THORNTON O'CONNOR
TOWN PLANNING

Volume I – NTS

Volume I

EIAR Non-Technical Summary

In respect of a Residential-Led Mixed-Use Development at

Milltown Park, Sandford Road, Dublin 6

Submitted on Behalf of

Sandford Living Limited

December 2025

Volume I - TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 Preamble

This Non-Technical Summary (NTS) of the subject Environmental Impact Assessment Report (EIAR) has been prepared on behalf of Sandford Living Limited (the Applicant) in relation to a Large-scale Residential Development planning application at Milltown Park, Sandford Road, Dublin 6, D06 V9K7. This application principally relates to the demolition of c. 4,847.5 sq m of existing structures on site, the refurbishment and reuse of Tabor House (1,575 sq m) and the Chapel (768 sq m) and the provision of a residential scheme comprising 562 No. residential units, in addition to a creche, café/restaurant and community/cultural space.

The proposed development is described as follows as per the Statutory Notices:

> *"Sandford Living Limited intend to apply for permission for a Large-Scale Residential Development at a c. 4.26 hectare site at Milltown Park, Sandford Road, Dublin 6, D06 V9K7. Works are also proposed on Milltown Road and Sandford Road to facilitate access to the development including improvements to pedestrian facilities on an area of c. 0.16 hectares. The development's surface water drainage network shall discharge from the site via a proposed 300mm diameter pipe along Milltown Road through the junction of Milltown Road / Sandford Road prior to outfalling to the existing drainage network on Eglinton Road (approximately 200 metres from the Sandford Road / Eglinton Road junction), with these works incorporating an area of c. 0.32 hectares. The development site area, road works and drainage works areas will provide a total application site area of c. 4.74 hectares.*
>
> *The development will principally consist of: the demolition of c. 4,847.5 sq m of existing structures on site including Milltown Park House (880 sq m), Milltown Park House Rear Extension (2,031 sq m), the Finlay Wing (622 sq m), the Archive (1,240 sq m) and the Link Building between Tabor House and Milltown Park House Rear Extension to the front of the Chapel (74.5 sq m); the refurbishment and reuse of Tabor House (1,575 sq m) and the Chapel (768 sq m) and the provision of a single storey glass entrance lobby to the front and side of the Chapel (52 sq m); and the provision of 562 No. residential units comprising 6 No. three-bed courtyard houses and 556 No. apartment units (70 No. studios, 176 No. one-bed units, 267 No. two-bed units and 43 No. three-bed units).*
>
> *Block A1 will range in height from 5 No. storeys to 8 No. storeys and will comprise 81 No. apartment units; Block A2 will range in height from 6 No. storeys to 8 No. storeys and will comprise 139 No. apartment units; Block B will range in height from 3 No. to 7 No. storeys and will comprise 74 No. apartment units; Block C will range in height from 4 No. storeys to 7 No. storeys and will comprise 151 No. apartment units; Block D will range in height from 3 No. storeys to 5 No. storeys and will comprise 30 No. apartment units; Block E will be 2 No. storeys in height and will comprise 6 No. courtyard type houses; and Block F will range in height from 5 No. storeys to 7 No. storeys and will comprise 81 No. apartment units.*
>
> *The development also includes the provision of: cultural/community space within Tabor House (4 No. storeys including lower ground floor level) and the Chapel (2 No. storeys including lower ground floor level and mezzanine level) (1,698 sq m) with associated outdoor space (248 sq m); a café/restaurant (179 sq m) and a creche (375 sq m) within*

Block F with associated outdoor creche play area; ancillary residents' amenities and facilities (324 sq m) within Blocks B & C; and a single storey bin store and substation adjacent to Block F (101 sq m).

The development also provides a new access from Milltown Road (which will be the principal vehicular entrance to the site) in addition to utilising and upgrading the existing access from Sandford Road as a secondary access principally for deliveries, emergencies and taxis; new pedestrian access points; pedestrian/bicycle connections through the site; 319 No. car parking spaces (288 No. at basement level and 31 No. at surface level); set down area for deliveries; bicycle parking; 22 No. motorcycle spaces; bin storage; boundary treatments; private balconies and terraces facing all directions; hard and soft landscaping including public open space and communal open space; green/blue roofs; PV panels; substations; lighting; plant; lift cores and overruns; and all other associated site works above and below ground.

The proposed development has a gross floor space of c.50,196 sq m above ground level over a partial basement (under part of Blocks A1 and A2 and under Blocks B and C) measuring c. 10,550 sq m, which includes parking spaces, bin storage, bike storage and plant".

1.2 History of the Application Site

1.2.1 Previous Strategic Housing Development Currently Remitted to An Coimisiún Pleanála

A Strategic Housing Development (SHD) was previously permitted by An Bord Pleanála in December 2021 on the subject site for 667[1] No. dwellings (principally Build-to-Rent), a creche, communal internal amenity and facilities and public and communal open spaces, with heights ranging from part 2 No. to 10 No. storeys (ABP Reg. Ref. ABP-311302-21). Permission was granted on 23rd December 2021.

This Grant of Permission was subsequently Judicially Reviewed and has subsequently been remitted back to An Coimisiún Pleanála (ACP) at the time of writing this EIAR. Its new Reference No. is TA29S.322160.

We note that the Applicant has legal advice that section 37(5) of the 2000 Act does not apply where the matter pending before the Commission is a direct application, such as an SHD application, and is not considered the "subject of an appeal".

1.2.2 Previous LRD Housing Development currently Subject to Judicial Review

Under An Coimisiún Pleanála Ref: LH29S.317921 (DCC Reg. Ref. 6026-23/S3), permission was granted on 19th December 2023 for 636 No. residential units and associated works. At the time of writing this Report, this application has been judicially reviewed by third parties and awaits adjudication.

[1] Reduced from 671 No. units via condition.

1.2.3 Change of zoning from SHD Application

The zoning of the site changed with the adoption of the new *Dublin City Development Plan 2022-2028 ("Development Plan")*, changing from Objective Z15 *'Institutional and Community'* in the *Dublin City Development Plan 2016 – 2022* to Objective Z12 '*Institutional Land (Future Development Potential)*' under the newly adopted *Development Plan* (came into effect in December 2022).

Having regard to this zoning change, this is, in our opinion, a recognition of the facts that the lands are no longer institutional and have not been since prior to 2019 when the lands were sold to the Applicant.

1.3 Requirement for this Environmental Impact Assessment Report

The Environmental Impact Assessment (EIA) requirements for certain developments derive from EU Directives. Directive 2011/92/EU as amended by Directive 2014/52/EU amended (the "EIA Directive") imposes requirements to assess the effects of certain projects on the environment. To assist with such assessments, the EIA Directive requires that an Environmental Impact Assessment Report ("EIAR") is prepared for certain projects. The EIAR was introduced by Directive 2014/52/EU and replaces the Environmental Impact Statement ("EIS") required under Directive 2011/92/EU.

The *European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018* have now transposed the 2014 Directive into Irish law.

The preparation of an EIAR is required for the subject proposed development as the scheme falls within the remit of those listed in Schedule 5 (Part 2) of the *Planning and Development Regulations, 2001* (as amended), which sets out the relevant thresholds which require the carrying out of an EIAR. The subject development falls within the threshold of Category 10 (b)(i) as it comprises the "*construction of more than 500 dwelling units"*.

The EIAR has also been prepared having due regard to the Environmental Protection Agency's *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, 2022*, which sets out that:

> *"A systematic approach, standard descriptive methods and the use of replicable assessment techniques and standardised effect descriptions must be adopted to ensure that all likely significant effects are adequately considered and clearly communicated."*

This EIAR has been prepared on behalf of the Applicant, Sandford Living Limited, in relation to the subject development of 636 No. units, a creche and community/cultural space. As noted above, the proposed development falls within the remit of Category 10(b)(i) Schedule 5 (Part 2) of the *Planning and Development Regulations, 2001 (as amended*), which states that the carrying out of an EIAR is required when development comprises the "*construction of more than 500 dwelling units*".

1.4 The Applicant

We confirm that our Client, Sandford Living Limited, owns the majority of the site (c. 4.26 Ha).

In addition, we note that a letter of consent has been received from Dublin City Council to carry out works on Milltown Road, Sandford Road and Eglinton Road (c. 0.48 Ha).

