water to be directed locally into swales when the permeable paving is overflowing to delay storm water from entering the main drainage network. As the swales overall can only accommodate relatively small surface areas across this site, the proposal cannot be used to drain the site as a whole, but will be installed to contribute to the overall 'SuDs' strategy.



- e) **Filter Strip** – An area of the existing road will have a filter strip located to the North to capture road runoff for small rain fall events. This allows run-off from localised hardstanding areas to be filtered and trap silt prior to entering the storm network.
- f) **Attenuation Tanks** – As noted above, for extreme storm events, a dedicated system to contain the storm water flows generated during a 1-in-100-year storm, increased by 20% for climate change are required by DLRCC. It is proposed to use underground storage tanks in three locations for this purpose see Drg. No. W3683-DR-1018 prepared by ByrneLooby Consulting Engineers.
- g) **Low Water Usage Appliances** – It is also worth highlighting that low water usage appliances should also be utilised to aid in the reduction of water usage on the development.

With the above SUDs provisions, it meant that oil separators are not required prior to final disposal of storm water from the development drainage network into the Stradbroke Stream (at two locations).

The combination of the above noted elements will allow the proposed development to adhere to the principles of sustainable drainage practices while enhancing overall storm water quality.

### 2.5.5 Public Open Space

This landscape consists of a sequence of different open spaces that are open to the public. Not all of these are accessible for all - due to the steep topography of the existing site and the desire to retain as many high value trees as possible and therefore undertake minimal regrading within root protection zones.

However, the landscape masterplan does provide 6,350 sq m of public open space that is accessible and usable by all, well over and above the 15% requirement of 5,370 sq m. This includes the following areas:

- The central lawn; this area comprises of a formal lawn with meadow planting and mounds to the sides, circuitous paths edged with rills and planting beyond. It includes an outdoor pavilion with indoor and external seating opportunities and other opportunities for seating within the lawn, with great views towards Dalguise House, framed by the trees. There is no play equipment in this area, but the landscape mounds and meadow and rills will provide a playable landscape.
- The garden between Blocks E & F; this area includes a raised timber deck to the north of Block E with tables and chairs and a more enclosed garden and play area which is characterised in part by the existing mature tree at its centre and also by the provision of another mature tree (Scotts Pine) rising up from a hole in the podium/basement floor.
- The woodland area west and north of Block G; this area comprises of several play nodes at ground, the elevated walkway and elevated play nets and the surrounding woodland landscape.
- The Walled Garden; this area includes the terrace directly to the south of Dalguise House which has provision for outdoor eating and drinking with views of the house to the north and the restored wall garden to the south. It also includes the regenerated walled garden. The Walled Garden will be split into a more active area with play to the north and a quiet, reflective space to the south, where people can grow and pick edible plants and rest in this sheltered spot. Plant beds will contain mainly edible



plants and trees, including herbs, fruits, nuts and vegetables, but also plants of botanical interest. An edible forest approach will be used with the trees planted in an orchard style. The walled garden wall will be retained and lengthened while access into the walled garden will be at points where there is already a break in the wall. The two existing trees of value will be retained within the design. There will be interesting structures within the garden - such as a long pergola trained with fruit trees. Along the paths there will be benches for rest and relaxation. Within the planting there will be areas for beehives, insect hotels and bird tables. Growing information boards will be positioned in key areas to educate people about the edible forest approach

### 2.5.6 Communal Open Space

The proposals allow for 3,880 sqm of communal open space (above the required 3,869 sqm based upon the communal open space for the apartments and the additional communal open space to compensate for units without, or with a shortfall in private open space). This includes the following:

- The garden area between Blocks D & E; which consists of a play area with water play, seating provision, and associated planting including a raised planter.
- The communal roof terrace on Block E, which includes outdoor dining and seating provision enclosed within raised planters with views of the coastline to the north and a viewing deck.
- The courtyard by the Coach House
- Woodland areas to the north and south of the site that include resting and play opportunities and sculpture interspersed within the woodland environment.
- In most places informal boundaries exist between public open space
- 

### 2.5.7 Access

The site is currently accessed via a driveway from the R119 Monkstown Road. This access point leads to the historical winding avenue that leads up to Dalguise House. The road is currently narrow and not conforming to standards for a two-way route. Increasing the width of this road for two-way traffic would have a detrimental effect on the existing trees. Therefore, another access route through the adjoining Purbeck development is proposed. This new access route will be the main vehicular access and lead directly into the basement of the development where there will be underground parking. This was heavily influenced by the desire to retain as many high value trees as possible in this part of the site.

The existing winding avenue that leads up to Dalguise House will be repaired and resurfaced with Buff macadam, but this will be done on top of the existing surface, so further excavation will not be necessary. In most areas the width of the original road will be retained with distinct incidences of road widening for passing bays. However, these passing bay areas have been carefully chosen so as not to encroach on existing root protection zones. The road will act as a shared surface, and not be the main vehicular route into the development, therefore widening the road for a pavement is not necessary.

Another objective for the site was increasing cycle and pedestrian permeability. Three additional access points are proposed within the new landscape masterplan, two to the east



and one to the west to link the site with the adjoining neighbourhoods, so that it is easy for the locals to benefit from the new amenity of the site. The access route to the west and the southern eastern access will enable cycle access in addition to pedestrian access with a wide gate and paths leading on from these access points.

The third access point to Cheshire Homes development to the northeast will be for pedestrians only, as here narrower 1.2m bark chip paths connect with the site so as not to interfere with root protection zones. All pedestrian/cycle access points will be secured with lockable cast iron gates, but these are intended to stay open for the majority of the time.

Provision is made in the landscaping proposals for potential future pedestrian and cycle connections that would facilitate permeability through the site boundaries with the residential estates of Arundel and Richmond Park, respectively, and the former Cheshire Home site, subject to agreement with those parties and/or Dún Laoghaire-Rathdown County Council, as appropriate.

These proposed access points can be seen on the General Arrangement Drawing supplied by Cameo+Partners Ltd as part of the submission.

### 2.5.8 Car Parking and Cycle Parking

The proposed development provides car parking for both the residential and non-residential components of the scheme, totaling in 227 no. spaces, comprising:

- 212 no. residential spaces
- 8 no. food & Beverage car spaces
- 7 no. creche spaces

The parking proposal also includes 12 no. cargo bike spaces and 8 no. motorcycle spaces.

In terms of cycle parking, the total residential cycle parking provision will be 713 no. long stay spaces and 346 no. short stay spaces (a total of 1,071 no. spaces).

### 2.5.9 Site Utilities

#### *Foul Infrastructure*

The wider area is served by the Ringsend Wastewater Treatment Plant, which has treated Dublin's wastewater since 1906 and is the largest plant in Ireland providing 40% of the Country's treatment capacity (water.ie). The plant includes secondary treatment with capacity PE of 1640000 (EPA Maps, 2022). There are no other EPA licenced waste-water treatment facilities within 10 km of the site.

The Irish Water service drawings identifies that a main combined sewer exists running under on the line of the Stradbrook/Monkstown Stream was obtained. The main is a 450mm diameter vitrified clay (VC) line flowing towards Carrickbrennan Road with an existing manhole for connection 1 at the Western end of the Purbeck Lodge and Dalguise House site



intersection while proposed connection 2 is adjacent western boundary to the Drayton Close estate.

A further 450mm diameter Irish Water/ DLRCC Vitrified Clay (VC) combined line exists, which runs from the Monkstown Valley development onto the application site, current entrance/exit roadway, and onto Monkstown Road, down Albany Avenue before connecting onto a main combined line on Seapoint Avenue.

Dalguise House is served by a separate septic tank and percolation area located in the lands outside to the Walled Garden on the western boundary. This will be removed during the construction phase.

### ***Water Supply***

Irish Water is responsible for managing and delivering water services to homes and businesses served by Public Water Supplies and Wastewater Agglomerations.

Potable water supply for Monkstown (as well as Blackrock, Booterstown, Clonkeen, Deansgrange, Dún Laoghaire Town, Foster's Avenue, Roebuck, Oatlands, Orpen, Pottery Road and Stradbroke) is from the Stillorgan Reservoir (DLR Co Council, 2022). Stillorgan is a treated-water reservoir that receives water that has been processed in Ballymore Eustace or Vartry, before it is dispersed through the network of pipes to a total population of 200,000 people in South Dublin. It is located approximately 3km from the site. There is an existing 160 dia. HPPE or equivalent, Irish Water water main on Monkstown Road this was located during a previous site walk over (12 January 2022) and has been confirmed by Irish Water.

### ***Electricity and Gas Infrastructure***

The development shall be supplied from the local ESB Networks Medium Voltage Network, which includes Medium Voltage Sub-Stations on Brighton Avenue and at Richmond Park. The development will be supplied from the Monkstown Road direction, with potential future linkage to the Richmond Park substation, and to locate 2 No. Substations within the development, one in Block E and one to the rear of the site in the vicinity of Block H. The location and ratings of Sub-Station shall be considered to satisfy architectural and engineering design freedom and also to satisfy the statutory requirements of ESB Networks.

As part of the development, a low-pressure gas distribution network shall be extended by Gas Networks Ireland from the existing gas supply network, to supply gas to the various tenant units proposed throughout the development. It is not proposed to supply gas services to individual residential units.

### ***Telecommunications***

All main roads / boulevards within the development shall contain ducting / cable ways and chambers as deemed necessary for the servicing of the site. The immediate surroundings of the site are currently serviced by Eir and Virgin Media infrastructure, which will be extended within the site to meet the needs of the development. Fibre-to-the-Home will be extended to each unit within the development to provide the development with high-speed broadband, TV and telecommunication requirements.



## 3.0 CONSIDERATION OF ALTERNATIVES

### 3.1 Introduction

The consideration of alternatives is necessary to evaluate the likely environmental consequences of a range of development strategies for the site within the constraints imposed by environmental and planning conditions

### 3.2 Legislative Context

Article 5 (1) of the 2014 Directive requires the consideration of reasonable alternatives which are relevant to the project and take into account the effects of the project on the environment. It states under Article 5 (1) that;

*“Where an environmental impact assessment is required, the developer shall prepare and submit an environmental impact assessment report. The information to be provided by the developer shall include at least...”*

*“...a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment.”*

Schedule 6 of the Planning and Development Regulations, 2001 (as amended) sets out the information which is to be contained in an EIAR and Part 1 (d) of Schedule 6 states that the following shall be included:

*“A description of the reasonable alternatives studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment.”*

In accordance with draft EPA Guidelines, different types of alternatives may be considered at several key stages during the process. As environmental issues emerge during the preparation of the EIAR, alternative designs may need to be considered early on in the process or alternative mitigation options may need to be considered towards the end of the process.

The EPA Guidelines (Draft) states:

*“The objective is for the developer to present a representative range of the practicable alternatives considered. The alternatives should be described with ‘an indication of the main reasons for selecting the chosen option’.”*

It is generally sufficient to provide a broad description of each main alternative and the key issues associated with each, showing how environmental considerations were taken into account in deciding on the selected option. A detailed assessment (or ‘mini-EIA’) of each alternative is not required.” The consideration and examination of alternatives is set out below.



### 3.3 Alternatives Examined

#### 3.3.1 'Do-Nothing' Alternative

The subject site has all the attributes required to deliver much needed housing within the Greater Dublin Area. It is a large site (c.3.58Ha) which is well served by high frequency public transport in the DART and Dublin Bus, both within walking distance. And the site also sits within walking distance to Monkstown Village and all the services within this area.

To 'do-nothing' on a site with such advantages would contravene national planning framework in which government policy states that local authorities '*support increased density in locations with good public transport, accessibility, particularly town / city cores*' (SPPR1-Urban Development and Building Height Guidelines, 2018)

Furthermore, the DLR development plan zones the site under Objective A which states "*To provide residential development and improve residential amenity while protecting the existing residential amenities*" in the DLR Development Plan 2022-2028.

#### 3.3.2 Alternative Locations

The subject site of c. 3.58 hectares lies on an existing residential property within the built-up area of Monkstown approximately 1.5 km west of Dún Laoghaire town centre and c. 1.5 km southeast of Blackrock village. The site is within walking distance of Monkstown Village, c 250 m, which provides a range of local services. The proposed site was specifically identified by the applicants, Greystar, who were seeking an appropriate location in the Dublin Region for their flagship development, which is intended to set a gold standard for long term residential communities in the country.

The convenient location and its proximity to high quality public transport was a key factor in the site selection. The site is located less than 400 metres from the Salthill and Monkstown Dart Station. There are also a number of bus stops within 200 metres of the site, served by routes 7 and 7A, which connect the site to Mountjoy Square to the north to Brides Glen Luas/Loughlinstown. A further bus stop at Temple Hill (c. 800 m to the west) is served by routes 4; 46E; 84; 84A. Furthermore, as per the *Dún Laoghaire-Rathdown County Development Plan 2022-2028*, there are existing and proposed bus priority routes within 1km of the site.

It was considered that this site with its size, setting and location is uniquely suited to create a high-quality scheme in an area with a very high demand for long term residential accommodation. The dominant tenancy in the Monkstown area is that of owner occupier and there are very few apartments and / or houses available for the rental market. The proposed development represents immense potential to alleviate pent up rental demand in the South Dublin area and could cater for a vibrant mix of young professionals and older 'size-down' tenants to live in an area of high demand. It was found that there is a finite number of suitable sites of comparable quality and size available in the southeast Dublin region, close to public transport that would have the capacity for the delivery of a scheme of this nature. See report by '*Housing Market Report*' KPMG that accompanies this application for further details.





This site is zoned objective 'A' in the *Dún Laoghaire-Rathdown Development Plan 2022-2028*. The objective of this land use zoning is "To provide residential development and/or protect and improve residential amenity." Residential is a 'Permitted in Principle' use, and Residential – Build to Rent is an 'Open for Consideration' use. The non-residential uses proposed as part of the development include: *Childcare Service* (i.e., the Childcare Facility) and *Restaurant*. These uses are 'Permitted in Principle' or 'Open for Consideration', respectively under the zoning objective. The remaining 'Other Uses' including residents' lounge, gym, co-working spaces and management offices are ancillary to the Build to Rent residential units.

The planning policy provisions at all tiers support the redevelopment of the subject lands in line with the above land zoning objective, the location of the lands in an existing built-up area and the scale of the lands which provides capacity for a significant number of new homes. As such, from a planning perspective, the site is considered appropriate for a development of the proposed nature and will deliver much needed housing, in line with an identified national priority.

In addition to the above planning considerations, the following environmental considerations were undertaken in respect of the subject lands in relation to their suitability for a higher density residential development. The key considerations are noted and discussed below.

- Proximity to public transport and pedestrian and cyclist infrastructure;
- Proximity of surrounding local road network to regional and national roadwork (for construction traffic access);
- Availability of social infrastructure and services;
- Built up/ urban surrounding landscape (townscape);
- Availability of utilities, water, electrical and gas infrastructure;
- Proximity to existing population.

Having regard to the considerations outlined above, the subject site was considered to be a suitable location for the proposed development for the following reasons:

- The connectivity of the subject site with the regional and national road network, public transport provision and existing social infrastructure was considered to have the potential to contribute to reduced transport emissions and associated noise and air quality impacts that could arise from a residential development.
- The availability of utilities, water, electrical and gas infrastructure provides opportunity to connect into existing services and infrastructure (subject to capacity), avoiding significant and further reaching construction activities associated with the introduction of new piped infrastructure etc. It is considered that this has the potential to reduce impact upon the land, soils and local biodiversity.
- The location of the lands in an existing urban built up area and close proximity to Monkstown, Dún Laoghaire town centre and Blackrock village is considered to provide potential for positive impacts surrounding the population, including employment opportunities at the construction and operation stage. It is also considered that the site is well located to provide benefits to the existing local population in relation to local facilities and amenities, public open space and community uses. It is also



considered that the proposed extensive open space, along with food and beverage offering will benefit the wider community.

- In landscape and visual terms, whilst the site is identified as having notable heritage and natural assets, the characteristics of the existing surrounding context (urban/built up) is considered to have the potential to absorb further development.

In summary, having regard to the environmental considerations above, the proposed location is considered to be appropriate for a development of the proposed scale and nature.

### 3.3.3 Alternative Design and Layout

Several reasonable alternative layouts for the proposed development were considered over the design process. The proposals for the development were subject to detailed discussion with the Planning Authority prior to the principles of the proposed layout being finalised.

As detailed below, the scheme progressed over several meetings with the local authority responding to the urban design, form, massing, height, and design quality of the proposed development. Alternative heights, materiality and rhythm were also assessed by the Design Team leading to a much more considered and appropriate response to this unique site. The following alternatives will be described in this chapter:

- **Alternative Design 01:** *Previous Planning Permission Ref. No. Ref. 306949-20*
- **Alternative Design 02:** *Scheme as presented at pre-S247 meeting*
- **Alternative Design 03:** *Proposed Scheme*

### 3.3.3.1 Alternative Design 01 – Previous Planning Permission Ref. No. Ref. 306949-20



Figure 3.1: Previous Planning Site Layout.

The figure above shows the site layout plan for the previous planning application submitted in 2020. This design comprises 290 No. units, a childcare facility and associated development. The 8 No. new apartment blocks (266 No. units) ranged in height from 5-9 storeys, some over podium level. 22 No. houses were included (including the converted stable yard and refurbishment of an existing gate lodge). Dalguise House was to be converted into 2 No. residential units and a childcare facility at basement level. The scheme also provided 314 No. Car Parking spaces and 365 No. bicycle spaces. As part of the design process, the design team reviewed the design, considered the positive design decisions to be brought forward into the next iteration and discounted the elements that didn't work.