The total site area within the red line boundary will be c. 4.74 Ha.

1.5 The EIAR Team

This EIAR was prepared by a team of experts as outlined below and was collated by Thornton O'Connor Town Planning. Each consultant is appropriately qualified and experienced in their respective fields in accordance with Directive 2014/52/EU as outlined in each individual chapter.

Chapter No.	Chapter Title	Consultant	Expert
Chapter 1	Introduction	Thornton O'Connor Town Planning (TOC)	Patricia Thornton
Chapter 2	Site Location and Context	TOC	Patricia Thornton
Chapter 3	Description of Development	TOC	Patricia Thornton
Chapter 4	Examination of Alternatives	TOC	Patricia Thornton
		O'Mahony Pike Architects (OMP)	Derek Murphy
		DBFL Consulting Engineers (DBFL)	Emma Daly
Chapter 5	Population and Human Health	TOC	Patricia Thornton
Chapter 6	Archaeological and Cultural Heritage	Archer Heritage Limited	Aidan O'Connell
Chapter 7	Architectural Heritage	Molloy and Associates	Maol Íosa Molloy
			Shelley O'Donovan
Chapter 8	Biodiversity	DNV	Liam Gaffney
			Ciara Barry-Hannon
			Brian McCloskey
			Shane Connelly
			Caoimhin Rohu
			Caitlin Markey
			Abbie Doyle
			Kelly Macken
			Charith Rakesh Kumar
			Torchia Mc Quaid
			Katie Connolly
Chapter 9	Landscape and Visual Impact	Modelworks	Richard Butler
Chapter 10	Land, Soils and Geology	DBFL	Emma Daly
			Ross Griffin
Chapter 11	Water-Hydrology	DBFL	Emma Daly
		AWN Consulting	Marcello Allende
Chapter 12	Air Quality and Climate	AWN Consulting	Jovanna Arndt
			Tanmay Gojamgunde
Chapter 13	Noise and Vibration	AWN Consulting	Leo Williams
Chapter 14	Material Assets – Waste Management	AWN Consulting	Chonaill Bradley
Chapter 15	Material Assets – Transportation	DBFL	Robert Kelly
			Helen Gendy
			Jane Murphy
Chapter 16	Material Assets – Site Services	DBFL	Emma Daly
Chapter 17	Microclimate - Wind	O'Connor Sutton Cronin Consulting Engineers	Ashish Nautiyal
Chapter 18	Risk Management	Enviroguide Consulting	Darragh Grant
			Janet O'Shea
			Louise Hewitt
Chapter 19	Interactions and Cumulative Impacts	TOC/All	Collated by Patricia Thornton
Chapter 20	Mitigation Measures and Monitoring	TOC/All	Collated by Patricia Thornton
Chapter 21	Difficulties Encountered	TOC/All	Collated by Patricia Thornton

Table 1.1: List of EIAR Consultants

2.0 SITE LOCATION AND CONTEXT

2.1 Existing Site Details

2.1.1 Location and Description of the Subject Lands

The total red line application site boundary is c. 4.74 Ha (c. 47,335 sq m) and is broken down as follows:

1. The developable site of c. 4.26 Ha (c. 42,547 sq m) at Milltown Park, Sandford Road.
2. Road works to Milltown Road and Sandford Road adjacent to the 2 No. entrances to the site (1 No. existing and 1 No. newly proposed): c. 0.16 Ha (c. 1,597 sq m).
3. Drainage works from Milltown Road to Eglinton Road: c. 0.32 Ha (c. 3,191 sq m).

The developable lands are located at the corner of Sandford Road and Milltown Road, Dublin 6. The subject site is bounded to the north by Norwood Park and Sandford Road, to the east by Milltown Road, to the south by a carpark associated with the Milltown Park Institutional and Community premises (buildings retained by the Jesuits after the disposal of the 'developable lands') and to the west by 2 No. storey existing residential dwellings located on Cherryfield Avenue Upper and Lower.

Figure 2.1: Aerial View of Subject Site, Indicative Application Site Boundary in Red

(Source: Google Maps, annotated by Thornton O'Connor Town Planning, 2025)

2.1.2 Site Context

The subject site is located at the junction of the Milltown Road and Sandford Road. This junction also immediately connects to Eglinton Road (R824) and St James Terrace /

Clonskeagh Road (R825). This places the subject site at the interface between the urban villages of Ranelagh, Milltown, Donnybrook and Clonskeagh.

The immediate area beyond the site is predominantly residential and institutional in nature. The residential units include 2 No. storey houses located adjacent to the western site boundary along Cherryfield Avenue Lower and Cherryfield Avenue Upper and in Norwood Park located adjacent to the north-western boundary. In addition, a 6 No. storey apartment development known as Cedar Hall and a 3 No. storey apartment complex known as Mount Sandford, both of which are located to the east of the subject site across Milltown Road.

Institutional uses are located adjacent to the south-west of the subject site and comprise Milltown Park Community House, Cherryfield Lodge Nursing Home and Gonzaga College. Muckross Park College is located to the north-west of the subject lands . A Circle K Petrol Station is located to the north of the subject lands along Sandford Road.

There are a number of neighbourhood centres near to the subject site with some forming strong urban villages. The following neighbourhood centres are within walking/cycling distance of the subject site:

- **Milltown-c.450 metres/c.6 minutes walking distance/c.1 minute cycling distance;**
- **Donnybrook-c.500 metres-c.900 metres/c.6-10 minutes walking distance/c.2-3 minutes cycling distance;**
- **Clonskeagh – c.350 metres – 1.3 km /c.6-16 minutes walking distance/c.1-6 minutes cycling distance;**
- **Ranelagh-c.500 m-1.4 km/c.6-18 minutes walking distance/c.1-5 minutes cycling distance;**
- **Beechwood-c.1 Kilometre/c. 13 minutes walking distance/c.4 minutes cycling distance; and**
- **Rathmines-c.1.8-2.2 km/c.22-c.28 minutes walking distance/c.6-c.8 minutes cycling distance:**

We note that there is a large quantum of services, facilities and amenities located in these areas which are all in close proximity to the subject lands. This includes medical centres, dentists, pharmacies, shops, cafes, restaurants, bars, gyms, sports clubs, hair salons and banks for example. Furthermore, we note that a creche, café/restaurant and community/cultural space is proposed as part of the development, which will benefit the future residents of the development and the local community.

In addition, the final layout of the community/cultural spaces will ultimately be agreed through compliance with Dublin City Council, as identifying occupiers at this juncture is likely futile whilst the planning application goes through the planning and construction process as any identified end user at this juncture may no longer need the space once planning has been secured and construction completed.

2.2 Accessibility of the Subject Site

2.2.1 LUAS Green Line and Bus Services

The subject site is located in close proximity to the following Green Line Luas stops:

- Beechwood: c.1 Km/ c. 13 minute walk
- Ranelagh: c.1.1 Km walk/14 minute walk
- Cowper: c.1.3 Km walk/17 minute walk
- Milltown: c.1.3 Km walk/17 minute walk

There are also numerous bus routes serving the subject site such as the No. 11, 39a, 44, S2, E1, E2, 7B, 116, 41X and 700 (Aircoach service). The proximity of the site to high frequency public transport provides opportunities for residents of the scheme to travel to significant employment locations and business districts such as the Canal, the Docklands, Harcourt Street, Ballsbridge, Sandyford Business District, Belfield Office Park and neighbourhood centres such as Ranelagh, Donnybrook and Rathmines. The majority of these areas are also located within cycling and walking distance of the site. Furthermore, University College Dublin and 4 No. hospitals are located within walking and cycling distance of the site (Clonskeagh Hospital, The Royal Hospital Donnybrook, Saint Vincent's Hospital and Saint Luke's Hospital).

Therefore, it is clear that there are significant employment opportunities easily accessible from the subject site.

2.3 Zoning of the Subject Lands

The subject site is zoned Z12 '*Institutional Land (Future Development Potential)*' in the *Dublin City Development Plan 2022-2028*. The stated aim of this land use zoning is:

> *"To ensure existing environmental amenities are protected in the predominantly residential future use of these lands".*

The zoning of the site has recently changed from Z15 to Z12 under the new *Development Plan* (came into effect in December 2022).

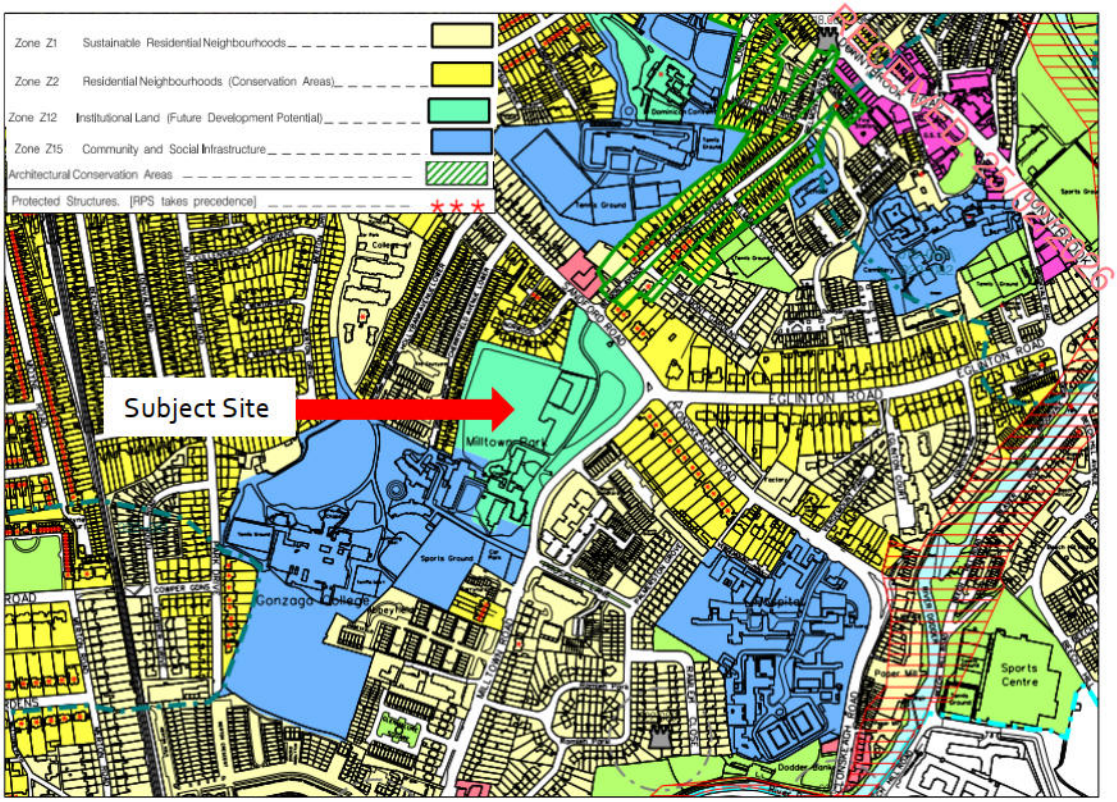

Figure 2.2: **Zoning Map Demonstrating the Z12 Zoning Pertaining to the Subject Site (Green Coloured Corner Site)**

(Source: ***Dublin City Council Development Plan 2022-2028*****, annotated by Thornton O'Connor Town Planning, 2025)**

Please see the image below in Figure 2.3 prepared by O' Mahony Pike Architects, which highlights the land uses across the entirety of the newly zoned Z12 lands and wider Z15 lands.

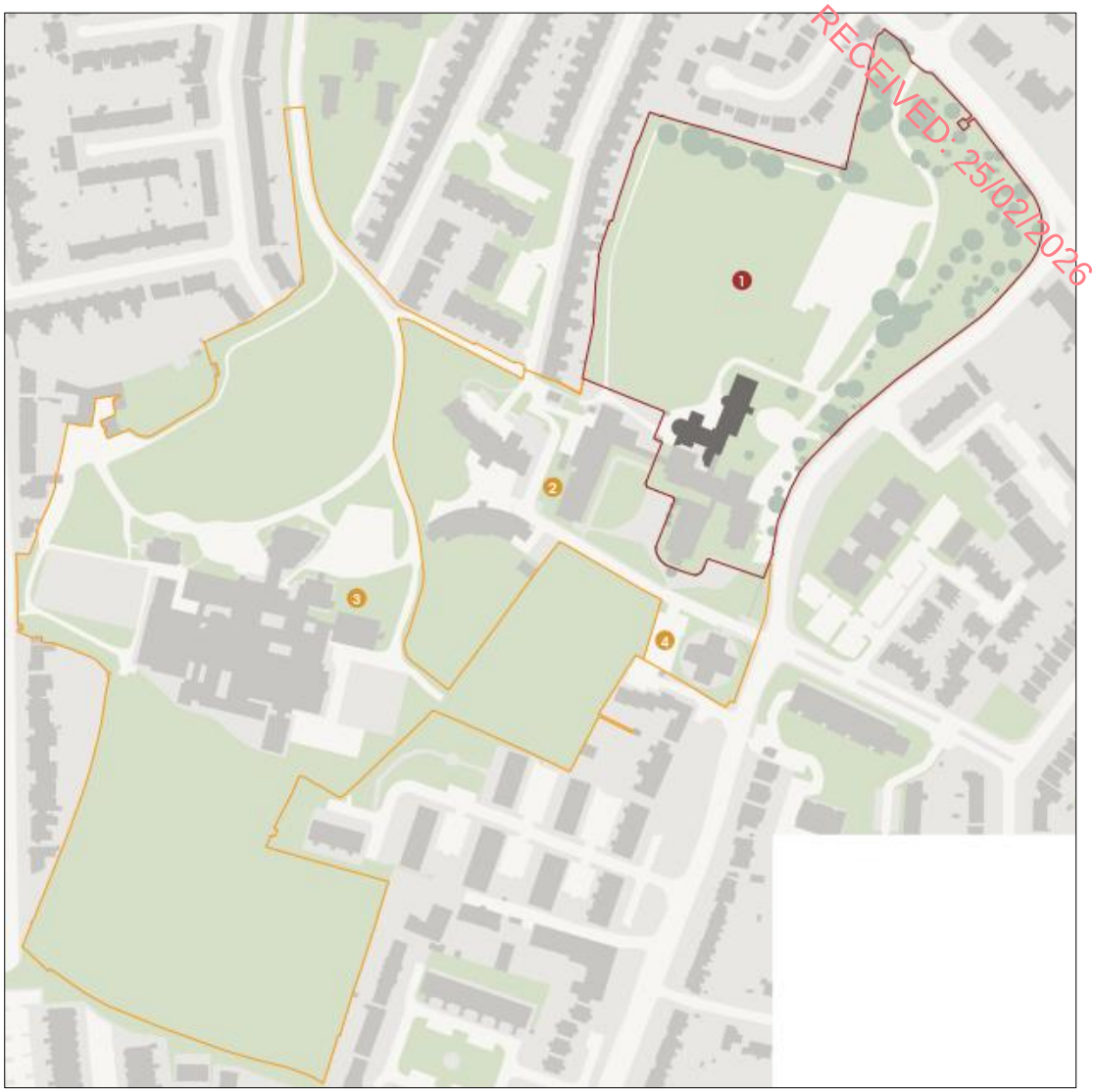

Figure 2.3: Image Demonstrating the Land Uses at the Subject Location

(Source: O' Mahony Pike Architects, 2025)

In summary the lands can be broken down as follows:

1. **Developable Site**

   Building range within the subject red line boundary which were formally utilised by the Jesuit Community at Milltown Park for institutional purposes from the 1850s. It has been confirmed by the Jesuit Community that the lands are surplus to their requirements due to a decline in vocations and are no longer required for the purposes of its function and mission. As a result, the buildings are currently vacant and have become impossible to maintain. It is noted that these lands were always in private use and the buildings and the lands subject to development were never publicly accessible lands.

2. **Milltown Park Campus (Retained Jesuit Lands)**

   The Jesuits will retain these institutional lands to the south/south-west of the proposed development, which addresses their future operational needs due to this decline in

vocations, and they will also retain the separate access already established from Milltown Road. The Jesuits have invested substantially in these lands in recent years to cater for their future operational needs in terms of residential accommodation and training. These lands currently comprise the Cherryfield Lodge Nursing Home and Milltown Park Community House. In addition, planning permission has been granted by Dublin City Council for a new modern archive building (DCC Reg. Ref. 3116/22) within the retained Jesuit lands, lands that were retained for this purpose (see No. 4 on the map above).