#### Positive Elements of the proposal:

- The overall composition of linear Blocks in the central area is the optimal configuration for the apartment blocks as this allows for an east / west orientation and creates views to Dalguise House from the access road.
- The creation of a plaza in front of Dalguise House and the primacy of the house within the overall setting.
- The Pavilion style Blocks at the north of the site was considered the correct response to this part of the site in terms of scale and form.
- The creation of distinct character areas across the site as follows:
  - Zone A (Purbeck): Pedestrian link is positive, however the design is congested and tree loss is quite large.
  - Zone B (Central lawn): The creation of more formal lawn in front of Dalguise House with a plaza in front of the house is considered positive.
  - Zone C (south of Dalguise) Walled Garden: with the retention of the existing limestone curved wall at the south of the site creating an enclosed garden



Areas identified for improvement:

- The creation of 3 separate basements across the site was deemed too intensive.
- The resulting vehicular strategy was deemed too intensive and would create a very busy access road and would necessitate a significant widening of the historic access road.
- The position and design of Block D and Block E has left the blocks too close with overlooking and overshadowing issues. The position and design also interferes with the views to Dalguise House.
- The exit road at the north of Block A results in a considerable loss of category A and category B trees (see arborist report for more details)
- Access to the site for pedestrians and cyclists is not considered enough with all traffic entering the scheme from 1 entrance.
- The 11no semi-detached housing at the south of the site was deemed monolithic and reads like a wall of development on to Brook Court.

This option was discounted due to issues with proximity between blocks, overlooking to neighbours and unit-mix. The understanding of the existing landscape as part of the Protected Structure, undermining the need to widen the existing historic lane and the issue of emergency access on the walled garden area. The topography and steep nature of the site at Block A and response to this condition was also deemed to be an issue and would result in more tree loss and the inclusion of a steep road around the front of Block A which reduced the green space.

Landscaping Strategy

In terms of the landscaping strategy, principles from the previous planning application were carried through with regards to the layout, access, the retention of existing boundaries as far as possible and the use of natural play and raised decking in certain areas to avoid impacting tree root zones.

However, the following significant changes were applied by the landscape team to improve on the overall scheme:

- The historic avenue's existing width has been retained where possible, with occasional widenings to allow for passing vehicles, resulting in less impact on the trees in this area. This has been made possible as the main vehicular access is through Purbeck into the basement and therefore the historical avenue will be a shared surface.
- The traffic has been diverted into the basement rather than up around the northwest part of the scheme, which has allowed the retention of more trees in this area.
- Additional potential connections have been introduced to surrounding neighbourhoods.
- A more organic design fitting to the site's character, with defined views towards Dalguise House has been created on the site.
- More 'magic moments' which celebrate the site's setting and assets have been created – such as the mature trees and bird life - for the public and residents to enjoy

- The biodiversity has been enhanced on site through the provision of various elements – edible food forest within the walled garden, biodiverse pond and swales with associated planting, native planting, bird and bat boxes, eco-poles.
- The landscape architects have worked hand in hand with the arboriculturist trying to retain as many high value trees as possible, while being realistic as to what can be achieved.
- Proposed trees will be a range of mature and semi-mature trees so that the landscape looks mature from day 1 and fitting with the rest of the trees on site.
- Various different SUDs features which work with the landscape amenity have been introduced on site.
- Moments of elevated play to reduce impact on trees while maximising the function of the site have been introduced on the site.

### Traffic and Access Strategy

The previous scheme proposed two way accesses at both Purbeck and Dalguise House Access. The former required severe gradients requiring significant removal of trees to meet the Dalguise House Access. The scheme included provision for permeability connections to surrounding land to improve overall connectivity for sustainable modes in the area.



Figure 3.2: Isometric View of Alternative design 01

### **3.3.3.2 Alternative Design 02: Scheme as presented at pre-S247 meeting**

Following on from the previously submitted scheme in 2020 the design team brought forward the positive aspects from this iteration, they included :

- The orientation / footprint of Blocks E,F,G,H,I,J.
- The central basement accessed via Purbeck.



- The 'Mews' style apartments at the southern end of the site.
- The Pavilion style apartment Blocks A,B and C.
- Shared access along the main avenue with additional smaller linkages within the site.
- The team then improved the response whilst re-thinking the areas of concern as identified above.



Figure: 3.3 Site Layout of Design Option 02

This new proposed scheme comprises 11 no. new apartment blocks ranging from 3-9 storeys and the full restoration of 4 existing structures of which the only Protected Structure is the Dalguse House being converted into Residential at level 01, residents' amenity at ground level and a public F+B offering at lower ground level.

The Site is divided into 4-character areas, the first is Purbeck to the north of the site, the Blocks are designed as pavilion blocks with the apartments wrapped around a central core. In the Central Lawn area, the Blocks are all designed as linear blocks to take advantage of the east/west orientation and maximise the daylight results. The walled garden area is designed as an enclosed spaces with Blocks J and H designed as split-level linear blocks. The South of the site is the Mews area with Blocks I slightly curved, following the curvature of the existing limestone wall.

The Key statistics for this iteration are:

- 482 Apartments
- 219 Car Parking Spaces
- 1000 Bicycle spaces
- 52% Dual Aspect
- 22% Site Coverage
- .98 Plot Ratio

The main overall design changes from the previous iteration are as follows:





- A central basement accessed via Purbeck and located under Blocks D,E,F,G. This removed the road around the north of Block A to the access road improving the setting of Block A and the front of the site.
- Blocks A, B + C have been positioned in order to minimise any negative impact on the existing mature trees.
- Blocks D+E have been re-designed as linear blocks making the internal configuration more efficient and allowing views towards Dalguise House as one moves along the access route.
- The Central Courtyard is arranged in a more formal pattern in response to the setting of the historic Dalguise House.
- Internal re-configuration of Blocks F, G and H which improved efficiencies and the daylight into the block.
- The impact of the design and construction methodology has been tested more rigorously in this iteration. To mitigate damage Block A has been re-oriented, the road to the north of Block A has been removed. The location of piles and excavation has also been considered and fed into the overall design response.
- The organisation of the site into 5 character areas: Purbeck, Access Road, Central Lawn, Walled Garden and Mews area.
- The creation of a much smaller scale mews typology at the south of the site which allows for much more generous landscaping around.
- The creation of an F+B offering at the lower ground floor of Dalguise House with a southerly aspect and views to the Walled Garden.
- The creche formerly located in Dalguise House is now moved to Block A, allowing easier access to the creche and bringing the facility closer to the neighbouring areas.
- The addition of a full amenity floor at the top of Block E complete with outdoor terrace offering views to the Irish sea beyond.

#### *Positive Elements of the Proposal*

- The Mews at the southern boundary breaks down the mass to the adjoining semi-detached dwellings and creates a more open landscaped environment at this part of the site.
- The food and beverage offering at the lower level of Dalguise House creates a vibrant environment and brings the public into the heart of the scheme, connecting the proposal to the wider neighbourhood whilst also bringing employment to this part of Monkstown.

#### *Areas identified for improvement*

- Access to main car park via Purbeck is unresolved;
- Ground level Block E reads to closed, the space needs to be opened up and to act as a fulcrum and meeting point for residents and staff within the scheme;
- Blocks B/C need to be made more efficient in mass and form;
- Block D reads very abrupt to the main historic avenue. The Block could be improved in its alignment with the avenue and buildings E and G;
- The Vinery at the rear of Dalguise blocks the view to the walled garden and the path of the sun to the south-west; and



- Blocks I x 2 could be made more efficient to allow for a smaller footprint and more space in the landscape around the buildings.



**Figure 3.4: Submitted application with Design iteration 02 overlaid in magenta**



**Figure 3.5: Section showing submitted application with Design iteration 02 overlaid in magenta.**



**Figure 3.6: Section showing submitted application with Design iteration 02 overlaid in magenta.**



**Figure 3.7: Early design view of the scheme from Purbeck**



**Figure 3.8: Proposed Scheme Central Courtyard Plan**





Figure 3.9: Proposed s247 scheme, walled garden looking north.



Figure 3.10: Proposed Scheme Walled Garden Plan.

From an environmental perspective, this scheme was the subject of detailed considerations including the introduction of a significant quantum of new development to an existing residential area, including new homes, commercial uses and public open space. Ultimately, the scheme was amended (which resulted in the proposed project) to address the planning related concerns raised by Dún Laoghaire Rathdown County Council. However, our environmental considerations in respect of the environment factors set out in Article 3(1) of the EIA Directive are provided below.

- **Population and Human Health:** It was considered that the development would introduce a significant quantum of new development to an existing residential area, including new homes, commercial uses and public open space. We therefore identified the potential for the proposed development to impact positively upon, inter alia, population, employment and amenity. From a human health perspective, we considered the interactions between human health with air quality and noise impacts.



- **Biodiversity:** This development would result in the demolition of a number of existing buildings, the disruption and alteration of the existing and established landscape, as well as significant changes to the nature of the use of the site. Ecological survey work was undertaken to inform assessments in relation to potential impact upon habitats and flora, mammals, bats and wintering birds. In terms of potential impacts, with mitigation measures in place, the construction and operation of the proposed development will not have a significant negative impact on biodiversity in the Zone of Influence.

Furthermore, having regard to Article 6(3) of the EU Habitats Directive, due to the identification of connectivity between the application site and the Natura 2000 site in Dublin Bay UNESCO Biosphere Reserve, the Dublin Bay Important Bird Area (IBA), and the Sandymount Strand/Tolka Estuary Wetland of International Importance (WII) an Appropriate Assessment Screening and Natura Impact Statement (NIS) was submitted at the pre-application stage.

The NIS concluded:

*“It is the considered opinion of ROD, as the author of this NIS, that, in making its AA in respect of the proposed Dalguise House Residential Development, Dún Laoghaire Rathdown County Council, as the Competent Authority in this case, may determine that, given the full and proper implementation of the mitigation prescribed in this NIS, the proposed development, either individually or in combination with other plans or projects, will not adversely affect the integrity of the South Dublin Bay and River Tolka Estuary SPA, South Dublin Bay SAC or the Dalkey Islands SPA.”*

- **Land, Soils, Geology and Hydrogeology:** This development would be inclusive of both demolition and the construction of a number of new buildings and hard landscaping works. We therefore identified the potential for impacts in this regard, mainly arising from the excavation required during the construction process. Other areas of potential impact were considered to arise from the stripping of topsoil, construction traffic, accidental spills and leaks/ contamination and any interactions with human health in this regard.
- **Hydrology (Surface Water):** We identified the potential for the development to impact upon the environment in terms of hydrology, during the construction and operational phase, given the locational characteristics of the site from a hydrological perspective. In this regard, we noted that direct hydrological linkages exist between the Stradbroom Stream (located north of the proposed development site) and the Dublin Bay waterbody (EPA online site code: 00206) where a number of SACs and SPAs are situated, the closest of which is the South Dublin Bay SAC, and the South Dublin Bay and River Tolka Estuary SPA located approximately 400m and 450m respectively from the north boundary of the proposed development site. The main considerations in this regard relate to the potential impacts arising from surface water run-off during soil excavation.
- **Air Quality and Climatic Factors:** We considered the potential for air quality impacts arising from the construction stage. The greatest potential for air quality impacts was considered to arise from dust emissions and their impact upon nearby sensitive receptors. In terms of the operational phase, potential impact arising from traffic movements associated with the development was also considered.
- **Noise and Vibration:** We considered the potential for noise and vibration impacts arising from the construction of this scheme upon nearby sensitive receptors, mainly neighbouring residential properties. From an operational perspective, potential impacts were identified in



respect of changes to noise levels arising from additional traffic associated with the development. We also considered the potential for noise impact arising from Mechanical Services Plant and the creche.

- **Townscape and Visual Impact Assessment:** Given the increased height of the development when compared to the existing low-rise context, it was expected that the increased height at the site (up to 9 storeys) had the potential to impact upon the surrounding townscape which may alter its character. From a visual impact perspective, the potential for the development to change views to/ across the site was considered in the context of potential impact upon visual amenities. The existing lands were considered to have a medium sensitivity to change, having regard to the distinct sylvan character and heritage dimensions of the landscape within the site boundary.
- **Archaeology:** From an archaeological perspective, the construction of this development would involve extensive disturbance of ground and therefore would have the potential to impact upon any archaeological remains or features present at the site. The archaeological desk-based study identified the potential for archaeological features in areas where this development proposed new built form.
- **Architectural Heritage:** From an architectural perspective, the application site presents heritage value in both the existing buildings and the landscape, potential impact in this regard has therefore been considered. The development seeks the demolition of a number of buildings and ancillary built form associated with Dalguise House, the construction of new built form within the setting of identified heritage buildings, the renovation and refurbishment of heritage buildings and significant changes to the landscape.
- **Microclimate/ Wind:** We considered wind and microclimate impacts on the basis that the development, arranged in a number of blocks/ buildings at a height of 3-9 storeys, would result in significant changes to the landscape and therefore has the potential to change the microclimate and pedestrian comfort levels.
- **Roads and Traffic:** Due to the scale of this development, the construction phase was considered to have the potential to generate a notable number of additional traffic movements. Furthermore, the development was inclusive of car parking with a total of 224 no. spaces and was therefore considered in the context of potential impact arising from additional traffic movements within the area. It also includes cycle parking, and a number of new access points for vehicles, cyclists and pedestrians. The operational phase of the proposed development therefore has potential to change (and therefore impact) the nature of the surrounding area from a traffic and transport perspective.
- **Waste:** This development, both at construction and operation stage, would produce waste. We therefore identified the potential for impacts in this regard, together with the necessity for the appropriate management of waste at both stages.
- **Built Services:** Due to the nature of the development, we have considered the potential for the development to impact upon existing site services/ utilities, from both a construction and operation phase perspective. The site is serviced as existing, but it is noted that the operational development will result in an increased demand upon services such as the public watermain system. From an Irish Water perspective, the capacity of existing infrastructure to serve the development was considered in consultation with Irish Water themselves.



### 3.3.3.3 Alternative 03 – The Proposed Project

After the S.247 meeting, the design team listened to and responded to the issues raised by DLRCC. This iteration also comprises 11 no. new apartment blocks ranging from 3-9 storeys and the full restoration of 4 existing structures of which the only protected structure is Dalguise House being converted into Residential at level 01, residents' amenity at ground level and a public F+B offering at lower ground level.

The Key statistics for this iteration are:

- 491 Apartments total
- 224 Car Parking Spaces
- 1071 Bicycle spaces
- 53% Dual Aspect
- 22% Site Coverage
- 1.13 Plot Ratio



Figure 4.13: Proposed Site Layout Plan showing layout and arrangement of the Blocks.

The design changes from the previous iteration are as follows:

- The Entrance via Purbeck has been improved with the car parking moved from the surface parking to underneath Blocks B+C leaving more space for more greening and landscaping.
- A new podium has been designed as a tiered cascading landscaped connection piece allowing pedestrians direct access to Block A and the access road above directly into the site.
- The re-design and internal re-configuration of Blocks B+C to reduce the mass and create a more legible design facing Purbeck.
- The re-design and re-alignment of Block D to address the main historic avenue and improve the setting around the Block.
- The Ground Floor of Block E has been re-designed as an open plan, activated on all sites containing a Yoga Room, Gym, Lounges, Co-Working spaces, Lounges,

Foyer and associated management suite for the scheme including residents orientation, parcels etc.

- Responding to concerns raised by the Local Authority the Blocks at the southern boundary, have been reduced in footprint and moved further from the southern boundary and adjoining housing.
- Internal re-configuration the Coach House to create a private garden space and new modern extension.



Figure 4.14 – 'Garden' Level – showing ground floor plan of each Block

### Landscaping Strategy

Between the pre-S247 meeting and the current proposal, the landscape scheme has been amended to accommodate the following:

- More detailed coordination with Fire consultant allowing for emergency routes and turning circle.
- More detailed coordination with Lighting consultants and Ecologist.
- Enhancement of the route and view into the basement through Terraced Garden bridge.
- Enhanced pedestrian connection from Purbeck to the main avenue and central lawn space area.
- Arrival space around Block E with raised decking.
- Increase in number of proposed trees, including a tree that is planted at basement level, but can be seen at grade through an opening in the podium.
- Glass house removed south of Dalguise House to allow for uninterrupted views of the Walled Garden and House respectively, with outdoor seating provided south of the house and vines planted within the edible garden.
- Provision of a raised decking outdoor creche area with associated planting/boundaries.
- Provision of more bikes to meet National Apartment Guidelines requirements.



- Design of Roof Terraces on Block E.
- Changes to architectural layout / entrances / levels etc.
- Provision of more detail on hard and soft landscape materiality / SUDs and water features / Cycle provision / Open space provision / Roof terraces / Tree Strategy.

### Traffic and Access Strategy

In terms of the traffic and access strategy, the following significant changes to earlier planning applications were applied by the design team to improve on the overall scheme:

- Current scheme retains principle from earlier schemes of principal access via Purbeck and secondary access via Dalguise Access. However, the Purbeck Access has been diverted into basement to avoid removal of trees if connecting to Dalguise Access.
- Dalguise Access was previously proposed one-way only. It is now proposed to facilitate light two-way traffic via passing bays along the avenue. This simplifies overall traffic management and wayfinding.
- The layout and landscaping of the roads has been brought more in line with DMURS.
- The provision for permeability connections to surrounding lands has been retained and enhanced.
- Enhanced cycle parking proposed across the site wholly in line with DLRC and National Apartment Guidelines requirements.
- Minor modifications in response to feedback from Dún Laoghaire Rathdown County Council Transportation Department.

### Overall Improvements of this proposal

This proposal responds positively to the setting and respects the positive principles established in the previous scheme. However, this design goes further to address the issues and unique context of this site creating a vibrant long term residential community. The careful arrangement of the blocks, their form, mass, and materiality all respond to the conditions found on site. Internal efficiencies found within the internal arrangement of the blocks have allowed for a reduced footprint and the scheme works closely with the landscaping design with a strong emphasis on retaining the existing setting and trees. Several overall positives can be included in the final proposal presented in this application. They include:

- **Heritage:** To retain and re-use the original historic structures found on site. Dalguise House will contain residential amenity and a food and beverage offering at Lower Ground level facing south towards the walled Garden. The Coach House and Stable Lodge will be retained and revitalised as 3 new residential apartments. The Brick Gate Lodge will be retained and re-purposed as a residential apartment. And the entrance lodge will also be retained and revitalised for use by staff.
- **Heritage:** The preservation of historic routes and linkages. The main avenue will be retained and improved with new linkages created across the scheme. The setting of





Dalguise House will be improved with the new Blocks framing the view to the house as it takes primacy at the center of the scheme.

- **Architecture:** The creation of a new long-term rental residential community with top of class amenity and exceptionally designed apartments set within this mature woodland site.
- **Architecture:** The careful arrangement of the Blocks that work with the existing site conditions, vegetation, and topography to create distinct character areas. At the north of the site the split-level pavilion blocks work with the existing levels and minimise the impact on the ecology, in the centre of the site the linear arrangement of Blocks E, F, G, H minimise the footprint of the blocks and create the setting for Dalguise House, the linear arrangement and low profile of Blocks H+J frame the walled garden with the existing wall being retained and cleaned. At the south of the site Blocks J + I reduce the height and scale to the adjoining properties, taken as a whole, this scheme represents an exceptional residential scheme in a site that is tailor made for long term community residences.
- **Urban Design:** The creation of courtyards, enclosed spaces, linkages, and permeability that connects the scheme to the wider community and within.
- **Residential:** Delivery of an exceptional residential rental scheme with a mix of units designed as Build to Rent (BTR) / Build to sell (BTS), active adult and short stay accommodation.
- **Landscaping:** The creation of an innovative landscaped design within the setting of the existing parkland. Providing top class amenity spaces for the benefit of the residents and public alike.
- **Landscaping:** The creation of an innovative landscaped design within the setting of the existing parkland. Providing top class amenity spaces for the benefit of the residents and public alike.
- **Landscaping:** To retain the maximum number of trees possible whilst removing damaged / dangerous trees. Planting new / native trees to supplement and improve the setting already found on site.



Figure 4.15 – Draft CGI View of Blocks FG and Dalguise House



**Figure 4.16 – Draft CGI View of Blocks J and the Rear of Dalguise House showing F+B**



**Figure 4.17 – Draft CGI View of the Coach House and Mews character area (Blocks i)**

The proposed project constitutes the final alternative, and preferred, option. The design has been progressed via an iterative process with design amendments arising from consultation with Dún Laoghaire Rathdown County Council during the pre-application process. The current scheme takes account of both planning and environmental considerations arising throughout the design process. This planning application submission, which includes this EIAR, provides a full assessment of the proposed project from a planning and environmental perspective.



### **3.3.4 Alternative Process**

This chapter has sought to assess the reasonable alternatives in the construction, layout and design of this project, in accordance with both the European Commission and EPA Guidelines. The development strategy surrounding the delivery of the proposal has been considered in detail and is documented in the phasing plan, drawing number MKS-RAU-ZZ-XX-DR-AR-100. Given the residential nature of the scheme, it is not envisaged that there are any alternative processes that could have been followed in respect of the assessment of environmental impact. It is therefore concluded that the consideration of an alternative process is not considered relevant to this EIAR.





## 4.0 POPULATION AND HUMAN HEALTH

### 4.1 Introduction

This chapter has been prepared to assess the likely impacts associated with Human Health for the proposed development. In accordance with the Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022), Draft Advice Notes for Preparing Environmental Impact Statements (EPA, 2015), and European Commission (EC), Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report (EU, 2017) this chapter has considered the “existence, activities and health of people” with respect to “topics which are manifested in the environment such as employment and housing areas, amenities, extended infrastructure or resource utilisation and associated emissions”.

### 4.2 Methodology

The EPA EIAR Guidelines (2022) advises that there is no specific guidance on the meaning of the term Human Health issued in the context of Directive 2014/52/EU. The EPA Guidelines (2022) advises in an EIAR, *“the assessment of impacts on population and human health should refer to the assessments of those factors under which human health effects might occur, as addressed elsewhere in the EIAR e.g. under the environmental factors of air, water, soil etc.”*

The assessment of other health and safety issues that are carried out under other EU Directives are also relevant. These may include reports prepared under the Industrial Emissions, Waste Framework, Landfill, Strategic Environmental Assessment, Seveso III, Water Framework Directive, Floods or Nuclear Safety Directives. In keeping with the requirement of the amended Directive, an EIAR should take account of the results of such assessments without duplicating them.

Issues examined in this chapter include demography, population, employment, social infrastructure, landscape, amenity and tourism, natural resources, air quality, noise and vibration, material assets, traffic and health and safety.

The assessment of significance is a professional appraisal based on the sensitivity of the receptor and the magnitude of effect.

### 4.3 Baseline Development

The Proposed Development site is located in County Dublin, and in the electoral district of Blackrock-Monkstown (ED 5012). The area selected for the assessment of the impact on human health has been defined as the electoral division (EDs) of Blackrock-Monkstown, Blackrock-Carysfort (ED 5009), Blackrock-Newpark (ED 5013), Blackrock-Seapoint (ED 5014), Blackrock-Stradbroom (ED 5015), Blackrock-Templehill (ED 5016), Dun Laoghaire-Monkstown Farm (ED 5045), Dun Laoghaire-Mount Town (ED 5046) and Dun Laoghaire-Salthill (ED 5051) and County Dublin.

The site is located within the Eastern and Midlands Region, as defined by the nomenclature of units for territorial statistics (NUTS) developed by Eurostat. The Eastern Midlands Region comprises of the Counties of Dublin, Wicklow, Kildare, Laois. Offaly, Westmeath, Meath Longford and Louth.



The site location is within the ground of Dalguise House (Protected Structure RPS No. 870), Monkstown Road, Monkstown, Blackrock, County Dublin, A94 D7D1 (and the lands including A94 N3A1 residential garage; A94 R9T1 Gate Lodge; A94 TP46 Dalguise Lodge (No. 71 Monkstown Rd); A94 V6V9 White Lodge); and on-street car parking in front of Nos. 6 and 7 Purbeck (A94 C586 and A94 HT99, respectively). The proposed development site occupies approximately 3.58 hectares.

## 4.4 Potential Impacts of the Proposed Project

### 4.4.1 Construction Phase

There will be a *slight* and *positive* effect on local business with the limited presence of construction workers using local facilities during the construction phase.

There is a direct hydrological pathway to Dublin Bay and Seapoint Beach via the Stradbroom Stream to the north of the proposed development site. there is up to a *moderate* risk of a *temporary* impact without mitigation on Stradbroom stream, which would result in an impact on local amenity, i.e. Seapoint Beach. It is noted, there is *no possible impact* on water quality status in Dublin Bay due to low contaminant loading and attenuation and dilution near source area.

The main potential impacts on human beings associated with the proposed development will be in relation to air quality, noise and visual effects during the construction stage. The potential impacts are assessed within the corresponding chapters of this EIA Report and are summarised below. There is potential for *temporary, significant* and *negative* impacts on human health in relation to noise during the construction phase of the proposed development. There is also potential for *short-term, slight* and *negative* impacts in relation to air quality and visual alteration, respectively, on human health during the construction phase of the proposed development.

### 4.4.2 Operational Phase

There are no health risks associated with operational noise or vibration resulting from the development. The overall impact is *neutral to not significant*.

Air dispersion modelling of traffic emissions has shown that levels of all pollutants are below the ambient air quality standards set for the protection of human health. It can be determined that the impact to human health during the operational stage is *long-term, negative* and *imperceptible*.

The reduction in water quality in the Stradbroom Stream is considered to constitute a *permanent moderate* impact at the local level. Pollutants entering the Stradbroom Stream have the potential to lead to *negative, moderate, short-term and permanent* impacts at Nationally, European and Internationally Designated sites.

It is expected the magnitude of operational stage landscape/townscape impacts will be *negative-neutral, moderate-slight* and *long-term* at the closest receptors.



There will be no significant adverse impact on the population from the proposed development. It will have a positive impact in terms of providing high quality residential housing in the region.

#### 4.5 Residual Impacts (post-mitigation)

In terms of noise and vibration during the construction and operational phases, it is not expected that the vibration thresholds set out in BS 5228 will be exceeded and therefore it is not expected that significant impacts will occur. It is expected that construction phase activities will likely be above the construction noise significant thresholds at the closest nearest sensitive locations. There will be a **negative, moderate- significant** and **short term** noise impact at the nearest sensitive locations during the construction phase. As the noise impacts associated with the construction phase will be temporary to **short-term** in duration and any elevated levels of noise will be of limited duration, the resultant impact to human health is **not significant**. There will be no residual impact to human health arising from noise and vibration impact during the construction or operational stage.

In terms of air quality (dust), the mitigation measures that will be put in place at the proposed development will ensure that the impact of the proposed development complies with all ambient air quality legislative limits and therefore the predicted impact is **short-term, negative** and **imperceptible** with respect to the construction phase and **long-term, negative** and **imperceptible** with respect to the operational phase in terms of human health impacts. There will be no residual impact to human health arising from air quality impact during the construction or operational stage.

It is predicted that there will be no likely significant effect with regard to the construction or operational phase on the Stradbroke Stream which may result in impacts to Seapoint Beach (local amenity).

There will be no residual significant impact to human health arising from additional traffic.

There will be no significant adverse impacts with respect to socio-economic factors, land-use, or the amenity value potential of the area. All necessary mitigation measures will be put in place to ensure the health and safety of all site personnel.

All other environmental aspects relating to the human environment which could have an adverse impact on the local population such as soils, water and visual impacts both operationally and during construction are addressed in the relevant chapters of this EIAR



## 5.0 BIODIVERSITY

### 5.1 Introduction

The process of identifying, analysing and evaluating the potential impacts of the Dalguise LRD project (“the proposed development”) on the topic of Biodiversity, i.e. habitats, species and designated sites, was undertaken in accordance with guidance on ecological and environmental survey and assessment provided by the Heritage Council, the Environmental Protection Agency, Transport Infrastructure Ireland and the Chartered Institute of Ecology and Environmental Management. These guidelines informed the planning and conducting of field survey work, and the analysis and evaluation of the potential impacts of the proposed development on Biodiversity.

### 5.2 Methodology

A desk study was undertaken to establish the “zone of influence” of the proposed development, i.e. the geographical area over which any effects are likely to be significant, and to examine any recent or historical records of features of ecological significance in this area, including any sites designated for nature conservation at the national or international level. As part of the desk study, statutory consultees and relevant stakeholders, e.g. the National Parks & Wildlife Service, were consulted. Consultees were invited to submit observations in relation to ecology and nature conservation.

Field survey work carried out to establish the ecological baseline included multidisciplinary walkover surveys of the development site and an appropriate buffer zone around the site to describe and map the habitats, species, and evidence of species present. Habitats were classified and mapped in accordance with guidelines published by the Heritage Council.

Dedicated surveys for rare and protected flora and fauna, as well as invasive alien species, were also undertaken during the optimal survey seasons. Following the desk study and field surveys, Key ecological receptors (KERs) were identified. These are features of ecological significance at the local (higher level) scale or above and that should be a material consideration in the decision-making process. The biodiversity chapter analyses the potential impacts of the proposed development on the Key ecological receptors and characterises these impacts in terms of their magnitude, extent, duration, frequency and reversibility, thereby evaluating their significance on a geographical scale. A total of eight KERs were identified within the study area: European Designated Sites, Nationally Designated Sites, Internationally Designated Sites, Linear Woodland, Bats, Birds, the Stradbrook Stream and Invasive Species. Each Key Ecological Receptor was evaluated in terms of its conservation value on a geographical scale.



### 5.3 Baseline Environment

It was determined that 12 European sites occur within the “zone of influence”, namely the South Dublin Bay Special Area of Conservation (SAC), the South Dublin Bay and River Tolka Estuary Special Protection Area (SPA), the North Bull Island SPA, the North Dublin Bay SAC, the Baldoyle Bay SAC, the Baldoyle Bay SPA, the Dalkey Islands SPA, the Rockabill to Dalkey Island SAC, the Howth Head Coast SPA, the Howth Head SAC, the Ireland’s Eye SPA and the Ireland’s Eye SAC.

Other internationally designated sites including the Sandymount Strand/Tolka Estuary Ramsar site, the North Bull Island Ramsar site, the Baldoyle Bay Ramsar site, the North Dublin Bay Marine Protected Area (MPA), the North Bull Island Wildfowl Sanctuary, the Dublin Bay UNESCO Biosphere Reserve and the Dublin Bay Important Bird Area (IBA) have connectivity to the proposed development. Some of these designated sites refer to the same areas. Seven nationally designated sites: the Baldoyle Bay proposed Natural Heritage Area (pNHA), the Howth Head pNHA, the Ireland’s Eye pNHA, the North Dublin Bay pNHA, the South Dublin Bay pNHA, the Dalkey Coastal Zone and Killiney Hill pNHA, and the Dolphins, Dublin Docks pNHA lie within the “zone of influence.”

The proposed development site is located approximately 300 m to the west of Monkstown Village and 240 m south of Seapoint Beach. The site is 3.58 ha in area, predominantly rectangular in shape and until very recently was in use as a private dwelling.

The proposed development site is bordered and divided by a network of mature treelines and linear woodlands. It is bounded to the south, east and west by residential developments and to the north by the Stradbroom Stream, residential developments and Monkstown Road. The surrounding area is dominated by suburban residential development. It is within the catchment of the Stradbroom Stream, which flows east-west and eventually discharges into Dublin Bay. The Stradbroom Stream is characterised by artificial embankments along most of its length. The stream is highly modified and is culverted until it reaches its outfall at the west pier in Dún Laoghaire. The site contains good quality habitat for bats and bird species. An established heronry exists in the mature trees along the western site boundary.

### 5.4 Potential Impacts of the Proposed Project

#### 5.4.1 Construction Phase

The key potential ecological impacts associated with the construction phase include habitat loss, habitat fragmentation, habitat degradation, disturbance to species, direct mortality, and the spread of invasive species.

The construction of the buildings, roads, paths, amenity areas, car parking and other infrastructure will result in habitat loss, fragmentation and degradation. The effect of these impacts will be a reduction in overall habitat quality within the footprint of the proposed development. Disturbance will occur during the construction phase of the proposed development as a result of noise, lighting, vibration and the presence of people and vehicles. Direct mortality is possible as a result of site clearance, tree felling and vegetation removal.



#### 5.4.2 Operational Phase

The key potential ecological impacts associated with the operational phase include habitat fragmentation, habitat degradation, disturbance to species and direct mortality. Disturbance will occur during the operational phase of the proposed development as a result of noise, lighting, and the presence of people and vehicles. Direct mortality is possible as a result of landscape maintenance works and through collision with windows.

#### 5.5 Residual Impacts (post-mitigation)

The assessment determined that, in the absence of mitigation, the construction and operation of the proposed development had the potential to have significant negative effects on the Key ecological receptors. In light of this finding, appropriate mitigation measures were proposed, aimed at eliminating or minimising these effects. Mitigation measures proposed include construction phase, general and specific measures designed for each Key Ecological Receptor. Key mitigation measures include the timing of works to avoid impacts on the key ecological receptors, the avoidance of sensitive habitats, the landscaping and lighting design, which have been cognisant of the key ecological receptors, and implementation of water quality protection measures.

In addition to mitigation of the likely ecological effects on the proposed development, the biodiversity assessment also proposed a number of ecological enhancement measures aimed at having a positive impact on ecology, wherever possible. These include the incorporation of a permanent pond into the drainage design, the creation of ecopoles and the installation of bat and bird boxes across the proposed development.

In the case of all key ecological receptors, it was found that any residual effects following the application of the proposed mitigation measures would not be significant at any geographical level. With the implementation of the proposed mitigation measures described in the EIAR, there will be no significant residual effects on biodiversity in the zone of influence.





## 6.0 LAND, SOILS, GEOLOGY AND HYDROGEOLOGY

### 6.1 Introduction

The likely significant effects of the proposed Dalguise House Large-Scale Residential Development on land, soils, geology, and hydrogeology was assessed as part of the EIAR. The assessment was made with regard to the design of the proposed development, the construction and finally the operation.

### 6.2 Methodology

With regards to soils, geology and hydrogeology, the assessment presents the baseline conditions of these features based on readily available information and data provided during the course of the Project and determines how the construction and operation of the Project will cause potential impact to these features. The impact assessment ranking methodology and terminology used in this section was conducted in line with Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes (NRA, 2009).

### 6.3 Baseline Environment

Teagasc (GSI 2022) data indicates that soils in the study area are generally mineral soils, largely derived from mainly acidic parent materials. The principal subsoil type in the study area is gravels derived from limestone (GLs), and the underlying subsoil namely made ground.

Site Investigations revealed that generally, the subsoil was relatively shallow with pockets of rock close to the surface. Topsoil was encountered and was present to a maximum depth of 0.30m below ground level. Made ground deposits were encountered in some areas, and cohesive deposits were encountered beneath the topsoil or made ground.

Laboratory Testing found that the soil material is above the inert limits as outlined within the European Council Directive 1999 131/EC Article 16 Annex II. The Waste Characterisation Assessment (WCA) classed all soils as 'non-hazardous'.