We note that a 2.4 metre high boundary wall has secured permission and has been constructed, separating the proposed development from the retained Jesuit lands. The proposed development can facilitate future potential links to the remaining institutional lands through the wall should this be required in the future, if the retained Jesuit lands become further surplus to requirements and are redeveloped.

3. Gonzaga College

The third parcel of land is occupied by the Gonzaga College Secondary School. Gonzaga School has always been a separate use, and the lands were purchased at a later date to the main Jesuit campus in the 1950s. The subject development building range and lands and the school are separated functionally and physically from the other. The tenuous relationship between the subject group and the school in particular will therefore be unaffected by the severance of links between the two.

With regard to Z12 zoned lands, the *Development Plan* states that *"these are lands, the majority of which are or which have been in institutional use, which may be developed for other uses in the future".*

The subject lands have not been in institutional use since 2015 when the institutional operations on the site ceased permanently, and the property was vacated by the Jesuits in 2019. In a previous SHD Application at the subject site (ABP Reg. Ref. ABP-311302-21), a letter was received from the Jesuit Community which confirmed that *"the former Jesuit Community property…is no longer required by the Society for the purposes of its functions and mission".* An updated letter was received from the Jesuit Community, dated 1st June 2023 for the first LRD application and this reiterates this fact. The letter notes that the Jesuit Community has *"experienced a dramatic decline"* and confirms that the application lands became surplus to their requirements and had become impossible to maintain, which lead to their sale in 2019. The Jesuit Community has retained the residential and administration accommodation to the south of the application lands with a separate access already established from Milltown Road. The letter confirmed that the Jesuit Community considered their *"future requirements thoroughly and have confirmed that the lands retained are adequate for their future needs. Planning permission was recently granted by Dublin City Council for a new modern archive building (DCC Reg. Ref. 3116/22) within the retained Jesuit lands, lands that were retained for this purpose".*

The application site has always been in private use and was not open or accessible to the public as confirmed in the letter, and the Society never provided any community facilities on site. The public have never enjoyed any right of access to these privately owned lands.

We note that the *Development Plan* sets out the following requirements in relation to the extent and layout of public open space on Z12 zoned lands as well as general development principles:

> *"Where lands zoned Z12 are to be developed, a minimum of 25% of the site will be required to be retained as accessible public open space to safeguard the essential open character and landscape features of the site. Where such lands are redeveloped, the predominant land-use will be residential.*
>
> *In considering any proposal for development on lands subject to zoning objective Z12, other than development directly related to the existing community and institutional uses, Dublin City Council will require the preparation and submission of a masterplan setting out a clear vision for the future development of the entire landholding.*
>
> *In particular, the masterplan will need to identify the strategy for the provision of the 25% public open space requirement associated with any residential development, to ensure a co-ordinated approach to the creation of new high-quality public open space linked to the green network and/or other lands, where possible. In addition, development shall have regard to the standards in Chapter 15.*
>
> *On Z12 lands, the minimum 25% public open space shall not be split up into sections/fragmented and shall comprise soft landscape suitable for relaxation and children's play, unless the incorporation of existing significant landscape features and the particular recreational or nature conservation requirements of the site and area dictate that the 25% minimum public open space shall be apportioned otherwise.*
>
> *Where there is an existing sports pitch or sports facility on the Z12 lands subject to redevelopment, commensurate recreational/social infrastructure will be required to be provided and retained for community use where appropriate as part of any new development (see also Chapter 10: Green Infrastructure and Recreation, Policy GI49)."*

A Masterplan has been prepared for the site and has incorporated all the requirements of the Z12 zoning objective including public open space. In line with the specific text of the Z12 zoning objective, the 'predominant' use of the site is proposed to be residential, with ancillary cultural/community space, a café/restaurant and a creche.

The development will have a significant positive impact due to the sustainable utilisation of these lands that are currently completely closed off from the public, which are proximate to public transport, employment locations, services and facilities. The site has always been in private use, and this will be replaced by a high-quality, aesthetically pleasing development providing 562 No. residential units, a café/restaurant, cultural/community space, a large quantum of public open space and many permeable links through the site, which will be a significant planning gain for the area, and thus will be consistent with the proper planning and sustainable development of the area. This section demonstrates that the proposal is fully in accordance with the policies and objectives of the Z12 zoning pertaining to the site.

The proposed development requires 25% of the site area to be designated as public open space in accordance with the Z12 zoning objective. The developable site area is 42,547 sq m which therefore requires the provision of 10,637 sq m public open space.

The public open space is provided as follows:

- **Public Park and Plaza Area Connected Through the Triple Height Undercroft of Block A1:**

  c. 10,879 sq m (c. 25.57% of the c. 42,547 sq m developable site area)

- **Additional Public Open Space:**
  - **Woodland Glade**
  - **Boulevard**
  - **Garden Café Area**

  c. 4,144 sq m (c. 9.74% of the c. 42,547 sq m developable site area)

Figure 2.4: Public Open Space Provision at the Application Site

(Source: Cameo and Partners Design Studio, 2025)

Therefore, a total of 15,023 sq m (c. 35.3% of the developable site area) has been designated as public open space which significantly exceeds the requirement to provide 25% public open space.

The majority of this space (25.57%) will be provided in the public park and the plaza area which are linked through the triple height under croft of Block A1. This triple height linked archway through Block A1 will create a strong connection between the public park and the public plaza and thus it is clear that the required 25% public open space has not been split up. The plaza area will not allow vehicular access to ensure a safe and attractive space is provided for pedestrians.

We note that the large parkland along the eastern boundary of the site is currently significantly overgrown and inaccessible and this space will be transformed by the subject development and will become a significant public amenity for the area. The eastern boundary will now comprise a new public park which will open up the lands to the community for the first time as the lands have always been in private use.

Figure 2.6: Image of Current Dark and Overgrown Area Which will be Made Useable as Part of the Proposed Development

(Source: CMK Horticulture & Arboriculture Ltd)

Natural play facilities for the scheme have been provided at various locations throughout the public open space, specifically aimed at children to reconnect with nature and there will also be opportunity for adult engagement through natural gym equipment. There will also be seating provided throughout the site.

We consider that the provision of a high-quality useable public park at the site with a connection to the public plaza area will be a significant planning gain for the area, allowing access to previously inaccessible private lands. The plaza area and the garden café area will provide a meeting point for the public to sit and talk. The open space provided in the site will be high-quality and functional and will provide a wide variety of activities for the

residents and public to utilise. The public open space will be provided within soft and hard landscaping consisting of high-quality and functional public open space, which includes publicly accessible walkways, grassland, benches, jogging route, fitness areas and play-on-the-way for example. Therefore, it is clear that the public open space comprises soft landscaping that is suitable for relaxation and children's play.

Figure 2.7: CGI of Part of the Public Open Space Showing People Jogging, Walking and Kids Playing

(Source: 3D Design Bureau, 2025)

Figure 2.8: Illustration of Part of the Public Open Space Showing Seating Areas and Children Playing

(Source: Cameo and Partners, 2025)

In addition to public park and plaza area connected through the triple height undercroft of Block A1, public open space will also be provided to the north of Block C (known as the Woodland Glade) which is positioned adjacent to the plaza. This Woodland Glade represents c. 7.04% of the site area (or c. 3,000 sq m) and will provide further amenity on site in excess of the 25% requirement. The Woodland Glade will be presented as a wildflower meadow and will work together with the park and plaza as an entire connected public open space.

A cafe has been introduced in to Block F, facilitating the provision of an open space focuses around this café and in front of the chapel.

In addition to utilising the eastern public park to travel through the site, the public can also utilise the pedestrian connection from Milltown Road and Sandford Road through the pedestrian boulevard between Blocks A and B.

The entrance from Sandford Road will be a secondary vehicular entrance, principally for taxis, set down and deliveries with a small element of mobility impaired parking and there will be no vehicular access allowed to the plaza area, which will ensure this area is a high-quality public space.

The scheme layout will improve legibility in the area and the proposed development will integrate into the surrounding context having regard to the open spaces in addition to the permeable links, the height transitions, the setbacks provided from boundaries and the breakdown in massing provided. The rejuvenation of the Chapel and Tabor House within the development will also contribute towards the assimilation of the scheme into the surrounding environment and the improved character of these structures will benefit from enhanced views via the newly proposed entrance from Milltown Road.

The proposed development balances the need to densify this sustainable urban site in order to consolidate the city while also appropriately setting back the development from surrounding areas. The development will enhance the local area by providing permeable links and a large quantum of high-quality public open space for the locality, which provides for the recreational and amenity needs of the population.

The proposed development will significantly contribute to housing supply by converting previously inaccessible, private lands to publicly available housing units with large open spaces and will also contribute to the city's strategic green infrastructure networks by providing public routes through the site within the landscaping layout. The development will thus facilitate connections for the public through the site towards the Dodder Greenway route and other green infrastructure areas, which will positively contribute to, and create linkages with, the surrounding strategic green network. It is clear that the proposed development will significantly contribute to the green infrastructure of Dublin City. In addition, we note that there are multiple pedestrian points provided to access the public open space from outside the site. The Masterplan also facilitates a future link from the application site to the remaining Institutional Jesuit lands should this link be required at a future date.

The scheme is in accordance with Section 14.6 of the *Development Plan*, which notes that abrupt transitions in scale and use should be avoided in areas proximate to other zoning

objectives. The development has set back much of the development from the surrounding areas having regard to the extensive public open space provided and, in addition, the western boundary is made up of modest 2 No. storey courtyard houses for example, which highlights that the proposed development has appropriately considered the transition between the development and surrounding spaces. Chapter 15 of the *Development Plan* has also been duly considered to ensure the proposal will integrate with surrounding lands i.e. such as in relation to height, plot ratio, site coverage, green infrastructure and urban greening.

The rejuvenation and integration of the Chapel and Tabor House within the development will also contribute towards the assimilation of the scheme into the surrounding environment and the improved character of these structures will benefit from enhanced views via the newly proposed entrance from Milltown Road. A significant effort has been made by the Design Team to provide well-considered and interesting building forms which enhances legibility, wayfinding and connectivity within the site for future residents and the existing wider area and thus will appropriately integrate with the surrounding area.

To conclude this section, the proposed development which comprises 562 No. residential units with a creche, café/restaurant, community/cultural spaces and public and communal spaces is consistent with the zoning objective pertaining to the lands.

3.0 DESCRIPTION OF DEVELOPMENT

3.1 Summary of the Proposed Development

The proposed development will principally include the following:

- 562 No. dwellings including:
    - 6 No. two storey, three-bedroom courtyard houses in Block E towards the western boundary;
    - 556 No. apartment units in Blocks A1, A2, B, C, D, E and F (70 No. studios, 176 No. one bed units, 267 No. two bed units and 43 No. three bed units);
- The blocks will range in height from 2 to 8 No. storeys with a partial basement provided under part of Block A1 and under Blocks A2, B and C;
- Community/Cultural space (c. 1,698 sq m net) within the refurbished Tabor House and Chapel plus an external pavilion (Secret Garden) measuring c. 248 sq m;
- Internal residents' communal amenity in Blocks B and C (c. 324 sq m);
- Creche within Block F (375 sq m);
- Café/Restaurant in Block F (179 q m)
- Public Open Space (15,023 sq m), Communal Open Space (4,314 sq m) and Upper Floor Communal Terrace (109 sq m); and
- Road works on Sandford Road and Milltown Road and Drainage Works on Eglinton Road.

Key Site/Development Statistics	
Site Area:	Total Red Line Application Boundary: **c. 4.74 Ha (c. 47,335 sq m) broken down as follows:** • 'Developable' Site Area: **c. 4.26 Ha (c. 42,547 sq m):** • Road works to Milltown Road and Sandford Road adjacent to the 2 No. proposed entrances: **c. 0.16 Ha (c. 1,597 sq m)** • Drainage works to Eglinton Road: **c. 0.32 Ha (c. 3,191 sq m)**

Existing Gross Floor Area	c. 7,190.5 sq m
Extent of Reuse and Refurbishment	c. 2,343 sq m gross (Tabor House - 1,575 sq m and The Chapel – 768 sq m). Net area of Community/Cultural space is 1,698 sq m internally
Demolition Area	c. 4,847.5 sq m including: • Milltown Park House (880 sq m); • Milltown Park House Rear Extension (2,031 sq m); • the Finlay Wing (622 sq m); • the Archive (1,240 sq m); and • the link building between Tabor House and Milltown Park House rear extension to the front of the chapel (74.5 sq m).
Gross Floor Space (Above Ground)	50,196 sq m
Basement Gross Floor Area	10,550 sq m
Site Coverage:	20.65%
Plot Ratio:	1.18
No. of Units Proposed	• 6 No. 3 bedroom houses; and • 556 No. apartments (70 No. studios, 176 No. one bed units, 267 No. two bed units and 43 No. three bed units).
No. of Units per Ha.	140 No. (under Compact Growth Guidelines calculation)[2]
Residents' Amenity Space (Blocks B&C)	324 sq m
Creche	375 sq m
Café/Restaurant	179 sq m
Community/Cultural Space	1,698 sq m internal space (Chapel and Tabor House). In addition, an outdoor pavilion / secret garden space will also be provided to the rear of Tabor House and the Chapel, measuring c. 248 sq m. Total = c. 1,946 sq m net
Max. height:	8 No. storeys plus lift overrun
Car Parking Spaces:	319 No. car parking spaces • 288 No. at basement; and

[2] Density of 131.9 uph using standard methodology of total number of units/site size – 562 No. units /4.26Ha

	• 31 No. at surface level
Bicycle Parking Spaces	1,343 No.
Motorcycle Spaces	22 No.
Public Open Space	Required: 25% Provided: 35.3% (15,023 sq m)
Communal Open Space	Required: 3,363 sq m Provided: 4,423 sq m
Internal Residents Amenity including Co-Working Space, Gym and Management Suite	• Block B – 76 sq m • Block C – 248 sq m

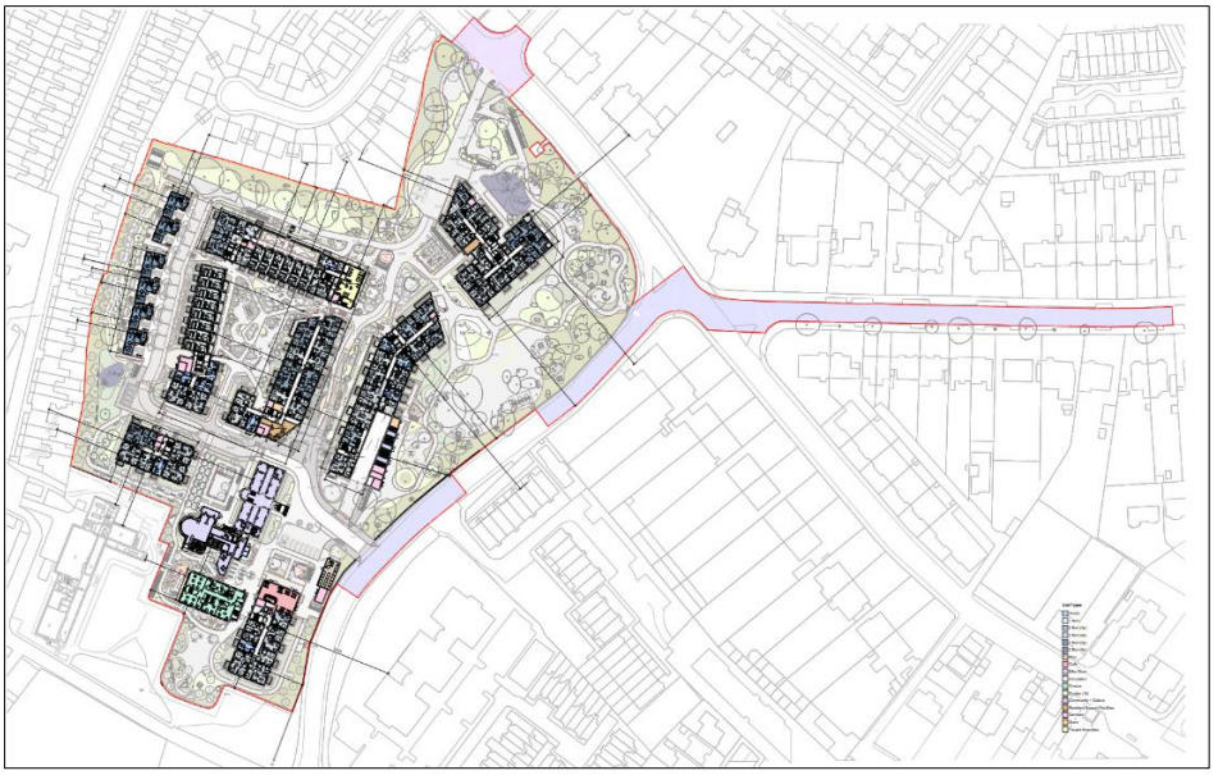

Figure 3.1: Layout of the Proposed Scheme

(Source: O'Mahony Pike Architects, 2025)