The GSI classifies the bedrock aquifer beneath the subject site as a 'Poor aquifer (PI), with bedrock which is generally unproductive except in local zones'. It would be classed as having a 'moderate vulnerability'. The groundwater body in the area (IE\_EA\_G\_003) is presently classified under the Water Framework Directive (WFD) status 2010-2015 as 'good' and the risk score as 'not at risk' (EPA, 2022).



## 6.4 Potential Impacts of the Proposed Project

### 6.4.1 Construction Phase

A number of potential construction phase impacts were reviewed. The most significant however was potential impacts of accidental leaks and spills and how this may impact upon locally important bedrock and/or gravel aquifer. Works during the construction of the scheme could pose a threat to the quality of groundwater bodies within the study area chiefly through unplanned events such as leaks/spills/runoff/accidental release or escape of fuels, oils and lubricants, bulk liquid cement, contaminated leachate.

A Conceptual Site Model (CSM) was prepared, evaluating the potential impact of accidental spills upon the underlying aquifer. From this, a minor to moderate risk of localised discharge to ground of contaminated water was found, whereby no possible impact on the status of the aquifer was predicted due to volume of leak indicated, natural attenuation within overburden and low potential for migration due to low connectivity of fracturing within the granite aquifer (Poor Aquifer).

Therefore, in line with the NRA 2009 Guidelines, the importance of these features was considered 'medium' and the magnitude of impact for works 'small adverse' due to the volumes of potential spill, short-term nature of the effect and nature of the aquifer (Poor Aquifer with low connectivity). Consequently, the overall significance rating was 'slight'.

Other impacts identified related to the requirement for significant excavation of soil/subsoil for foundation and ground level construction which may increase the vulnerability of the underlying bedrock and hydrogeology to risk of potential soil erosion, transportation and contamination. The importance of these features was already assigned as 'medium' and the magnitude of impact 'small adverse' due to the short-term duration of impact. Consequently, the overall significance rating was considered to be 'slight'.

### 6.4.2 Operational Phase

Operational phase impacts were identified and related largely to the leak of petrol/ diesel fuel from individual cars in parking areas whereby contaminated run-off has potential to seep into bedrock and the underlying aquifer system. However, whilst the importance of the feature was considered 'medium', the risk of impact was considered to be 'low', on account of the low contaminant loading and short-term nature of any potential discharge. Therefore, in line with the NRA 2009 Guidelines, the overall significance rating was considered to be 'imperceptible'.



## 6.6 Residual Impacts

Prior to mitigation, the two impacts identified were assigned as 'slight' largely on account of the 'medium' importance rating of the receptor and moderate risk of localised contamination and soil vulnerability. However, the implementation of mitigation measures during the construction phase, along with good site management and construction practices will eliminate any significant impact on the environment and reduce significance to 'imperceptible'.

The only identified operational impact was already considered to be 'imperceptible' in nature, relating to the potential for accidental leakage / spillage / contaminated run-off from vehicles in the parking area of the development. With the design and installation of permanent mitigation measures for the operational phase (i.e., petrol interceptors), all negative impacts on the soil and geological environment are eliminated.



## **7.0 HYDROLOGY – SURFACE WATER**

### **7.1 Introduction**

The likely significant effects of the proposed Dalguise House Large-Scale Residential Development on the local hydrology regime (surface water) was assessed as part of the EIAR. The assessment was made with regard to the design of the proposed development, the construction and finally the operation.

### **7.2 Methodology**

The Hydrology – Surface Water Chapter was prepared in line with the suggested topics outlined in the EPA EIA Guidelines 2022, and for the assessment of impacts, the NRA (2009) Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes.

### **7.3 Baseline Environment**

The proposed development site lies within the Liffey River and Dublin Bay Catchment (Catchment ID\_09), and includes the area drained by the River Liffey and by all streams entering tidal water between Sea Mount and Sorrento Point, Co. Dublin. There is one watercourse in the study area, the Stradbrook Stream, flowing along the northern site boundary and is partially culverted along its route. The Stradbrook Stream Water Framework Directive (WFD) risk score and status is still under review, and whilst the stream is significantly culverted, the ecological status or potential is assigned as ‘moderate’ in 2013-2018. No chemistry monitoring data is available for the stream on the EPA database.

Direct hydrological linkages exist between the Stradbrook Stream and the Dublin Bay waterbody where a number of SACs and SPAs are situated, the closest of which is the South Dublin Bay SAC, and the South Dublin Bay and River Tolka Estuary SPA located approximately 400m and 450m respectively from the north boundary of the proposed development site. Dublin Bay has a WFD status (2013 – 2018) of ‘Good’ and a risk score of ‘Not at risk’. The ecological status of transitional and coastal water bodies during 2013-2018 for Dublin Bay is classed as ‘good’ (EPA, 2022).

The Office of Public Works (OPW) mapping shows that areas to the north-east of the site are predicted by surface water flooding and has records of flooding in Monkstown to the east of the site. The closest recorded event to the site caused flooding of the Carrickbrennan Road area in 2011. Flood Zone Mapping does not show any flooding (Flood Zone A / Flood Zone B) affecting the site or surrounding areas however, the northern extent of the site is shown to be an ‘Area of Flood Risk Concern’ for Fluvial – Surface Water (from the Stradbrook Stream).



## **7.4 Potential Impacts of the Proposed Project**

### **7.4.1 Construction Phase**

Construction phase impacts to surface waterbodies are possible from (i) Sedimentation from near-river material handling, (ii) spillage of hydrocarbons and other chemicals into the surface water environment, (iii) spillage of cementitious materials directly into the Stradbrook Stream or be washed into it in run-off and (iv) mistreatment from on-site toilets and washing facilities provides for potential water quality impacts. Impacts largely relate to the reduction of surface water quality which may compromise their respective WFD statuses or cause effect to the Conservation Objectives of the nearby designated sites. They were assigned individually to the immediate receptor (Stradbrook Stream), to Nationally Designated Sites, to European Designated Sights and to Internationally Designated Sites. Significance of impact ranged from 'significant/moderate' to 'significant' pre-mitigation.

### **7.4.2 Operational Phase**

Operational phase impacts were identified and related largely to the leak of petrol/ diesel fuel from individual cars in parking areas whereby contaminated run-off has potential to seep into bedrock and the underlying aquifer system, and from additional pressures incurred through discharge of sewerage from the development into the existing system (which will discharge into the Dublin Bay and associated designed sites). For the former, whilst the importance of the feature was considered 'medium', the risk of impact was considered to be 'low', on account of the low contaminant loading and short-term nature of any potential discharge. Therefore, the overall significance rating was considered to be 'imperceptible'. For the latter, no perceptible risk was found, as the peak effluent discharge from the site would equate to 0.096% of the licensed discharge at Ringsend WWTP and would therefore not impact on the overall water quality within Dublin Bay.

## **7.5 Residual Impacts (post-mitigation)**

### **7.5.1 Construction Phase**

Prior to mitigation, potential impacts to the surrounding waterbodies were considered to range from 'significant' to 'moderate' in most cases, largely on account of the designation status of the potentially affected waterbodies (nationally, European and internationally significant) located within the Zone of Influence of, and with hydrological connection to the proposed development. However, the implementation of mitigation measures during the construction phase, along with good site management and construction practices will reduce the significance of effect to 'imperceptible' in all cases, except where an accidental pollution event (i.e., spill) occurs. This will still result in a significant effect to the Stradbrook Stream, due to proximity to the potential spill source. A similar conclusion is made within the NIS prepared for the Project.





### **7.5.1 Operation Phase**

With regards to the operational phase, the same residual impacts are assigned as with construction, with all effects being 'imperceptible' and resulting in no-change with the exception of accidental and once-off pollution events (i.e., spill) which would result in a significant effect to the Stradbrook Stream.



## **8.0 AIR QUALITY AND CLIMATE**

### **8.1 Introduction**

AWN Consulting Limited has been commissioned to conduct an assessment of the likely impact on air quality and climate associated with the proposed Project at Dalguise House, Monkstown, Co. Dublin.

### **8.2 Methodology**

Impacts to air quality and climate can occur during both the construction and operational phases of the proposed development. With regard to the construction stage the greatest potential for air quality impacts is from fugitive dust emissions impacting nearby sensitive receptors. Impacts to climate can occur as a result of vehicle and machinery emissions.

Potential impacts to air quality during the operational phase of the proposed Project are as a result of a change in traffic flows and volumes on the local road network. The changes in traffic flows were assessed against the UK Design Manual for Roads and Bridges (DMRB) screening criteria for an air quality assessment.

### **8.3 Baseline Environment**

In terms of the existing air quality environment, baseline monitoring data available from similar environments indicates that levels of nitrogen dioxide, particulate matter less than 10 microns and less than 2.5 microns are generally well below the National and European Union (EU) ambient air quality standards.

The existing climate baseline can be determined by reference to data from the EPA on Ireland's total greenhouse gas (GHG) emissions and compliance with European Union's Regulation 2018/842. The EPA state that Ireland had total ESR GHG emissions of 43.48 Mt CO<sub>2</sub>eq in 2021. This is 2.71 Mt CO<sub>2</sub>eq higher than Ireland's annual target for emissions in 2021. The EPA predict that Ireland can comply with the GHG targets for 2021 – 2030 provided full implementation of the measures outlined within the Climate Action Plan and the use of the flexibilities available.

### **8.4 Potential Impacts of the Proposed Project**

#### **8.4.1 Construction Phase**

There are a number of sensitive receptors in close proximity to the site at which dust impacts may occur. Provided the dust mitigation measures outlined in Appendix 11.2 of Chapter 11 are implemented, dust emissions are predicted to be short-term, negative and imperceptible and will not cause a nuisance at nearby sensitive receptors.

The best practice dust mitigation measures that will be put in place during construction of the proposed Project will ensure that the impact of the Project complies with all EU ambient air quality legislative limit values which are based on the protection of human health. Therefore,



the impact of construction of the proposed Project will be short-term, localised, negative and imperceptible with respect to human health.

#### **8.4.2 Operational Phase**

Potential impacts to air quality during the operational phase of the proposed Project are as a result of a change in traffic flows and volumes on the local road network. As stated previously, the changes in traffic flows were assessed against the UK Design Manual for Roads and Bridges (DMRB) screening criteria for an air quality assessment. The operational phase air quality modelling assessment determined that there is no potential for significant impacts as a result of traffic related to the proposed Project. It can therefore be determined that the impact to air quality as a result of altered traffic volumes during the operational phase of the proposed Project is negative, imperceptible and long-term.

The changes in traffic volumes associated with the operational phase of the development were not substantial enough to meet the assessment criteria requiring a detailed climate modelling assessment. The proposed development is not predicted to significantly impact climate during the operational stage and will not contribute significantly to Ireland's obligations under the EU Targets and emissions ceilings set out by Directive (EU) 2016/2284 *"On the Reduction of National Emissions of Certain Atmospheric Pollutants and Amending Directive 2003/35/EC and Repealing Directive 2001/81/EC"*. In addition, the proposed development has been designed to minimise the impact to climate where possible during operation.

As the National and EU standards for air quality are based on the protection of human health, and concentrations of pollutants in the operational stage of the proposed development are predicted to be significantly below these standards, the impact to human health is predicted to be imperceptible, negative and long term.

#### **8.5 Residual Impacts (post-mitigation)**

No significant impacts to either air quality or climate are predicted during the construction or operational phases of the proposed development.



## **9.0 NOISE AND VIBRATION**

### **9.1 Introduction**

AWN Consulting Limited has been commissioned to conduct an assessment of the likely noise and vibration impacts associated with the proposed residential development at Dalguise House, Monkstown, County Dublin.

### **9.2 Methodology**

The noise impact assessment has focused on the potential outward impacts associated with the construction and operational phases of the proposed development on its surrounding environment.

### **9.3 Baseline Environment**

The existing noise climate in the vicinity of the proposed development has been surveyed. Prevailing noise levels are primarily due to local road traffic. Noise levels measured on the site have been used in the assessment of potential impacts associated with the proposed development.

### **9.4 Potential Impacts of the Proposed Project**

#### **9.4.1 Construction Phase**

During the main construction phase involving excavation, site clearance, building construction works, and landscaping, the assessment has determined that for construction works taking place close to the site boundaries, that the predicted noise levels will be above the construction noise criteria at the nearest sensitive properties. During periods of construction in these areas of the site it is predicted that short term significant impacts are likely.

#### **9.4.2 Operational Phase**

During the operational phase, the outward noise impact to the surrounding environment will include any additional traffic on surrounding roads and plant noise from the residential and amenity buildings as part of the development. The impact assessment has concluded that additional traffic from the proposed development on local roads will have an insignificant impact on the surrounding noise environment. Mechanical plant items will be designed to ensure any noise impacts during this phase will not exceed the recommended limit values.

### **9.5 Residual Impacts (post-mitigation)**

Mitigation measures are recommended during the construction phase so that impacts are reduced. There is potential for significant impacts associated with the most intensive construction works and where works take place close to dwellings located adjacent to the site boundary.



## 10.0 LANDSCAPE AND VISUAL

### 10.1 Introduction

The Landscape and Visual chapter describes the townscape context of the proposed development and assesses the likely impacts of the scheme on the receiving environment, in terms of both townscape character and visual amenity.

**Landscape/townscape assessment** relates to changes in the physical environment, brought about by a proposed development, which may alter its character. **Visual Impact Assessment** relates to changes in the composition of views as a result of changes to the landscape/townscape, how these are perceived and the effects on visual amenity.

### 10.2 Methodology

Production of this Landscape/Townscape and Visual Impact Assessment involved:

- A desktop study to establish an appropriate study area and relevant landscape and visual designations in the *Dún Laoghaire Rathdown County Development Plan 2022-2028*;
- Fieldwork undertaken in April 2022 to study the receiving environment;
- Assessment of the significance of the landscape impact of the proposed development as a function of landscape sensitivity weighed against the magnitude of the landscape impact;
- Assessment of the significance of the visual impact of the proposed development as a function of visual receptor sensitivity weighed against the magnitude of the visual impact. The visual impact assessment utilises verifiable photomontages of the proposed development from a range of receptor locations within the surrounding public realm.

This document uses methodology as prescribed in the Institute of Environmental Management and Assessment (IEMA) and landscape Institute (UK) *'Guidelines for Landscape and Visual Impact Assessment'* (GLVIA-2013). It is also undertaken in accordance with the *Guidelines for Information to be Contained in Environmental Impact Assessment Reports* (EPA, 2022).

### 10.3 Baseline Environment

The site itself is that of Dalguise House, which is approximately 3.58ha in size with the protected structure of Dalguise House located south-centrally within it amongst extensive gardens, lawns and mature trees. The site is in the heart of Monkstown Valley which slightly lower lying than the lands that surround it. Most notably there is a small rise to the north in the direction of Monkstown Road, which runs along a low crest before the topography falls gently towards the sea at Seapoint Beach. To the east and west of the site are the meandering cul-de-sacs of the 'Richmond Park' and 'The Beeches' respectively. These mainly consist of mid-low density terraced and semi-detached dwellings surrounding small communal green areas. To the south, a line of generous proportioned detached houses from Brook Crescent





back onto the wooded southern boundary of the site. The grounds of Stradbroke Rugby Club occupy much of the nearby land to the southwest.

The wider study area throughout the southern quarters consists of residential housing estates that have emerged over the last century with the notable ruins of Monkstown Castle located on land to the southeast of the junction of Carrickbrennan Road Castle park and Monkstown Avenue. The village core of Monkstown is located approximately 200m to the northeast of the site and to the north, the coast roads of Seapoint Avenue and Longford Terrace separate large period residences from the coastline. The intervening land is occupied by Seapoint linear park and Salthill / Monkstown DART station as well as the railway line that runs along the coast. The West Pier of Dun Laoghaire harbour occurs within the north eastern portion of the study area and is a popular recreational feature. Seapoint Beach, to the north of the site, is a popular bathing spot beneath one of the Martello towers that line the Dublin Bay Coastline

Dalguise House appears on the Ordnance Survey maps from the period 1888 – 1913 in a location formerly occupied by Richmond Cottage which was contained in the wider estate of Carrick Brennan Lodge. The village of Monkstown was formerly known as Carrickbrennan where a church had been built before the 8<sup>th</sup> century. Monkstown Castle was built in the 12 or 13<sup>th</sup> century and the land around Monkstown remained largely rural up until the 1800s, but containing large stately houses owned by merchants of Dublin.

## **10.4 Potential Impacts of the Proposed Project**

### **10.4.1 Construction Phase**

There will be permanent physical effects to the land cover of the site, which are not readily reversible following the construction stage. The open parkland landscape of the site will be changed to a high intensity residential development that will see many of the internal trees, gardens and lawn areas removed for basement excavation and replacement by circulation and storage areas. During the construction stage of the proposed development, which is estimated to take approx. 36 to 42 months, there will be intense construction-related activity within and around the site, including approach roads.

Construction stage impacts will be greatest as the emerging, scaffolding covered, apartment building shells rise into view for surrounding receptors and contribute negatively to views and townscape character. However, construction stage impacts on landscape/townscape character will be 'short-term' and are not deemed to be significant.

### **10.4.2 Operational Phase**

The operational stage townscape impacts are a balance between the substantially increased scale and intensity of modern built development within a site that currently represents partly derelict underutilisation of a substantial, but hidden area of heritage open space that contributes to the general sylvan character of the landscape fabric, but less so to the overt landscape character of the local area. The proposed development allows for a rejuvenation



and repurposing of the site and Dalguise House in a manner that secures its utility and relevance for decades to come and sets it within a campus-style urban form that benefits from the leafy character to be retained and supplemented. Given its location within the relatively low lying ground of Monkstown Valley and the degree of enclosure and screening by buildings and vegetation, the contribution of the proposed development to the townscape character of the wider study area is not strong as the scale of the development would suggest.

Eighteen viewpoints are utilised for the visual impact assessment and these represent a broad range of viewing distances and angles, viewing contexts and visual receptor types. The significance of visual impacts generally varies between Moderate-slight at five of the closer viewpoints, to Imperceptible, generally from more distant viewpoints where intervening screening limits or eliminates potential views of the proposed development. Only from VP6 (Richmond Park) during within months, when intervening trees are bare, is there considered to be a Moderate impact. In all instances, the quality of effect was deemed to be on the Negative side of the spectrum i.e. Negative or Neutral-Negative as the upper levels of the proposed buildings will typically rise into view above intervening buildings and vegetation adding to the general scale and intensity of built form, but without the full design context. There are not considered to be any significant visual impacts.

In terms of cumulative impacts, there are a number of other large residential developments that are committed or planned within the wider area i.e. beyond the 1km radius TVIA study area. However, there are only two in the near vicinity that will have a material cumulative impact. Whilst they each contribute towards a trend for an increased scale and density of residential development in the area, there is relatively little intervisibility likely between the developments and cumulative effects are not deemed to be significant.

## **10.5 Residual Impacts (post-mitigation)**

There are not any specific landscape and visual mitigation proposed and instead, relevant mitigation is embedded in the design of the proposed development and particularly landscape proposals which will see sylvan character retained and/or reinstated insofar as possible. Consequently, the landscape and visual assessment of 'Potential Impacts' accounts for embedded mitigation and potential impacts can be considered the same as 'Residual Impacts' in this instance.



## **11.0 CULTURAL HERITAGE AND ARCHAEOLOGY**

### **11.1 Introduction**

IAC Archaeology has prepared chapter 14 to assess the impacts, if any, on the archaeological and cultural heritage resource of the proposed development at Dalguise House, Monkstown, County Dublin.

### **11.2 Methodology**

Research has been undertaken in two phases. The first phase comprised a paper survey of all available archaeological, historical, and cartographic sources. The second phase involved a field inspection of the proposed development area.

### **11.3 Baseline Environment**

The proposed development area lies within an extensive curtilage to the south of Monkstown Road and is surrounded by modern developments. The Stradbrook Stream (sometimes referred to as the Monkstown Stream), flows east-west through the development area at Drayton Close and abuts the northern extent of the Dalguise lands. The townland boundary between both Dunleary and Monkstown extends partially through the proposed development area and can be considered as possessing cultural heritage and archaeological potential. The demesne landscape associated with Dalguise House also possesses cultural heritage significance, being a post medieval designed landscape. The specific built heritage elements of the proposed development area and the designed landscape are detailed and assessed in Chapter 15 Architectural Heritage.

There are no archaeological sites located within the development area; however, there are seven recorded monuments within the 500m study area, The nearest of these sites consists of Martello tower (DU023-010), located c. 420m to the northwest.

A review of the Excavations Bulletin (1970–2022) has revealed that no investigations have been carried out within the proposed development area, although three investigations have taken place within the surrounding environs. All three investigations at Martello Tower, Carrickbrennan Graveyard and Monkstown Primary School failed to identify any features of archaeological significance.

Analysis of cartographic sources has revealed that the proposed development area itself has remained relatively unchanged from the post-medieval to modern periods. Historically the site is placed within the townland and parish of 'Monckstowne'. The site is located to the northwest of Monkstown Castle within open fields, with the Monkstown Stream passing through the site from east to west. The townland boundary between Dunleary and Monkstown divides the site along the trajectory of the Monkstown Stream. The site is mostly within the demesne of Richmond Cottage (Dalguise) and possibly a small part of the neighbouring Carrickbrennan Lodge to the immediate west. The development area passes through the demesne of Drayton Lodge specifically.



Analysis of aerial photographic record available for the area failed to identify any previously unknown archaeological features in the area. The site has remained within the landscape of Dalguise and Drayton Close with Stradbrook Stream running east to west through the development area. A field inspection has been carried out as part of the assessment which established that the demesne landscape depicted on the 1912 OS mapping survives largely intact, including the majority of the structural features, in varying degrees of preservation. No previously unknown features of archaeological potential were identified, with the exception of the general archaeological potential assigned to watercourses.

## **11.4 Potential Impacts of the Proposed Project**

### **11.4.1 Construction Phase**

There are no predicted impacts on any known archaeological remains or recorded monuments during the construction of the proposed development. It is possible that ground disturbances associated with the development may directly and negatively impact archaeological features or deposits that have the potential to survive beneath the current ground level, without surface expression. Dependent on the nature, extent and significance of any such remains, impacts may be moderate to very significant in significance.

The townland boundary between Dunleary and Monkstown follows the trajectory of the Stradbrook Stream, which will be crossed by a new entrance and bridge into the proposed development area. Ground disturbances within the stream channel may result in direct, negative impacts upon buried archaeological remains or artefacts. Dependent on the nature, extent and significance of any such remains, impacts may be moderate to very significant in significance.

All topsoil stripping associated with the proposed development will be monitored by a suitably qualified archaeologist. If any features of archaeological potential are discovered during the course of the works further archaeological mitigation may be required, such as preservation in-situ or by record. Any further mitigation will require approval from the National Monuments Service of the Department of Housing, Local Government and Heritage.

Prior to the commencement of construction, an underwater wade survey will be carried out on the section of the stream to be affected by the construction of a new access bridge. This will be carried out under licence to the DoHLGH. Dependent on the results of the assessment, further mitigation may be required such as preservation in-situ or by record and/or archaeological monitoring. Any further mitigation will require approval from the National Monuments Service of the Department of Housing, Local Government and Heritage.

### **11.4.2 Operational Phase**

There are no predicted operational impacts upon the archaeological or cultural heritage resource and as such no mitigation is required.

## **11.5 Residual Impacts (post-mitigation)**

Following the completion of mitigation, there will be no residual negative impacts upon the archaeological or cultural heritage resource.



## 12.0 ARCHITECTURAL HERITAGE

### 12.1 Introduction

This report has been prepared by Ciarán Mullarkey & Karl Pedersen of Mullarkey Pedersen Architects. Mullarkey Pedersen Architects are RIAI Accredited Grade I Conservation Architects. This report has been prepared to assess likely impacts, both direct and indirect, on protected structures and other heritage assets, following inspection of the site and surrounding urban context; architectural and historical research, including development chronologies; assessment of design proposal for the site.

### 12.2 Methodology

The Protected Structure and curtilage affected or likely to be affected by the development have been identified and described. This description takes into consideration four principal areas which define heritage value; a) Evidential value present as a physical record of past human activity; b) Historical value that illustrates the connection of past people or events to the present; c) Aesthetic value that provide sensory and intellectual stimulation; and d) Communal value that contributes to a collective experience or memory.

The heritage assets have been assessed in terms of their sensitivity to change, and the degree to which the proposed development will impose change on the assets, directly or indirectly. The understanding of the sensitivity to change and the degree of change probable allows a quantitative and qualitative determination of the likely impact on the heritage assets. Impacts are determined to be Positive, Neutral or Negative, and the degree of impact is established, ranging from Very Significant to Negligible.

Where negative impacts are noted as a possibility, mitigation measures to reduce the severity of the impact or eliminate it are identified. These mitigation measures include i) Control over the height of proposed structures in proximity to Heritage Assets, ii) The retention and enhancement of historic landscape, iii) a sensitive approach to interventions in historic fabric, and iv) enhancing public access to heritage assets.

### 12.3 Baseline Environment

Dalguise House was built sometime between 1816 and 1837 at a time when Monkstown saw an influx of many of the city's more successful residents. Dalguise House was most probably originally a villa, a distinctive typology in Irish Architectural History, namely a country house with a defining relationship with the city, functioning as a retreat from the city but nonetheless very much part of it. The site later became subsumed within the massive wave of suburban development. Those features which have been identified as being of some importance, and susceptible to change by the Development, are:

1. *Dalguise Lodge/Entrance Lodge*
2. *Garden paths*
3. *Stables*
4. *Wall to Walled Garden*
5. *Vinery*
6. *Dalguise House*





7. *Gate Lodge/Brick Lodge*

## 12.4 Potential Impacts of the Proposed Project

The principal potential impacts to Heritage Assets from the developments are:

i) *Setting & Context*

The site retains some elements of the 19<sup>th</sup> century layout, notably the carriage way, lawn, walled garden and stables. The Development will cause a significant overall change to the setting, which is currently almost rural in character. The proposed development includes 11 No. apartment buildings the tallest of which is 9 storeys, changing the setting from a secluded parkland setting to a more urban one. The apartment blocks are located at such a distance as to allow the historic structures to be viewed and understood in their totality. In addition, the masterplan retains the centrality of Dalguise House itself within the historic grounds. The primary historic routes will be retained and will provide new development with its ordering principal. The retention of these routes as the backbone of a large new development will preserve these routes into the future, and as such will result in positive effects on the heritage of these historic features

ii) *Lodges.*

The two historic Lodges (Dalguise Lodge/Entrance Lodge and Gate Lodge/Brick Lodge) form part of the curtilage of the Protected Structure & date from late 19<sup>th</sup> Century. The restoration of these structures, to best conservation practice, will enhance the conservation significance of the site. The removal of the west chimney from the inner lodge, and removal of existing partitions and doors will have a moderate negative impact.

iii) *Dalguise House*

The House has been subject to extensive renovation over many years and its presentation and fabric has been changed considerably. There will be no impact on the external presentation of Dalguise House. The historic fabric, windows, render, etc. will be refurbished or repaired as required to best conservation practice. Internally, the removal of partition walls in the basement will generate negative effects on the architectural heritage of the house, as will the division (reversible) of the two large bow ended rooms at first floor.

iv) *Vinery & Glasshouse*

The 19<sup>th</sup> century vinery has historical special interest, the 20<sup>th</sup> century glass house has none. Both buildings are to be demolished. This represents a moderate negative impact on the conservation significance of the site.



v) *Walled Garden*

The existing walled garden forms a significant element of the curtilage of a Protected Structure and it has retained its original form and fabric. The proposed development includes 2 No. apartment buildings in close proximity to wall and introduces 3 No. new openings including a vehicular opening. The construction of a block of apartments in the walled garden will bring about a very substantial change in character, which will have a negative effect on the heritage of the walled garden. In mitigation, the removal of the derelict structures when combined with the repair of the outer face of the wall, when exposed, is likely to result in positive effects on the heritage of the wall. The removal of 12.4m length of wall in the south east corner will have a significant negative effect.

vi) *The Stable Yard and Stable Buildings*

The existing Stable Yard and Buildings complex form a significant element of the curtilage of a Protected Structure. The works to the stable building will involve the removal of most of the existing modern interventions and a restoration of the original external character of the building, giving rise to positive effects on architectural heritage. The coachman's cottage will be renovated to best conservation practice. This represents an enhancement of the conservation significance.

## 12.5 Residual Impacts (post-mitigation)

Impacts to the setting and context of the Protected Structure and Curtilage are mitigated as noted in Section 15.5. of Chapter 15 Architectural Heritage. By the nature of the Heritage Assets, these mitigation measures are aimed at reducing the severity of the impact and upgrading historic fabric. With mitigation measures applied:

- The siting and massing of new-build elements will ensure that the centrality of Dalguise House is not compromised, and the relationship it enjoys with the historic grounds in its immediate curtilage is retained.
- Openings in the walled garden will be limited to those necessitated by the change of use of the site, and new openings will be sensitively and appropriately detailed. The garden wall will continue to be a defining feature of the site.
- The most significant elements of the Historic Landscape, Dalguise House, walled garden, lodges, historic circulation routes, stables and vinery will all be retained and enhanced. Impacts to these will be reduced to the change in setting/context and the localised loss of fabric.



## 13.0 MICROCLIMATE – WIND

### 13.1 Introduction

This chapter of the EIAR assesses the impacts of wind velocities on the proposed Large Residential Development (LRD) at the lands at Dalguise House, Monkstown Road, Monkstown, Co. Dublin, and surrounding area. This chapter of the EIAR should be read in conjunction with the Wind Microclimate Study submitted as part of this planning application. This chapter has been prepared by Metec Consulting Engineers.

### 13.2 Methodology

The method for the study of wind microclimate combines the use of Computational Fluid Dynamics (CFD) to predict wind velocities and wind flow patterns, with the use of wind data from suitable meteorological station and the recommended comfort and safety standards (Lawson Criteria). The effect of the geometry, height and massing of the proposed development and existing surroundings including topography, ground roughness and landscaping of the site, on local wind speed and direction is considered as well as the pedestrian activity to be expected (sitting, standing, strolling and fast walking). The results of the assessment are presented in the form of contours map of the Lawson criteria at pedestrian level. “Lawson Comfort and Distress Criteria” has been adopted for wind microclimate studies as a means of assessing the long term suitability of urban areas for walking or sitting, accounting for both microclimatic wind effects (i.e. site location and prevailing winds) and microclimatic air movement associated with wind forces influenced by the localised built environment forms and landscaping effects.

- Topography of the site with buildings (proposed and adjacent existing/permited developments massing, depending on the scenario assessed “baseline, proposed or cumulative”) have been modelled.
- Suitable wind conditions have been determined based on historic wind data. Criteria and selected wind scenarios included means and peaks wind conditions that need to be assessed in relation to the Lawson Criteria.
- Computational Fluid Dynamics (CFD) has been used to simulate the local wind environment for the required scenarios (‘baseline, proposed, cumulative”).
- The impact of the proposed development massing on the local wind environment has been determined (showing the wind flows obtained at pedestrian level).
- Potential receptors (pedestrian areas) have been assessed through review of external amenity/public areas (generating the Lawson Comfort and Distress Map).
- Potential mitigation strategies for any building related discomfort conditions (where necessary) have been explored.

The significance of on-site measurement locations are defined by comparing the wind comfort/safety levels with the intended pedestrian activity at each location, using the table provided by the Lawson Comfort and Distress Criteria.



### **13.3 Baseline Environment**

The wind microclimate of the baseline environment is defined by the wind patterns that develop on the existing site under the baseline wind conditions. There is not designated public area in the existing context, therefore the application of the Lawson Criteria was not necessary as potential receptors will use the area, for the different designated scope, when the proposed development will be constructed. However, the map of Comfort and Distress was produced as a means of understanding the wind patterns of the site generated by the local wind climate.

For assessing the wind microclimate for the proposed development, the study has considered the site exposed to all the wind directions which exceed the 5% of frequency, as required for the Lawson Criteria and some additional high-speed winds, which are occurring less often (below 5% of the times) but that can cause distress conditions because of their speed.

### **13.4 Potential Impacts of the Proposed Project**

#### **13.4.1 Construction Phase**

As construction of the Dalguise House Development progresses, the wind conditions at the site would gradually adjust to those of the completed development. During the construction phase, wind conditions will be in line with the baseline wind microclimate and the effect on potential receptors (pedestrians) can be considered negligible.

Furthermore, the areas more sensitive for receptors (Central Landscaped Area) are potentially not going to be used until construction will be finalised.

#### **13.4.2 Operational Phase**

The assessment of the proposed scenario has shown that no area is unsafe and no conditions of distress are created by the proposed development. All the roads proposed can be used for their intended scope (walking). The proposed central landscape area can be used for long-term sitting/short term-sitting. The wind microclimate of the proposed development is comfortable and usable for pedestrians.

### **13.5 Residual Impacts (post-mitigation)**

Wind cannot be eliminated or totally mitigated as it depends on weather conditions which could vary. The data of the historical wind conditions collected and reported in the previous sections, show that the wind speeds likely to occur on the site are below critical values and that pleasant and comfortable microclimate can be maintained for most of the time and under the most frequent wind scenarios.

Gusts and storms can still occur however, and they can create unpleasant and sometimes unsafe conditions. The pedestrian activities concerning the Lawson Comfort and Distress Criteria are not in general carried out during those weather conditions. Having considered the above, no further changes to the development design and further increasing of the landscaping is suggested, as safety and pedestrian comfort is maintained in accordance with Lawson Comfort and Distress Criteria and Distress Criteria.



## **14.0 MATERIAL ASSETS - ROADS AND TRAFFIC**

### **14.1 Introduction**

This Chapter assesses any likely and significant impacts associated with traffic due to the proposed development. Mitigation measures are proposed where negative effects are identified. This chapter of the EIAR should be read in conjunction with the accompanying Transport Impact Assessment Report (TIA) and Framework Mobility Management Plan (MMP)/Travel Plan.

### **14.2 Methodology**

Traffic count surveys were undertaken in March 2022 in order to collate the full set of traffic data considered necessary to support the planning application for the proposed development. The estimated trip rates from the proposed development were calculated and added these figures to the base flows. A Junctions 10 analysis was also undertaken to assess the capacity of the proposed accesses onto Monkstown Road (R119). An assessment of public transport provisions in the area was also carried out to determine the likely usage of public transport services by residents and visitors to the new development.

In addition, to the Transport Impact Assessment (TIA) undertaken, a Travel Plan / Mobility Management Plan (MMP) for the proposed development was prepared with the specific objectives of reducing in overall terms both the number of trips generated by the development and ensuring that greater numbers use the extensive public transport services in the immediate area. In addition, a Construction and Environmental Management Plan was prepared for the construction stage.

In terms of projecting future year traffic scenarios beyond the 2022 Base Year, the assumed Opening Year of the proposed development was taken to be 2024, with the Design Year taken as 2039. Pre-planning discussions also took place with Dun Laoghaire Rathdown County Council (DLRCC) on the proposed access and parking strategy.

### **14.3 Baseline Environment**

The proposed development site is well served by public transport infrastructure (DART and buses), bicycle lanes and road (R119 Monkstown Road). The GDA Cycle Network Plan has identified further enhancements to the existing network in the vicinity of the proposed development. The BusConnects Plan proposes revisions to the bus network to better serve existing and proposed development in the area.