3.2 Residential Unit Types

The proposed development principally comprises the provision of 562 No. residential units as follows:

1. 6 No. 3 bedroom, 2 No. storey courtyard houses;

2. 556 No. apartments as follows:

   → 70 No. studios
   → 176 No. 1 beds

→ 267 No. 2 beds
→ 43 No. 3 beds

The scheme provides 56 No. Part V units (30 No. in Block D and 26 No. in Block F which will cater for persons in need of a dwelling as per the social housing list (14 No. studios, 10 No. one beds, 27 No. two beds and 5 No. three beds).

The proposed dwelling mix will provide an enhanced choice in unit sizes in the area, affording greater flexibility to those who may be seeking to reside in the area.

3.3 Creche

The proposed development will provide a creche (375 sq m) within the ground floor of Block F and will cater for c. 75 No. children. This crèche will contain 5 No. classrooms and includes a dedicated open space area (244 sq m) for staff and children to utilise.

Although the *Community and Social Infrastructure Audit (incl. Schools and Childcare)* concluded that the proposed development only created a demand for 11 No. childcare spaces, the Applicant has incorporated a crèche into the scheme, which can cater for 75 No. children. This will benefit the future residents of the development but will also cater for the immediate existing residents of the area, and thus will greatly enhance the amenity of the area.

3.4 Community / Cultural Space and Resident Amenity

The development will provide high-quality community/cultural space within the refurbished and converted Tabor House and Chapel (c. 1,698 sq m). In addition, an external pavilion (Secret Garden) to the rear of Tabor House and the Chapel will also be provided which measures c. 248 sq m, giving a total of c. 1,946 sq m net floor area. The pavilion/secret garden to the rear of Tabor House will represent a natural extension to the proposed community/cultural space which can host a variety of events for the community.

The *Masterplan + Architectural Design Statement* prepared by OMP notes the following in relation to the community/cultural spaces:

> *"The retention of the Chapel and Tabor house buildings were central to our masterplan from an early stage, creating a focal point for this new neighbourhood.*
>
> *There are many potential uses for the retained buildings, for example, the Chapel could house the main Cultural hub for the new development with an impressive 'great hall' on the first floor which could be used for a number of activities from performances, screenings to local community gatherings or simply somewhere to lounge and relax.*
>
> *While the lower level could provide a number of different sized rehearsal spaces with the flanking rooms converted to changing rooms, showers and a small kitchen facility which could support any events or gatherings above in the 'great hall'.*
>
> *Tabor House also lends itself to many potential uses, it could for example contain studio spaces design to house a variety dancers, musicians and artists. The cultural accommodation that could be housed in Tabor House would be split across the four*

levels; with the ground floor dedicated to dance and performance/rehearsal spaces, the first floor recording /practice rooms for musicians and the top floors will be house a collection of artist studios, creating a hierarchy of program across the levels. This lower level also has the potential to connect to the secret garden to the rear of Tabor house which will be planted as an edible garden with natural produce ranging from fruit baring shrubs, herb gardens and a variety of fruit trees, such as apple, pear and plum.

It is proposed that the exact layout of these spaces will be agreed with DCC post-planning. This is because securing a successful planning permission, and the subsequent construction of the development would reasonably take 2-3 No. years, in which time an appropriate end-user(s) will be found for these spaces."

The above strategy for the community/cultural spaces is the Design Team's initial consideration but the specific use and layout of these community/cultural spaces will be agreed with Dublin City Council via compliance post-planning. This is considered a reasonable approach as by the time planning permission is secured and the scheme is constructed, it will be c. 2-3 No. years and an appropriate end-user(s) will be found for the spaces at that juncture.

Furthermore, internal resident amenity space is provided in Blocks B and C measuring c. 324 sq m, comprising co-working space, a gym and a management suite. The development also includes an upper-level communal terraces in Blocks A1 measuring 109 sq m.

The management suite will serve the residents needs from parcel delivery to repairs and is located in a central point for the development at the corner of Block B, welcoming residents from the Milltown entrance with a concierge.

Block C comprises a Gym + Co-working space, which opens onto the green avenue just off the northern plaza. This centrally located amenity space will help to animate the ground floor with provision of a gym and build on the services provided across this development with a co-working offering on the mezzanine level.

It is clear that a wide range of high-quality community/cultural spaces, amenities and facilities are proposed of the subject scheme.

3.5 Roadworks

The proposed development includes road works on Sandford Road and Milltown Road adjacent to the existing access off Sandford Road and the newly proposed access of Milltown Road.

Milltown Road

The new Milltown Road access will be the principal vehicular access for the proposed development facilitating access to the basement car park, the forecourt adjacent to Tabor House and the houses along the western boundary (Block E). This new access will also facilitate pedestrians and cyclists. As detailed in Chapter 10 and Chapter 15 prepared by DBFL Consulting Engineers and enclosed separately, the following principal works are proposed:

- Provision of a new vehicle access off Milltown Road (primary vehicle access to the proposed development facilitating access to the basement carpark as well as serving pedestrians and cyclists). This new site access shall be a priority junction. A Toucan Crossing is also proposed in the vicinity of the Milltown Road access to improve facilities for vulnerable road users.

Sandford Road

The existing access from Sandford Road will be utilised as the secondary vehicular access to the site, principally for deliveries, emergencies and taxis with a small element of mobility impaired parking for example and thus will have very minimal traffic movements. Fire tender access will also be provided from this entrance, and pedestrian and cyclist access will also be facilitated.

As detailed in Chapter 10 and Chapter 15 prepared by DBFL Consulting Engineers and enclosed separately, the following principal works are proposed:

- Retain existing entrance on Sandford Road (facilitates pedestrian and cycle access as well as limited vehicle access to the northern end of the site). Improvements to existing pedestrian crossing point in the vicinity of the Sandford Road entrance is also proposed. There is no vehicular access from Sandford Road to the basement carpark, the forecourt area adjacent to Tabor House and the duplex units along the western boundary (which are all served exclusively from Milltown Road).

3.6 Drainage Works

The following works are detailed by DBFL Consulting Engineers in Chapter 11 (Water-Hydrology):

> *"Provision of on-site surface water drainage infrastructure which will discharge from the site along its south-eastern boundary via Milltown Road and the junction of Milltown Road / Sandford Road prior to discharging to the existing public surface water drainage network in Eglinton Road (proposed 300mm diameter pipe extending approximately 300m from the proposed development site boundary to the outfall location which includes replacement of approx. 160m of the existing 225mm diameter drainage network along Eglinton Road).*
>
> *…The public surface water network on Eglinton Road is expected to provide a suitable surface water discharge point for the proposed development. However, in order to achieve the required drainage invert levels on site, approximately 160m of the existing 255m diameter drainage network along Eglinton Road will need to be replaced with a 300mm pipe running at a flatter gradient. The proposed surface water drainage network will collect surface water runoff from the site via a piped network."*

Please refer to Chapter 11 of this EIAR prepared by DBFL Consulting Engineers.

3.7 Height and Layout

The proposed layout of the scheme has been subject to numerous design iterations and therefore we consider that the scheme as proposed is the optimal solution for the lands (further details in Chapter 4 – Examination of Alternatives).

The proposed layout has positioned the highest forms at the least sensitive locations throughout the site (fronting Milltown Road and Sandford Road, fronting the large public open space area to the east of the site, and towards the centre and southern portions of the subject lands), at a distance from sensitive residential receptors and behind the substantial tree belt along the northern and eastern boundaries.

Proposed Heights

The proposed heights are as follows:

- Block A1 will range in height from part 5 No. storeys to 8 No. storeys and will comprise 81 No. apartments;
- Block A2 will range in height from part 6 No. storeys to 8 No. storeys and will comprise 139 No. apartments units;
- Block B will range in height from part 3 No. to part 7 No. storeys and will comprise 74 No. apartments;
- Block C will range in height from 4 No. storeys to 7 No. storeys) and will comprise 150 No. apartments;
- Block D will range in height from 3 No. storeys to 5 No. storeys and will comprise 30 No. apartments;
- Block E will be 2 No. storeys in height and will comprise 6 No. 2-storey houses;
- Block F will range in height from 5 No. storeys to part 7 No. storeys and will comprise 81 No. apartments; and
- The refurbished Chapel (2 No. storeys including lower ground floor) and Tabor House (4 No. storeys including lower ground floor level) will comprise community/cultural space.

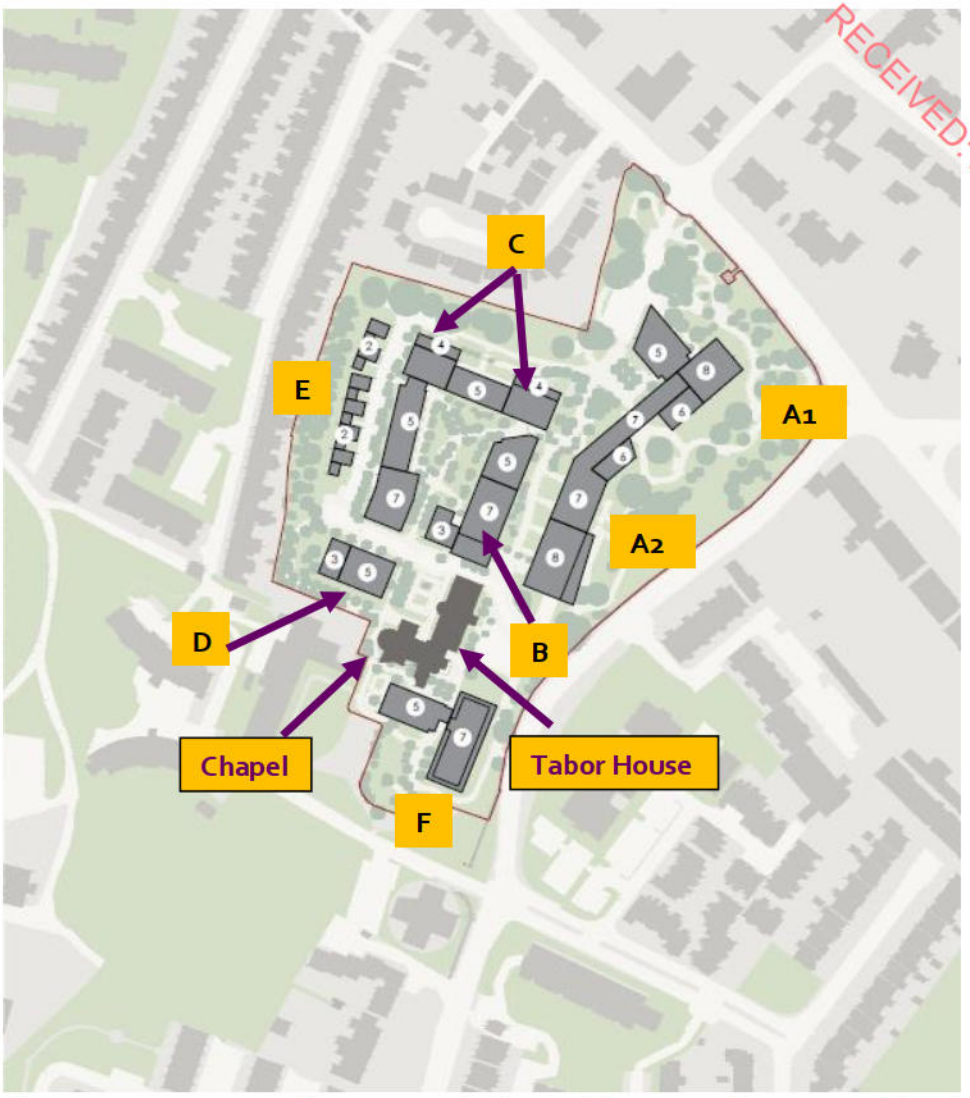

Figure 3.2: Proposed Layout of the Subject Development with the Heights Annotated

(Source: OMP Architects, 2025)

It is considered that the proposed development strikes a balance between respecting the surrounding context of the site while also ensuring that this prominent strategic site is appropriately densified. Each block has a subtle shift in direction as a response to its particular urban condition.

3.8 Open Space and Landscaping

The application lands have always been in private use and have thus been closed off from the general public. Therefore, the landscape strategy for the site will completely open up the site as a public amenity for the first time. The landscaping strategy has been prepared by Cameo and Partners Design Studio and is enclosed separately with this planning application. The *Landscape Design Statement* sets out in detail the open spaces provided throughout the site and notes that:

> *'The design philosophy for the proposed new residential-led mixed-use scheme in Sandford aims to create a high-quality residential community with a splendid and*

unique, contemporary landscape design within a parkland setting which is cognisant of the historical context of the site and its notary buildings'.

The Report notes that an overarching aim of the proposed development is to create a new residential development integrated within the existing landscape setting of the site through a series of connected landscape character areas.

Figure 3.3: Extract of Ground Floor Illustrative Landscape Masterplan

(Source: Cameo and Partners Design Studio, 2025)

Figure 3.4: **Aerial View of the Proposed Development Demonstrating the Green Emphasis of the Scheme**

(Source: **3D Design Bureau, 2025)**

Public Open Space

The Landscape Documentation outlines the various character areas proposed within the development with a particular focus on the 25% public open space requirement of the Z12 zoning pertaining to the lands.

The public open space is provided as follows:

- **Public Park and Plaza Area Connected Through the Triple Height Undercroft of Block A1:**

  c. 10,879 sq m (c. 25.57% of the c. 42,547 sq m developable site area)

- **Additional Public Open Space:**
  - **Woodland Glade**
  - **Boulevard**
  - **Garden Café Area**

  c. 4,144 sq m (c. 9.74% of the c. 42,547 sq m developable site area)

Figure 3.5: Public Open Space Provision at the Application Site

(Source: Cameo and Partners, 2025)

Figure 3.6: Public Open Space Provision at the Application Site

(Source: Cameo and Partners Design Studio, 2025)

Therefore, a total of 15,023 sq m (c. 35.3% of the developable site area) has been designated as public open space which significantly exceeds the requirement to provide 25% public open space.

We note that the large public park along the eastern boundary of the site is currently significantly overgrown and this space will be transformed by the subject development and will become a significant public amenity for the area. The opening up of the area, while maintaining the woodland feel will allow access to the general public for the first time and the imposing boundary wall will be modified in sections to provide views into the site which will invite the public into the open spaces provided and will improve permeability in the area.

The proposed development will remove or manage all Category U[3] trees for ecological purposes. To improve the quality and usability of the open space areas to the north and east of the site, the poor-quality Category C[4] trees are also recommended for removal and thus the proposed development will seek to open up this park for residents and visitors to enjoy. Therefore, the provision of a high quality useable public park available to the wider community at the site will be a significant planning gain for the area (as the public have never enjoyed any right of access to these privately owned lands).

The public park links through the triple height undercroft of Block A1 to the plaza area where there will be no vehicular access allowed to the plaza area, thus ensuring that the space is high-quality for public use. The entrance from Sandford Road will be a secondary vehicular entrance, principally for taxis, set down and deliveries and bollards will prevent access to the plaza area, which will provide a safe and enjoyable environment for the public and residents. The opening up of the area while maintaining the woodland feel will allow access to the general public for the first time and the imposing boundary wall will be modified in sections to provide views into the site which will invite the public into the open spaces provided and will improve permeability in the area.

In addition to public park and plaza area connected through the undercroft of Block A1, a parkland walk (known as the Northern Woodland Glade) will also be provided to the north of Block C which is positioned adjacent to the plaza and the communal amenity space in Block C. This northern space represents c. 7.04% of the site area (or c. 3,000 sq m) and will provide further amenity on site in excess of the 25% requirement. The Woodland Glade will be presented as a wildflower meadow and will work together with the park and plaza as an entire connected public open space. In addition to utilising the eastern public park to travel through the site, the public can also utilise the pedestrian connection from Milltown Road and Sandford Road through the pedestrian boulevard between Blocks A and B.