## 14.4 Potential Impacts of the Proposed Project

### 14.4.1 Construction Phase

The likely effect of the proposed development during the construction phase will be:

- 1) Additional HGV traffic along the proposed designated haul route which will have a slight medium-term adverse effect on the local road network during the construction works.
- 2) Additional construction personnel car / light vehicle movements which will have a slight medium-term adverse effect on the local road network during the construction works.
- 3) Construction vehicle movements associated the proposed development when undergoing service connections on the public road, which will have a slight short-term adverse effect on traffic movements on these roads in the vicinity of the proposed development.
- 4) Construction vehicle movements at the site access on Monkstown Road which will have a slight short-term adverse effect on pedestrian and cycle movements on these roads in the vicinity of the proposed development, for example due to pedestrians and cyclists having to give way at the construction access to the site and / or divert around construction works.

### 14.4.2 Operational Phase

#### *Vehicular Traffic Impact*

The AADT of Monkstown Road in the Base Year (2022) was calculated having regard to Unit 16.1 of the TII Project Appraisal Guidelines for National Roads, October 2016. The TIA has calculated that the additional AADT associated with the proposed development is equal to 9.6% of the Opening Year AADT and 8.9% of the Design Year AADT. The likely impact of the proposed development during the operational phase will therefore be negative, moderate and long-term in the immediate vicinity of the proposed development on Monkstown Road. This impact will dissipate on the wider road network, reducing with distance from the site.

#### *Public Transport*

The anticipated loading from the proposed development is less than 1% of the DART's capacity and therefore its impact on the DART public transportation system will be negligible. Therefore, the impact of additional bus passenger loading has been taken into account in the design of the future bus service network through the NTA's detailed modelling. Therefore, the local public transportation system will have adequate capacity to cater for the additional passenger loading associated with the proposed development.

#### *Pedestrians and Cyclists*

There will be an increase in the number of pedestrians and cyclists in the surroundings of the development. However, the area enjoys good pedestrian and cycle connectivity and there is ample capacity to absorb this increase.



## **14.5 Residual Impacts (post-mitigation)**

### **14.5.1 Construction Phase**

Following implementation of the Construction and Environmental Management Plan, the impact of the proposed development will be negative, temporary and slight during the construction stage.

### **14.5.2 Operational Phase**

There will be a moderate increase in the use of the immediately adjacent road network by private vehicles. This will dissipate with distance from the site. There will be an increase in the number of pedestrians and cyclists in the surroundings of the development. However, the area enjoys good pedestrian and cycle connectivity and there is ample capacity to absorb this increase. The impact of the development during the operational phase will be permanent, negative and slight.



## 15.0 MATERIAL ASSETS – WASTE MANAGEMENT

### 15.1 Introduction

AWN Consulting Ltd. carried out an assessment of the potential impacts associated with waste management during the construction and operational phases of the proposed development. The receiving environment is largely defined by Dún Laoghaire-Rathdown County Council (DLRCC) as the local authority responsible for setting and administering waste management activities in the area through regional and development zone specific policies and regulations.

### 15.2 Methodology

The assessment of the impacts of the Proposed Development, arising from the consumption of resources and the generation of waste materials, was carried out taking into account the methodology specified in relevant guidance documents, along with an extensive document review to assist in identifying current and future requirements for waste management; including national and regional waste policy, waste strategies, management plans, legislative requirements and relevant reports. A summary of the documents reviewed, and the relevant legislation is provided in the RWMP and in the OWMP provided in Appendices 18.1 and 18.2.

### 15.3 Baseline Environment

There is currently no waste generated at the proposed development site.

### 15.4 Potential Impacts of the Proposed Project

If waste material is not managed and stored correctly, it is likely to lead to litter or pollution issues at the development site and in adjacent areas.

#### 15.4.1 Construction Phase

During the construction stage, mismanagement of waste – including inadequate storage of waste, inappropriate segregation techniques, using non-permitted waste contractor or inadequate handling of hazardous waste - can all lead to **short-term, significant** and **negative** impacts.

#### 15.4.2 Operational Phase

An inadequate strategy to management waste generated during the operational phase of the proposed development can lead to **long-term, significant** and **negative** impacts.

These impacts may arise in the form a segregation system which is not fit for purpose and lead to waste unnecessarily being diverted to landfill. Inappropriately designed waste storage areas may also lead to littering, which may have knock on effects such as the presence of vermin in the affected areas. Similarly to the construction phase, the use of non-permitted waste contractors may lead to negative environmental impacts or pollution.



## 15.5 Residual Impacts (post-mitigation)

During the construction phase, typical C&D waste materials will be generated which will be source segregated on-site into appropriate skips/containers, where practical and removed from site by suitably permitted waste contractors to authorised waste facilities. Where possible, materials will be reused on-site to minimise raw material consumption. Source segregation of waste materials will improve the re-use opportunities of recyclable materials off-site. There will be soil and stones excavated to facilitate construction of the basement, the new building foundations, installation of services and roads for the development. The volume of material to be excavated has been estimated by the project engineers (Byrne Looby) at c. 68,123m<sup>3</sup>. Any suitable excavated material will be reused on site, where possible. It is anticipated that 57,904m<sup>3</sup> of excavated material will be removed from site. Excavated material which is to be taken offsite will be taken for offsite reuse, recovery, recycling and/or disposal. The remaining material will be temporarily stockpiled for reuse as fill or for landscaping, where possible.

A carefully planned approach to waste management and adherence to the mitigation measures in Chapter 18 and the site-specific Resource Waste Management Plan (Appendix 18.1) during the construction phase will ensure that the effect on the local and regional environment will be **short-term, neutral and imperceptible**.

During the operation phase, waste will be generated from the residents, tenants and staff at the proposed development. Dedicated individual bins, satellite waste storage areas (WSA) and staging areas have been allocated throughout the development for residents and staff. The WSAs have been appropriately sized to accommodate the estimated waste arisings in individual spaces as well as in shared residential areas. The waste storage areas have been allocated to ensure a convenient and efficient management strategy with source segregation a priority. Waste will be collected from the designated waste collection areas and within the curtilage by permitted waste contractors and removed off-site for re-use, recycling, recovery and/or disposal.

An Operational Waste Management Plan has been prepared which provides a strategy for segregation (at source), storage and collection of wastes generated within the development during the operational phase including dry mixed recyclables, organic waste, mixed non-recyclable waste, medical waste, cardboard, plastic and glass as well as providing a strategy for management of waste batteries, WEEE, printer/toner cartridges, chemicals, textiles, waste cooking oil and furniture / bulky items (Appendix 18.2). The Plan complies with all legal requirements, waste policies and best practice guidelines and demonstrates that the required storage areas have been incorporated into the design of the development.

Provided the mitigation measures outlined in Chapter 18 and the site-specific Operational Waste Management Plan (Appendix 18.2) are implemented and a high rate of reuse, recycling and recovery is achieved, the predicted effect of the operational phase on the environment will be **long-term, neutral and imperceptible**.



## 16.0 MATERIAL ASSETS – BUILT SERVICES

### 16.1 Introduction

This chapter of the EIAR assesses the impacts of the proposed Large Residential Development (LRD) at the lands at Dalguise House, Monkstown Road, Monkstown, Co. Dublin, on the Material Assets – Built Services, namely the Foul Drainage, Potable Water Supply, Electricity, Gas network and telecommunications on the environment and the surrounding area. This chapter of the EIAR should be read in conjunction with the architectural and engineering drawings submitted as part of this planning application. This chapter has been prepared by Metec Consulting Engineers and Byrne Looby Consulting Engineers.

### 16.2 Methodology

The assessment of the potential impact of the proposed development on the water bodies was carried out according to the methodology specified by the EPA and the specific criteria set out in the Guidelines on Information to be Contained in an Environmental Impact Statement (EPA 2002 and 2017 (Draft)), EIA Directive, Advice Notes on Current Practice (in preparation of Environmental Impact Statements) (EPA 2003), Environmental Impact Assessment (EIA), Guidance for Consent Authorities Regarding Sub-Threshold Development (DoEHLG 2003), Development Management Guidelines (DoEHLG, 2007) and Guidelines for Planning Authorities and An Bord Pleanála on Carrying out Environmental Impact Assessments August 2018.

The following sources of information were used in the completion of this assessment:

- Site Visits
- Site Investigation Report
- Civil Engineering Drawings Prepared by Byrne Looby Consulting Engineers
- Geological Survey of Ireland (GSI) online maps and databases
- ECFRAMS Flood Mapping from OPW
- EPA online maps and databases
- Topographical Survey
- Local authority record drawings
- ESB record drawings
- BGE record drawings
- EIR record drawings
- Virgin Media record drawings

All drainage (surface and foul) and water supply will be provided in accordance with the requirements of Dun Laoghaire-Rathdown County Council and with the following:

- Greater Dublin Regional Code of Practice for Drainage Works
- Greater Dublin Strategic Drainage Study (GDSDS)
- Planning System and Flood Risk Management Guidelines
- Building Regulations (Part H)
- Irish Water Standard Details and Codes of Practice for Water and Wastewater
- Infrastructure
- CIRIA SuDS manual C753 (2015).



This chapter also encompasses knowledge obtained from site visits, drainage and water services record information received from Irish Water and the Local Authority. Additionally, information from the EPA and GSI websites has been utilised.

Metec contacted each electrical, comms and gas utility provider in order to determine the existing infrastructure in the area in and around the site.

## **16.3 Baseline Environment**

### **16.3.1 General**

#### *Foul Water Drainage:*

The background information identifies that a main combined sewer exists running under on the line of the Stradbrook/Monkstown Stream was obtained. The main is a 450mm diameter vitrified clay (VC) line flowing towards Carrickbrennan Road with an existing manhole for connection 1 at the Western end of the Purbeck Lodge and Dalguise House site intersection while proposed connection 2 is adjacent western boundary to the Drayton Close estate.

A further 450mm diameter Irish Water/ DLRCC Vitrified Clay (VC) combined line, exists, which runs from the Monkstown Valley development onto the application site, current entrance/exit roadway, and onto Monkstown Road, down Albany Avenue before connecting onto a main combined line on Seapoint Avenue was noted.

Dalguise House is served by a separate septic tank and percolation area located in the lands outside to the Walled Garden on the western boundary. This will be removed during the construction phase.

#### *Potable Water Supply:*

There is an existing 160 diameter HPPE or equivalent, Irish Water, watermain on Monkstown Road. This has been confirmed by Irish Water.

#### *Natural Gas:*

The wider area is served by a 250mm Low Pressure Network, with the site currently supplied with a low pressure connection from the Monkstown Road.

#### *Electricity:*

The wider area is served by a 10kV and 400 Volt Network, with the site currently supplied with a low voltage connection from the Monkstown Road. A High Voltage Line is located on the near carriage of the Monkstown Road, connecting High Voltage stations across South Dublin.

#### *Telecommunications:*

The wider area is served by a Fibre and Copper Network fed from local exchanges, with Open air duct infrastructure currently installed to the site boundary via the Purbeck scheme.





## 16.5 Potential Impacts of the Proposed Project

### 16.5.1 Construction Phase

#### 16.5.1.1 Direct

Accidental spills of harmful substances such as petrol/diesel or oil during the delivery and storage of harmful substances or by leakages from construction machinery. Potential for building materials or silts to be washed into the surface water system, causing blockages and pollution.

During the connection of new mains to existing mains on site there is a small risk that contamination of the existing supply may occur. The potential impact on the local public water supply network would be short term and significant.

As part of the confirmation of feasibility, upgrade works are required. These works are outside the site extents and will be carried out independently by Irish Water.

#### *Natural Gas Supply*

The requirement for Gas will not impact the site as the gas usage is anticipated to be low. The impact is likely to be not significant.

#### *Electrical Supply*

The impact is likely to be neutral, imperceptible, and temporary.

#### *Telecommunications*

EIR/Virgin Duct networks can be extended along roadways to service the development. The impact is likely to be neutral, imperceptible and temporary.

#### 16.5.1.2 Indirect

There is not anticipated to be any indirect affects to the built assets during the construction phase.

#### 16.5.1.3 Worst Case Scenario

The worst-case scenario is that flooding occurs on-site and in the surrounding area due to this development. On-site measures are to be provided during construction as outlined in this chapter and the water chapter, to ensure such flooding does not occur.



## 16.5.2 Operational Phase

### 16.5.2.1 Direct

Given the proposed residential usage, there is very little risk of accidental spillages resulting in water quality issues during the operational stage.

The development will result in an increase in the wastewater discharged from the site to the public sewer system. The foul outflow from the site will be directed to the municipal treatment plant at Ringsend. Upgrade works are needed as the plant is not currently meeting its requirements under the Urban Wastewater Treatment Directive and increased outflow from development such as the proposed development will increase loading on the Ringsend WWTP. However, planning permission has recently been granted, under Bord Order ABP301798-18 for an expansion to the WWTP at Ringsend which will increase network capacity by 50%. Irish Water have also confirmed feasibility for connection of the proposed development to the existing public sewer system subject to controlled flow provisions on the new development. Therefore, any impact from the increased wastewater flows on the existing drainage network will be temporary and not significant.

There exists a minor risk associated with the possibility of leakage from damaged foul sewers and drains within the development site. Any foul water leakage could result in minor contamination of groundwater in the area. The current foul water drainage system that is on site will need to be replaced. Placing a new system on site reduces the overall risk of leakage from damaged sewers.

Basement and undercroft car parking areas on site will discharge to the foul system via a petrol interceptor to prevent pollution from accidental oil spills.

The new development will lead to an increase in the water supply demand on the public water supply network. Irish Water has confirmed that there is capacity in the system to take additional demand. There is very little likelihood of accidental damage occurring to the water supply system during the operational phase of the development.

#### *Natural Gas Supply*

As there is very small requirement for Gas this will not impact the site. The impact is negligible and will be less than or similar to existing usage.

#### *Electrical Supply*

The impact of the proposed SHD development on the electricity supply is likely to be an increase in demand on the existing supply.

The potential impact of the proposed SHD development on the electricity network is likely to be neutral.



### *Telecommunications*

EIR & Virgin Duct networks are to be extended from Purbeck to service the Development. The potential impact of the proposed development on the EIR/Virgin networks is likely to be neutral.

#### 16.5.2.3 Worst Case Scenario

The worst-case scenario would be a failure of one of the systems on the site, which may cause flooding or pollutants to enter the surrounding environment and cause negative effects. There is very little risk of this occurring during the operational stage.

### **16.5 Residual Impacts (post-mitigation)**

Implementation of the mitigation measures and adherence to the Construction and Environmental Management Plan prepared for the project will ensure that any potential residual impacts will be short term and imperceptible.



## 17.0 INTERACTIONS

### 17.1 Introduction

This Chapter of the EIAR has been prepared by Tom Phillips + Associates and deals with likely interactions between effects predicted as a result of the proposed development.

In addition to the requirement under the *Planning and Development Regulations 2001 (as amended)* to describe the likely significant effects of the proposed development on particular aspects of the environment, it is also required to consider the interaction between impacts on different environmental factors. As such, these are assessed below.

The interaction of effects within the Proposed Development in respect of each of the environmental factors, listed in Article 3(1) of the EIA Directive, has been identified and addressed in the respective chapters in this EIAR. This chapter presents an overview of these interactions of impacts, from the Proposed Development, between the various environmental factors.

This Chapter outlines the areas where potential interactions may arise as a result of the proposed development.

The potential cumulative impact of the proposed development with committed or planned development projects in the surrounding area is also recognised as an interaction between potential environmental impacts. Cumulative impact has been addressed in detail in Chapter 21 of the EIAR and Chapter 18 of this NTS.

### 17.2 Description of Potential Interactions

All aspects of the environment are likely to interact to some extent and to various degrees of complexity. The likely significant interactions between factors arising from the proposed development are set out in the matrix provided as Table 17.1 below.



Table 17.1: summary of interactions between effects predicted as a result of the proposed development.

Interactions Between Environmental Factors												
	Popula tion & Human Health	Biodive rsity	Land, Soils, Geology and Hydroge ology	Hydrolog y	Air Quali ty/ Clima te	Noise & Vibrat ion	Landsc ape & Visual	Architec tural Heritage	Cultural Heritage and Archaeol ogy	Roads and Traf fic	Was te	Built Servi ces
Populati on & Human Health			✓	✓	✓	✓	✓			✓	✓	✓
Biodivers ity			✓	✓		✓	✓	✓			✓	✓
Land, Soils, Geology and Hydroge ology				✓	✓			✓	✓		✓	✓
Hydrolog y								✓				
Air Quality/ Climate										✓		
Noise & Vibration										✓		
Landscap e & Visual									✓			
Architect ural Heritage									✓			
Cultural Heritage and Archaeol ogy												
Roads and Traffic											✓	
Waste												
Built Services												

### 17.2.1 Interactions between *Population and Human Health* and *Land, Soils, Hydrology and Hydrogeology*

As set out in Chapter 7, 9, and 10 there is the potential for public health issues to arise due to the potential contamination of the land and soils due to the construction works. With the application of the proposed mitigation measures during the construction process, (as outlined in Section 10.5), along with good site management and construction practices will eliminate



any significant impact on the environment and reduce significance to 'imperceptible' in all cases.

#### **17.2.2 Interactions between *Population and Human Health and Air Quality and Climate***

As set out in Chapter 7 and 11, there is potential for interaction between population, human health and air quality on the basis that an adverse impact due to air quality in either the construction or operational phase has the potential to cause health and dust nuisance issues. The mitigation measures that will be put in place at the proposed development will ensure that the impact of the proposed development complies with all ambient air quality legislative limits. Therefore with mitigation measures it is considered that there will be no residual impact to human health arising from air quality impact during the construction or operational phase of development.

#### **17.2.3 Interactions between *Population and Human Health and Noise and Vibration***

As set out in Chapter 7 and 12, there is potential for population, human health and noise arising from noise/ vibration emissions during the construction phase. Whilst the potential for negative, significant and short-term impact at the closest receptors arises in respect of noise, with the proposed mitigation measures in place, the Proposed Development will not generate any perceptible levels of vibration during operation and therefore there will be no impact from vibrations on human health.

#### **17.2.4 Interactions between *Population and Human Health and Landscape and Visual***

As set out in Chapters 7 and 13, there are potential interactions between population and human health and landscape and visual on the basis of the potential effects arising from visual effects upon surrounding existing dwellings and their occupants. However, as Chapter 7 confirms, even where the proposed development is more readily visible in its surrounding context, the magnitude of operational stage landscape/townscape impacts will be negative-neutral, moderate-slight and long-term at the closest receptors. The impact upon population and human health is therefore not considered to be significant.

#### **17.2.5 Interactions between *Population and Human Health and Material Assets (Roads and Traffic)***

As set out in Chapters 7 and 17, there are potential interactions between population and human health and material assets (roads and traffic) arising from increased traffic volumes at construction and operational phase and the associated impacts surrounding air quality and noise. However, as outlined within the respective chapters, with the proposed mitigation in place, the resultant potential impact is not considered to be significant.

#### **17.2.6 Interactions between *Population and Human Health and Material Assets (Waste Management)***

As set out in Chapter 7 and 18, there are potential impacts on human beings are in relation to incorrect management of waste during construction and / or operation, which could result in littering and presence of vermin – with associated potential for negative impacts on human health and residential amenity. A carefully planned approach to waste management and adherence to the project specific C&D RWMP and OWMP (Appendices 18.1 and 18.2,





respectively), will ensure appropriate management of waste and avoid any negative impacts on the local population. The effects should be long-term, imperceptible and neutral.

#### **17.2.7 Interactions *between Biodiversity and Land, Soils, Geology and Hydrogeology***

As set out in Chapter 8 and 9, there is a potential interaction between biodiversity and land, soils, geology and hydrogeology during the construction phase which will require the excavation and importation of large amounts of material. This is identified as having the potential to lead to habitat loss and the potential for pollution within the site and outside the site. Following the implementation of the mitigation measures in Chapter 8 and 9, there will be no significant effect on the Key Ecological Receptors.

#### **17.2.8 Interactions *between Biodiversity and Hydrology***

As set out in Chapters 8 and 10, there are potential interactions between biodiversity and hydrology. This is identified on the basis that during the construction and operational phases of development, there is the potential for the proposed development to lead to pollution of the Stradbroke Stream and connected habitats downstream via contaminated surface water runoff. Following the implementation of mitigation measures outlined in Chapter 8 and Chapter 10, there will be no significant effect on the Key Ecological Receptors.

#### **17.2.9 Interactions *between Biodiversity and Noise and Vibration***

As set out in Chapter 8 and 12, there is potential for interactions between biodiversity and noise and vibration on the basis that during the construction and operational phase of development there will be an increase in disturbance including noise and vibration that could potentially lead to increased disturbance. Following the implementation of the mitigation measures in Chapter 8 and 12, there will be no significant effect on the Key Ecological Receptors.

#### **17.2.10 Interactions *between Biodiversity and Material Assets (Waste)***

As set out in Chapter 8, there is potential for interaction between biodiversity and material assets (waste) on the basis that there is the potential for the construction and operation of the proposed development to lead to pollution within the site and the wider environment. Following the implementation of mitigation measures designed to reduce the amount of waste produced, manage the wastes generated responsibly and handle the waste in such a manner as to minimise the effects on the environment as outlined in Chapter 8 and Chapter 18, there will be no significant effect on the Key Ecological Receptors.

#### **17.2.11 Interactions *between Biodiversity and Landscape and Visual***

As set out in Chapter 8, there is potential for interaction between biodiversity and Landscape and Visual on the basis that there is potential for the construction and operation of the proposed development to lead to habitat loss, habitat degradation, the introduction of species of low biodiversity value and the introduction of artificial lighting. Following the implementation of the mitigation measures in Chapter 8 and 13, there will be no significant effect on the Key Ecological Receptors.



#### **17.2.12 Interactions between *Land, Soils, Geology and Hydrogeology and Hydrology***

As set out in Chapter 9, there are potential interactions between land, soils, geology and hydrogeology and surface water, due to the excavation and removal of made ground and overburden which could potentially increase the sediment loading to the surface water environment and impact to associated aquatic species. Chapter 10 also notes that, further, contaminated or imported soil has the potential to run off during the construction phase and have negative impacts on surface water environments. The implementation of mitigation measures during the construction phase, along with good site management and construction practices will eliminate any significant impact on the environment and reduce significance to 'imperceptible' in all cases.

#### **17.2.13 Interactions between *Air Quality and Climate and Roads and Traffic***

Chapter 11 identifies potential interactions between air quality and climate and roads and traffic, noting that interactions between air quality and traffic can be significant. With increased traffic movements and reduced engine efficiency, i.e. due to congestion, the emissions of vehicles increase. The impacts of the proposed development on air quality are assessed by reviewing the change in annual average daily traffic on the surrounding road network and the proposed scheme. In this assessment, with appropriate mitigation measures the impact of the interactions between traffic and air quality are considered to be imperceptible.

#### **17.2.14 Interactions between *Air Quality and Climate and Land, Soils, Geology and Hydrogeology and Hydrology***

Chapter 9 and 11 identify potential interactions between air quality and climate and land and soils on the basis that construction phase activities such as land clearing, excavations, stockpiling of materials etc. have the potential for interactions between air quality and land and soils in the form of dust emissions. With the appropriate mitigation measures to prevent fugitive dust emissions, it is predicted that there will be no significant interactions between air quality and land and soils.

#### **17.2.15 Interactions between *Noise and Vibration and Roads and Traffic***

Chapter 12 and 17 note potential interactions between noise and vibration and road and traffic on the basis that the noise impacts have been fully considered in respect of traffic flow projections associated with the development.

#### **17.2.16 Interactions between *Architectural Heritage and Landscape (Townscape) and Visual***

Chapters 13 and 14 identify a potential interaction between architectural heritage landscape (townscape) and visual on the basis that the development of the historic landscape significantly changes the character of the development site, including views into and out of the site. The receiving townscape is considered to have Medium sensitivity. The magnitude



of townscape impact is therefore deemed to be Moderate-slight and of a marginally negative quality i.e. Neutral-Negative.

#### **17.2.17 Interactions between *Material Assets (Waste Management) and Land, Soils, Geology and Hydrogeology***

Chapter 14 identifies a potential interaction between archaeology and land and soils on the basis that there is potential for direct impacts on archaeological features as a result of construction activities including ground excavation. With the appropriate mitigation measures to monitor ground works associated with the proposed development by a suitably qualified archaeologist there are no predicted residual impacts upon the archaeological heritage resource.

#### **17.2.18 Interactions between *Cultural Heritage and Archaeology and Land, Soils, Geology and Hydrogeology***

Chapter 14 identifies a potential interaction between archaeology and land and soils on the basis that there is potential for direct impacts on archaeological features as a result of construction activities including ground excavation. With the appropriate mitigation measures to monitor ground works associated with the proposed development by a suitably qualified archaeologist there are no predicted residual impacts upon the archaeological heritage resource.

#### **17.2.19 Interactions between *Microclimate - Wind and Landscape (Townscape) and Visual***

Chapter 16 notes an interaction between microclimate wind and landscape on the basis that the landscaping proposals are incorporated into the wind modelling. With the proposed landscape mitigation measures, safety and pedestrian comfort is maintained in accordance with Lawson Comfort and Distress Criteria.

#### **17.2.20 Interactions between *Material Assets (Roads and Traffic) and Material Assets (Waste Management)***

As identified by Chapter 18, waste has the potential to interact with roads and traffic on the basis that local traffic and transportation will be impacted by the additional vehicle movements generated by removal of waste from the Site during the construction and operational phases of the proposed Development. The increase in vehicle movements as a result of waste generated during the construction phase will be temporary in duration. There will be an increase in vehicle movements in the area as a result of waste collections during the operational phase but these movement will be imperceptible in the context of the overall traffic and transportation increase. Traffic-related impacts during the construction and operational phases are addressed in Chapter 17 (Material Assets - Roads and Traffic). With the mitigation measures detailed in Chapter 17 & 18 and the requirements of the OWMP (included as Appendix 18.2), the predicted effects are short to long-term, imperceptible and neutral.



### **17.2.21 Interactions between *Archaeology and Cultural Heritage and Architectural Heritage***

Chapter 14 identifies a potential interaction between Archaeology and Cultural Heritage and Architectural Heritage on the basis that heritage considerations form the basis of both chapters. With appropriate mitigation measures, there are no predicted residual impacts upon the archaeological and cultural heritage resource.

### **17.3.22 Interactions between *Population and Human Health and Material Assets (Built Services)***

As identified by Chapter 7 and Chapter 19, there is the potential for the built services to interact with population and human health on the basis that there is the potential for public health issues to arise due to the contamination of the surrounding water service networks due to the construction works. There is a potential for disruption to services due to accidents on site during the construction process. With the appropriate mitigation measures applied during the construction process, the danger to public health will be negative, significant, and short term.

### **17.3.23 Interactions between *Land, Soils, Geology and Hydrogeology and Material Assets (Built Services)***

As identified by Chapter 19, there is the potential for the built services to interact with land, soils, geology, and hydrogeology on the basis that during the installation process of the necessary built services, excavations will be required. These excavations will be limited in their depth and therefore with mitigation measures any impact they have on the land, soils, geology, and hydrogeology will be negative, imperceptible, and temporary.

### **17.3.24 Interactions between *Biodiversity and Material Assets (Built Services)***

As identified by Chapter 8 and Chapter 19, there is potential for the construction and operation of the proposed development to lead to impacts on local biodiversity and downstream impacts on proximate watercourses and designated sites via excavation and installation works during the proposed implementation of infrastructure throughout the site. Following the implementation of the mitigation measures in Chapter 8 and 19, there will be no significant effect on the Key Ecological Receptors.



## 18.0 CUMULATIVE IMPACTS

### 18.1 Introduction

This Chapter has regard to the potential cumulative impact upon the environment arising from the proposed project, in combination with other developments (committed or planned projects) in the surrounding area. This Chapter should be read in conjunction with Section 3.7.1 and 3.7.2.

The accepted meaning of “cumulative impacts” is as set out in the Guidance on the Preparation of the EIA Report (Directive 2011/92/EU as amended by 2014/52/EU) as:

*“changes to the environment that are caused by activities/projects in combination with other activities/projects.”*

This very broad interpretation has been further defined in the Irish context in the EPA’s 2022 Guidelines on the Information to be Contained in Environmental Impact Assessment Report to mean:

*“the addition of many minor or significant effects including effects of other projects, to create larger, more significant effects”.*

The EPA guidance goes on to provide that while a single activity may itself result in a minor impact, it may, when combined with other impacts (minor or significant), result in a cumulative impact that is collectively significant.

Having regard to the built-up urban environment within which the subject lands are located, there is a significant amount of new development either under construction, permitted or proposed. In recognition of this, and the potential for cumulative impacts upon the environment, an extensive exercise has been undertaken to identify projects within the surrounding area that have the potential to give rise to cumulative impact, when considered in combination with the proposed development. The methodology surrounding the identification of relevant projects is set out below.







DLRCC/ ABP Reg. Ref.	Address	Decision Date	Overview of Development	Distance to Dalguise House
D17A/0590+A BP-301533-18	Richmond Cheshire Home, Richmond Park, Monkstown, Co Dublin	12 <sup>th</sup> April 2018. Granted after appeal on 7 <sup>th</sup> January 2019	Residential development consisting of the demolition of the existing nursing home and 5 no. studio apartments and the construction of a total of 56 no. residential units in 2 no. apartment blocks  76 car parking spaces, 5 motorcycle spaces and 41 bicycle spaces; 5 visitor car spaces and 26 bicycle spaces at surface level	Adjoining Dalguise House: < 50 metres
D19A/0378+A BP-305843-19	Former Richmond Cheshire Home, Richmond Park, Monkstown, Co Dublin	05 Jun 2019. Granted after appeal on 26 <sup>th</sup> May 2020	Permission for revisions to a residential development previously permitted under Reg. Ref. D17A/0590 / ABP-301533-18.  72 no. residential units in these 2 no. apartment blocks.  79 car parking spaces, 7 motorcycle spaces and 64 bicycle spaces	Adjoining Dalguise House: < 50 metres
ABP30380419	St. Teresa's House/Centre and St. Teresa's Lodge (Protected Structures), Temple Hill, Monkstown, Blackrock, Co. Dublin.	10 <sup>th</sup> June 2019	294 no. apartments, conversion of St. Teresa's House, dismantling and relocation of St. Teresa's Lodge,	1.2 km



ABP31232521	3.9 ha at 'St. Teresa's House' (A Protected Structure) and 'St. Teresa's Lodge' (A Protected Structure) Temple Hill, Monkstown, Blackrock, Co. Dublin	14 <sup>th</sup> April 2022	New residential and mixed use scheme of 493 residential units  Including the subdivision, conversion and re-use of 'St. Teresa's House' the dismantling, relocation and change of use from residential to café of 'St. Teresa's Lodge' within the site development area.	1.2 km
ABP30887720	Former Europa Garage Site, Newtown Avenue, Blackrock, Co. Dublin	12 <sup>th</sup> April 2021	Development of 101 no. apartments	1.3 km
D17A/0137	Newtown Avenue, Blackrock, Co. Dublin. This site is known as the 'Former Europa Garage site'	12 <sup>th</sup> April 2017 (after appeal)	Demolition of the garage buildings on site. The residential scheme shall provide for 51 no. residential units	1.3 km
D21A/0958	Former Europa Garage Site, Newtown Avenue, Blackrock, Co Dublin	20 <sup>th</sup> April 2022	Residential development providing 91 residential units	1.3 km
ABP-304682-19	Previously permitted Blocks 2 and 3, Cualanor, Glenageary, Upper Road, Co. Dublin.	30 <sup>th</sup> August 2019	368 no. apartments and associated site works.	c.1.3km
ABP30894620	Lands adjacent and to the rear of Cluain Mhuire Family Centre, Newtownpark Avenue, Blackrock, Co. Dublin	15 <sup>th</sup> April 2021	Demolition of a single storey shed, construction of 140 no. apartments	1.4 km



ABP-304249-19	Old School House, Eblana Avenue, Dun Laoghaire, Co. Dublin.	26 <sup>th</sup> July 2019	Demolition of existing buildings on site, construction of 208 no. Build to Rent Shared Living Residential Development, cafe/kiosk and associated site works.	c.1.5km
ABP-308046-20	Frascati Centre, Frascati Road, Blackrock, Co. Dublin.	16 <sup>th</sup> December 2020	Alterations to Phase 1 permission for 45 no. apartments from second to fourth floor permitted under Reg.Ref: D17A/0950 and ABP-300745-18 to include the provision of 57 no. additional apartments as an extension to Phase 1, the subject application relates to a total of 102 no. apartments.	c.1.85km
D21A/0706 + ABP -313240-22	Frascati Centre, Frascati Road, Blackrock, Co. Dublin.	Granted 15 <sup>th</sup> March 2022. 3 <sup>rd</sup> party appeal to ABP lodged 5 <sup>th</sup> April 2022.	The proposal relates to a Phase 2A residential development of 41 no. apartments and the allocation of 60 no. car spaces.	c.1.85km
ABP30733220	Dean's Grange Road, Deansgrange, Co. Dublin	20 <sup>th</sup> September 2020	Demolition of existing buildings, construction of 151 no. apartments	1.9 km
D18A/1184+A BP-305265-19	Junction of, Fleurville Road and, Newtownpark Avenue, and abutting, Annville Avenue to the east, Blackrock, Co. Dublin	29 <sup>th</sup> July 2019. Granted after appeal on 13 <sup>th</sup> Feb 2020	Residential development consisting of 68 no. apartments	2 km



### 18.2.2 Planned Projects

The below projects are planned projects that are at various stages of the planning process. The key distinction from the projects listed above is that they do not have planning permission at the time of writing. Each of these projects represent developments which consist of 50 residential units or more. These represent both mixed-use and residential developments, granted either through Section 34 process directly to DLRCC, through SHD applications directly to ABP, or granted by ABP following either first- or third-party appeals. This list includes applications within a 2km radius of the subject site at Dalguise House.

DLRCC/ ABP Reg. Ref.	Address	Lodgement Date/ Status	Overview of Development	Distance to Dalguise House
D22A/0070 + ABP-313363-22	Richmond Cheshire Home, Richmond Park, Monkstown, Co. Dublin	Planning Application Lodged 31 <sup>st</sup> January 2022. Refused by DLRCC and is now subject of a first party appeal to ABP.	Residential development comprising of 96 no. apartment units	Adjoining subject site: <50 metres
N/A	Stradbrook/Sallynoggin Streams	Tender documents for a CCTV and flow survey have been prepared which is envisaged to be completed during winter 2021-2022.	Roughan & O'Donovan Consulting Engineers (ROD) has been commissioned by Dún Laoghaire – Rathdown County Council (DLRCC) to prepare Flood Alleviation Options (FAO) for the Stradbrook and Sallynoggin Streams.	Runs through subject site
ABP-314041-22	Lands located at and adjoining Stradbrook House, Stradbrook Road, Mountashton, Blackrock, Co. Dublin.	Planning Application lodged 11 <sup>th</sup> July 2022	Demolition of the existing Stradbrook House and adjoining surface car park, and the construction of 108 No. Build-to-Rent	0.5 km



			residential senior living apartments	
ABP31207021	The former Ted Castles site and Dun Leary House (a Protected Structure), Old Dun Leary Road, Cumberland Street and Dun Leary	Planning Application Lodged 26 <sup>th</sup> November 2021.	'Build to Rent' strategic housing development consisting of the construction of a new development of 146 no. units	1.4 km
D21A/1041	St. Michael's Hospital Car Park, Crofton Road, Dun Laoghaire, County Dublin, A96 TN26	3 <sup>rd</sup> Party Appeal lodged against decision to grant on 8/8/22.	Mixed use development of 88 no. Build to Rent residential apartments, commercial unit and café across 2 buildings.	1.4km
N/A	Deansgrange Stream	Detailed Construction Design, Compilation of Work Packages and the Preparation of Tenders for Contracts	Improvements to the flood defence regime	1.6km at closest point
D21A/0996 + ABP-314429-22	Frascati Centre, Frascati Road, Blackrock, Co. Dublin.	3 <sup>rd</sup> Party Appeal lodged against decision to grant on 22/08/22.	The proposal relates to a Phase 3 residential development of 98 no. apartments and all associated site works.	c.1.85 km

### 18.3 Potential Cumulative Impact

Each Chapter which addresses a specific environmental factor provides a detailed cumulative impact assessment in respect of the committed and planned projects identified in Chapter 3 (Sections 3.7.1 and 3.7.2). The aforementioned chapters should be referred to for full details of the assessment; this chapter provides a summary of the cumulative impact assessment.



**Table 18.2: Summary of the conclusions of the Cumulative impact assessment undertaken in respect of each environmental aspect.**

Chapter/ Environmental Factor	Potential Cumulative Impact
Population and Human Health	Chapter 7 has undertaken a cumulative impact assessment of the proposed development in combination with the projects outlined in Sections 3.7.1, and 3.7.2 of this EIAR and concludes that other than the potential of neutral, imperceptible, and short-term cumulative impacts arising from construction activities upon human health (addressed in detail in Chapters 7 and 12), no further significant adverse cumulative effects would arise.
Biodiversity	Chapter 8 has undertaken a cumulative impact assessment of the proposed development in combination with the projects outlined in Sections 3.7.1 and 3.7.2 of this EIAR and concludes that there would be no significant adverse cumulative effects arising.
Land, Soils, Geology and Hydrogeology	Chapter 9 has undertaken a cumulative impact assessment of the proposed development in combination with the projects outlined in Sections 3.7.1 and 3.7.2 of this EIAR and concludes that there would be no significant adverse cumulative effects arising.
Hydrology	Chapter 10 has undertaken a cumulative impact assessment of the proposed development in combination with the projects outlined in Sections 3.7.1 and 3.7.2 of this EIAR, and concludes that there would be no significant adverse cumulative effects arising.
Air Quality and Climate	Chapter 11 has undertaken a cumulative impact assessment of the proposed development in combination with the projects outlined in Sections 3.7.1 and 3.7.2 of this EIAR and concludes that there would be no significant adverse cumulative effects arising.
Noise and Vibration	Chapter 12 has undertaken a cumulative impact assessment of the proposed development in combination with the projects outlined in Sections 3.7.1 and 3.7.2 of this EIAR and concludes that there would be no significant adverse cumulative effects arising from the operational phase of the project. In respect of the construction phase, the assessment concludes that there is potential for cumulative construction noise impacts to arise which are expected to be negative, significant and short-term.





Landscape (Townscape) and Visual	Chapter 13 has undertaken a cumulative impact assessment of the proposed development in combination with the projects outlined in Sections 3.7.1 and 3.7.2 of this EIAR and concludes that there would be no significant adverse cumulative effects arising.
Cultural Heritage and Archaeology	Chapter 14 has undertaken a cumulative impact assessment of the proposed development in combination with the projects outlined in Sections 3.7.1 and 3.7.2 of this EIAR and concludes that there would be no significant adverse cumulative effects arising.
Architectural Heritage	Chapter 15 has undertaken a cumulative impact assessment of the proposed development in combination with the projects outlined in Sections 3.7.1 and 3.7.2 of this EIAR and concludes that there would be no significant adverse cumulative effects arising.
Microclimate - Wind	Chapter 16 has undertaken a cumulative impact assessment of the proposed development in combination with the projects outlined in Sections 3.7.1 and 3.7.2 of this EIAR and concludes that there would be no significant adverse cumulative effects arising.
Material Assets (Roads and Traffic)	<p>Chapter 17 has undertaken a cumulative impact assessment of the proposed development in combination with the projects outlined in Sections 3.7.1 and 3.7.2 of this EIAR. The estimated traffic arising from the development incorporates a number of committed and planned projects deemed to have potential cumulative interactions with the development. In this regard, Chapter 17 concludes that for the construction phase of development <i>“The volume of traffic to be generated is therefore modest and will not, in itself or in combination with other nearby developments, give rise to appreciable cumulative impacts on the surrounding road network”</i>. The following is concluded for the Operational Phase Cumulative Impacts:</p> <p><b>Vehicular Traffic</b></p> <ul style="list-style-type: none"> <li>• The impact of other developments in the vicinity is captured by the application of TII growth factors to surveyed traffic volumes on the surrounding road network, which indicates increases of c. 4% per annum in background traffic volumes in the period to 2030, reducing thereafter. These figures also account for modal shift from existing car users towards more sustainable modes of transport, as the facilities available for these other</li> </ul>



	<p>modes improve with time. There is ongoing significant investment in bicycle, bus and train infrastructure, with ongoing increase in uptake of these modes.</p> <ul style="list-style-type: none"> <li>• Further, the impact of increased home-working in the aftermath of the Covid19 pandemic is not captured by these figures, and that has led to a general reduction in peak vehicular traffic flows on the road network.</li> </ul> <p><b>Public Transport</b></p> <ul style="list-style-type: none"> <li>• The impact of this cumulative additional passenger loading has been taken into account in the design of the future bus service network and therefore these cumulative impacts will be slight to moderate.</li> </ul> <p><b>Pedestrian and Cycle Facilities</b></p> <ul style="list-style-type: none"> <li>• The cumulative impacts in terms of these modes will be negligible.</li> </ul>
<p>Material Assets (Waste Management)</p>	<p>Chapter 18 has undertaken a cumulative impact assessment of the proposed development in combination with the projects outlined in Sections 3.7.1, and 3.7.2 of this EIAR, and concludes that there would be no significant adverse cumulative effects arising.</p>
<p>Material Assets (Built Services)</p>	<p>Chapter 19 has undertaken a cumulative impact assessment of the proposed development in combination with the projects outlined in Sections 3.7.1 and 3.7.2 of this EIAR, and concludes that there would be no significant adverse cumulative effects arising.</p>



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## **19.0 ENVIRONMENTAL COMMITMENTS/ MITIGATION MEASURES**

### **19.1 Summary**

This Chapter provides a consolidated list of all of the environmental commitments/ mitigation measures that have been recommended by the various specialists throughout the Chapters of this EIAR.

The mitigation and monitoring measures have been recommended on that basis that they are considered necessary to protect the environment during both the construction and operational phases of the proposed project. A summary table is provided as an Appendix to Chapter 22 of Volume 2.



## APPENDIX 1

### Details in respect of the competence of the various experts

Table 1.3: EIAR Project Team and Environmental Specialists

Name	Role	Company	Qualification/ Experience
Cheryl O'Connor	EIAR Project Manager, Co-ordinator and Planner	Tom Phillips + Associates	<b>BSocSc, MPlan (Planning and Sustainable Development)</b> <ul style="list-style-type: none"> <li>Senior Planner</li> <li>Corporate Member of the Irish Planning Institute (IPI) and Licensee Member of the Royal Town Planning Institute (RTPI)</li> <li>Over 7 years' experience in Planning and EIA.</li> </ul>
Chonail Bradley and David Doran	Population and Human Health Assessment.	AWN	<b>Chonail Bradley- BScEnv AssocMCIWM</b> <ul style="list-style-type: none"> <li>Principal Environmental Consultant</li> <li>Associate Member of the Chartered Institute of Waste Management</li> <li>Over 7 years' experience in EIA, Environmental reporting and Waste Management</li> </ul> <b>David Doran- MSc in Environmental and Energy Management</b> <ul style="list-style-type: none"> <li>Environmental Consultant with 1.5 years' experience in the Environment Team at AWN.</li> <li>Holds a MSc in Environmental and Energy Management and is an Affiliate Member of CIWM.</li> </ul>
Patrick O'Shea/Kalvin Townsend-Smyth/Rachel Heaphy	Biodiversity Assessment	ROD	<b>Patrick O'Shea- M.Sc. Ecological Management and Conservation Biology; BA in Natural Sciences (Botany).</b> <ul style="list-style-type: none"> <li>Senior Ecologist in ROD</li> <li>(MCIEEM) Full Member of Chartered Institute of Ecology and Environmental Management</li> <li>Patrick holds licences issued by the National Parks and Wildlife Service for bat roost disturbance during surveys (DER-BAT-2022-39) and to handle bats during the course of his work</li> <li>(C59/2022).</li> </ul>



			<ul style="list-style-type: none"> <li>Over 9 years in ecological survey and assessment for infrastructure projects.</li> </ul> <p><b>Kalvin Townsend-Smyth- BSc (Hons) in Wildlife Biology</b></p> <ul style="list-style-type: none"> <li>Ecologist at ROD</li> <li>3 years' experience in ecological consultancy</li> </ul> <p><b>Rachel Heaphy- BSc (Hons) in Zoology</b></p> <ul style="list-style-type: none"> <li>Ecologist at ROD</li> <li>1 year experience in ecological assessment.</li> </ul>
Jackelyn Wren	Land, Soils, Geology and Hydrogeology Assessment	ByrneLooby Consulting Engineers	<p><b>Jackelyn Wren - Honours Bachelor of Arts Degree in Geography</b></p> <ul style="list-style-type: none"> <li>Senior Environmental Specialist</li> <li>8 years' professional experience in the preparation of Environmental Impact Assessment (EIA) Reports in Ireland and the Middle East.</li> </ul>
Jackelyn Wren	Hydrology – Surface Water	ByrneLooby Consulting Engineers	<p><b>Jackelyn Wren - Honours Bachelor of Arts Degree in Geography</b></p> <ul style="list-style-type: none"> <li>Senior Environmental Specialist</li> <li>8 years' professional experience in the preparation of Environmental Impact Assessment (EIA) Reports in Ireland and the Middle East.</li> </ul>
Niamh Nolan	Air Quality and Climate Assessment	AWN Consulting	<p><b>Niamh Nolan- BSocSci (Hons) Social Policy and Geography</b></p> <ul style="list-style-type: none"> <li>Air Quality Consultant.</li> <li>Associate member of Institute of Air Quality Management (IAQM) and the Institution of Environmental Science (IES).</li> <li>Experience in mapping software primarily in QGIS and she specialises in the area of air quality, climate and sustainability.</li> <li></li> </ul>
Leo Williams	Noise and Vibration Assessment	AWN Consulting	<p><b>Leo Williams- BAI MAI PgDip MIOA</b></p> <ul style="list-style-type: none"> <li>Senior Acoustic Consultant</li> <li>Member of Institute of Acoustics (MIOA)</li> <li>6 years' experience as an environmental consultant</li> </ul>



			specialising in Acoustics and Environmental Impact Assessment.
Richard Barker	Landscape and Visual Assessment	Macroworks	<p><b>MLA, PG Dip (Forestry), BA (Environmental)</b></p> <ul style="list-style-type: none"> <li>• Principal Landscape Architect</li> <li>• Corporate member ILI</li> <li>• Over 23 years' experience in LVIA</li> </ul>
Faith Bailey	Cultural Heritage, Archaeology Assessment	IAC	<p><b>Faith Bailey- MA, BA (Hons), MIAI, MCIfA</b></p> <ul style="list-style-type: none"> <li>• Associate Director with IAC Ltd.</li> <li>• 18 years' experience in archaeological and cultural heritage consultancy, responsible for the production of EIAR and assessments for all aspects of development nationwide.</li> </ul>
Ciarán Mullarkey & Karl Pedersen	Architectural Heritage	Mullarkey Pedersen Architects	<p><b>Ciarán Mullarkey</b></p> <ul style="list-style-type: none"> <li>• Qualified in 2000- RIAI Part III at University College Dublin</li> <li>• Qualified in 1992 - Dip Architecture, with Distinction - Edinburgh University</li> <li>• Qualified in 1991 - MA (Hons) Architecture - Edinburgh University</li> <li>• 2006 – Member of the Royal Institute of the Architects of Ireland (Membership No. 06132)</li> <li>• 2012 – RIAI Conservation</li> <li>• Architect Grade III- 30 years' experience</li> </ul> <p><b>Karl Pedersen</b></p> <ul style="list-style-type: none"> <li>• Qualified in 1989 Bachelor of Science in Architecture – University of Dundee</li> <li>• Qualified in 1992 First Class Bachelor of Architecture (Hons) – University of Dundee</li> <li>• Qualified in 1993 RIBA Part III – Professional Practice – University of Dundee</li> <li>• 1993 Architects' Registration Board No. 059423G</li> <li>• 2006 Royal Institute of the Architects of Ireland No. 06198</li> </ul>





			<ul style="list-style-type: none"> <li>• 2010 RIAI Grade 1 Conservation Architect- 30 years' experience</li> </ul>
Dr Liam Harrington	Microclimate - wind	Metec	<p><b>Dr Liam Harrington- BSc Hons (Physics) MSc Energy Systems PhD Computer Modelling,</b></p> <p>A Computational Fluid Dynamics and Building Physics Consultant with over 25 years experience in computer modelling in the fields of Computational Fluid Dynamics, Dynamic Thermal Simulation and Lighting.</p>
Maurice Ramsey	Microclimate - wind	Metec	<p><b>Maurice Ramsey - BA, BAI, MSc, CEng MIEI, FConsEI,</b></p> <ul style="list-style-type: none"> <li>• Director of Metec Consulting Engineers has contributed the outline of the available MEP utilities on the site and has detailed all identified risks associated with these services.</li> <li>• Holds a Bachelor's Degree in Mathematics, a Bachelor's Degree in Engineering and a Master's Degree in Engineering.</li> <li>• Chartered Engineer (Engineers Ireland) 2003</li> <li>• F Cons EI (Association of Consulting Engineers of Ireland) 2021</li> <li>• Holds over 25 years of experience within in the consultancy side of the construction industry in Ireland. He has been involved in the preparation of EIAR documents for over fifteen years and is particularly familiar with the area in and around Dublin where many of his projects are located.</li> </ul>
Eoin Ó Catháin	Traffic and Transport Assessment	ROD	<p><b>Eoin Ó Catháin- Chartered Engineer (CEng MIEI)</b></p> <ul style="list-style-type: none"> <li>• Partner and Technical Director in ROD</li> <li>• Qualified as a Civil Engineer (BEng.) from University College Dublin (UCD) in 2004.</li> <li>• Holds a post graduate qualification in Transport and Environmental Engineering (MSc 2006, Trinity College Dublin;</li> </ul>



			<ul style="list-style-type: none"> <li>• Construction Law and Contract Administration, (PostGrad Dip, TCD, 2013);</li> <li>• Health and Safety (PostGrad Dip, TCD, 2020).</li> <li>• Holds 18+ years of experience in traffic and transport engineering and planning.</li> <li>• Registered Consulting Engineer (RConsEI),</li> <li>• Member of the Chartered Institute of Arbitrators (MCI Arb) and a graduate member of the Institute of Occupational Safety and Health (GradIOSH).</li> </ul>
Chonaill Bradley and David Doran	Waste Management	AWN Consulting	<p><b>Chonaill Bradley- BScEnv AssocMCIWM</b></p> <ul style="list-style-type: none"> <li>• Principal Environmental Consultant</li> <li>• Associate Member of the Chartered Institute of Waste Management</li> <li>• Over 7 years' experience in EIA, Environmental reporting and Waste Management</li> </ul> <p><b>David Doran- MSc in Environmental and Energy Management</b></p> <ul style="list-style-type: none"> <li>• Environmental Consultant with 1.5 years' experience in the Environment Team at AWN.</li> <li>• Holds a MSc in Environmental and Energy Management and is an Affiliate Member of CIWM</li> </ul>
Dr Liam Harrington	Microclimate - wind	Metec	<p><b>Dr Liam Harrington- BSc Hons (Physics) MSc Energy Systems PhD Computer Modelling,</b></p> <p>A Computational Fluid Dynamics and Building Physics Consultant with over 25 years experience in computer modelling in the fields of Computational Fluid Dynamics, Dynamic Thermal Simulation and Lighting.</p>
Maurice Ramsey	Material Assets- Built Services	Metec	<p><b>Maurice Ramsey - BA, BAI, MSc, CEng MIEI, FConsEI,</b></p> <ul style="list-style-type: none"> <li>• Director of Metec Consulting Engineers has contributed the outline of the available MEP utilities on the site and has detailed all identified risks associated with these services.</li> </ul>



			<ul style="list-style-type: none"><li>• Holds a Bachelor's Degree in Mathematics, a Bachelor's Degree in Engineering and a Master's Degree in Engineering.</li><li>• Chartered Engineer (Engineers Ireland) 2003</li><li>• F Cons EI (Association of Consulting Engineers of Ireland) 2021</li><li>• Holds over 25 years of experience within in the consultancy side of the construction industry in Ireland. He has been involved in the preparation of EIAR documents for over fifteen years and is particularly familiar with the area in and around Dublin where many of his projects are located.</li></ul>
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