Finally, as a result of the replacement of 24 No. duplexes in Block E in LRD 1 with 6 No. houses, which are set back much further from the western boundary, a biodiversity enhancement area is introduced, which gives wildlife priority whilst allowing maintenance and occasional access.

The area serves as a vital biodiversity corridor, featuring ecological encasements that support a diverse range of flora and fauna. This area prioritises the retention of existing trees, ensuring the preservation of mature habitats. Additionally, new high-value wildlife trees are strategically placed to enhance the ecological value of the corridor, fostering a thriving environment for local wildlife and contributing to the overall sustainability of the development

[3] Trees in such condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management. Trees that are dead, dying or showing immediate and irreversible decline. (CMK, 2023)
[4] Trees of low quality and value (a minimum of 10 years). (CMK, 2025)

Figure 3.7: Illustrations of the Proposed Transformed Parkland

(Source: Cameo and Partners Design Studio, 2025)

Figure 3.8: Illustrations of the Proposed Transformed Parkland

(Source: Cameo and Partners Design Studio, 2025)

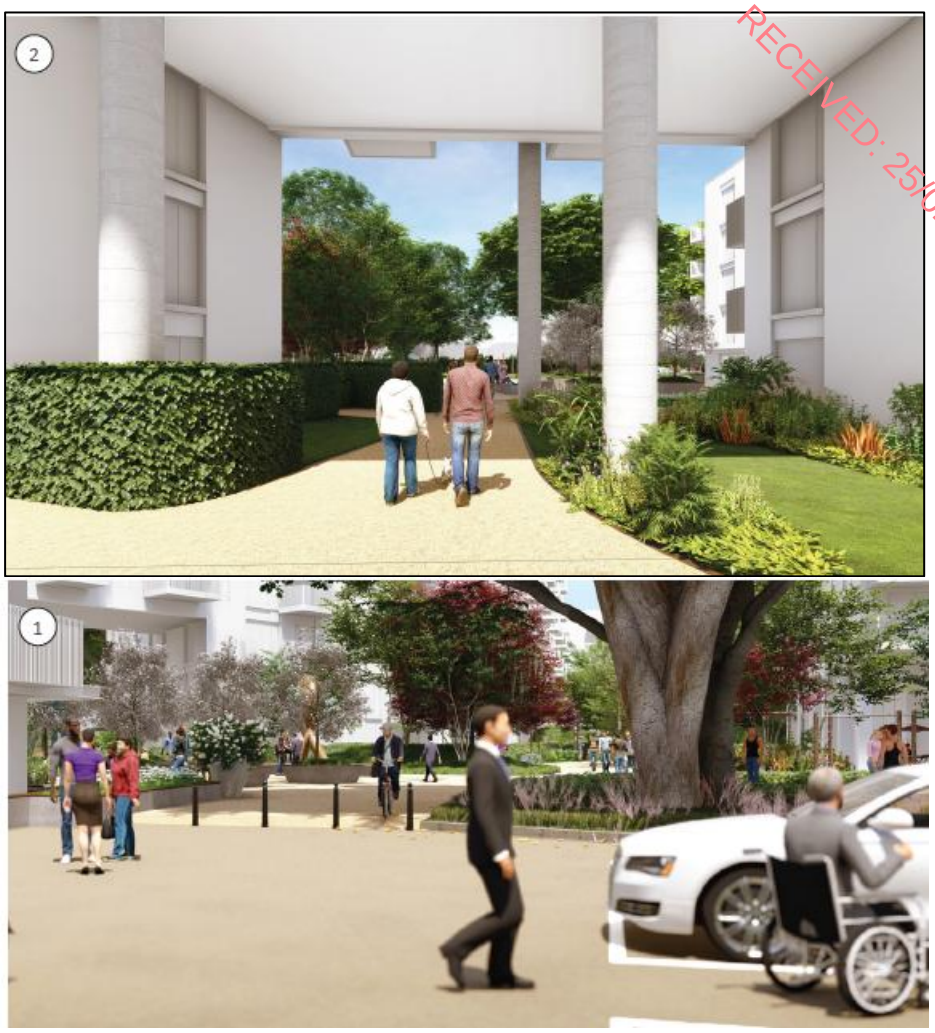

Figure 3.9: **Illustrations of the Triple Height Archway Linking the Parkland and the Plaza Area (see Bottom Image Showing Bollards to Prevent Access to Plaza)**

(Source: **Cameo and Partners Design Studio, 2025)**

Figure 3.10: **Illustrations of the Plaza Area**

(Source: **Cameo and Partners Design Studio, 2025)**

Natural play facilities for the scheme will be mainly focused within these areas, specifically aimed at children to reconnect with nature and there will also be opportunity for adult engagement through natural gym equipment. There will also be seating provided throughout the site.

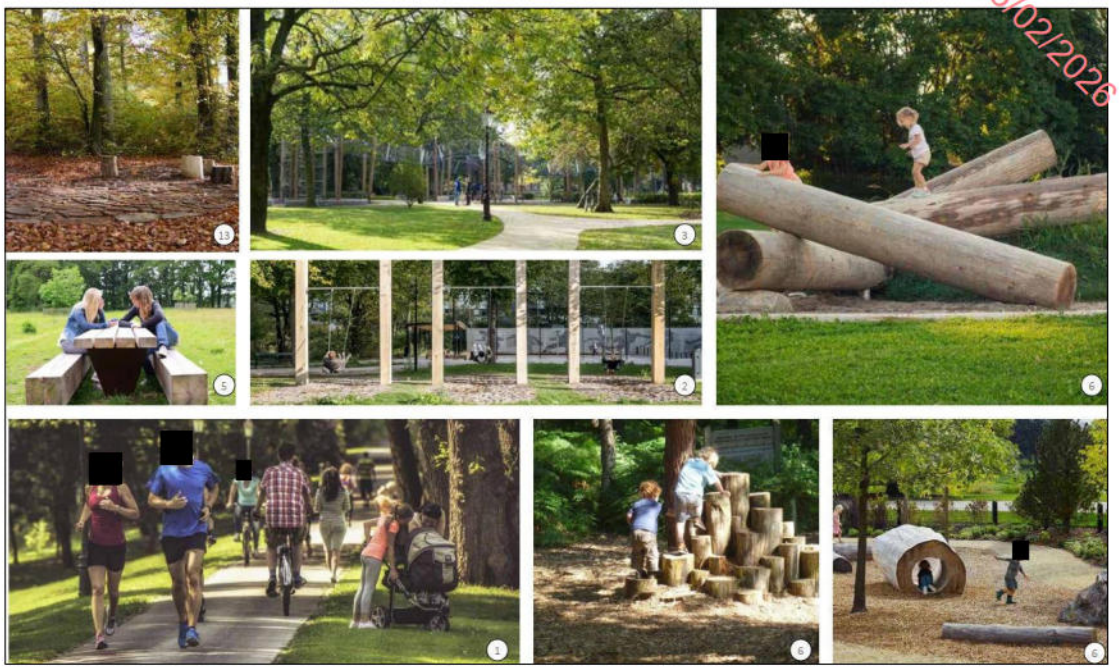

Figure 3.11: Examples of Public Open Space Features

(Source: Cameo and Partners Design Studio, 2025)

Figure 3.12: Illustrations of the Woodland Glade to the North of Block C

(Source: Cameo and Partners Design Studio, 2025)

Figure 3.13: Illustration of the Pedestrian Street Linking Milltown Road Entrance to the Public Plaza and Beyond to Sandford Road

(Source: Cameo and Partners Design Studio, 2025)

Therefore, it is clear that the proposed layout has comprehensively considered the public open spaces within the scheme. These spaces will be high-quality and will provide a place to meet, sit, exercise or to walk or cycle through, which is currently not an amenity available at the lands as the site has always been in private use.

Communal Open Space

The total communal open space proposed at surface level is 4,314 sq m (10% of the developable site area) and is primarily provided within the residential courtyards of Blocks B and C and around Blocks D and F.

A further communal amenity space is provided as a roof garden in Block A1.

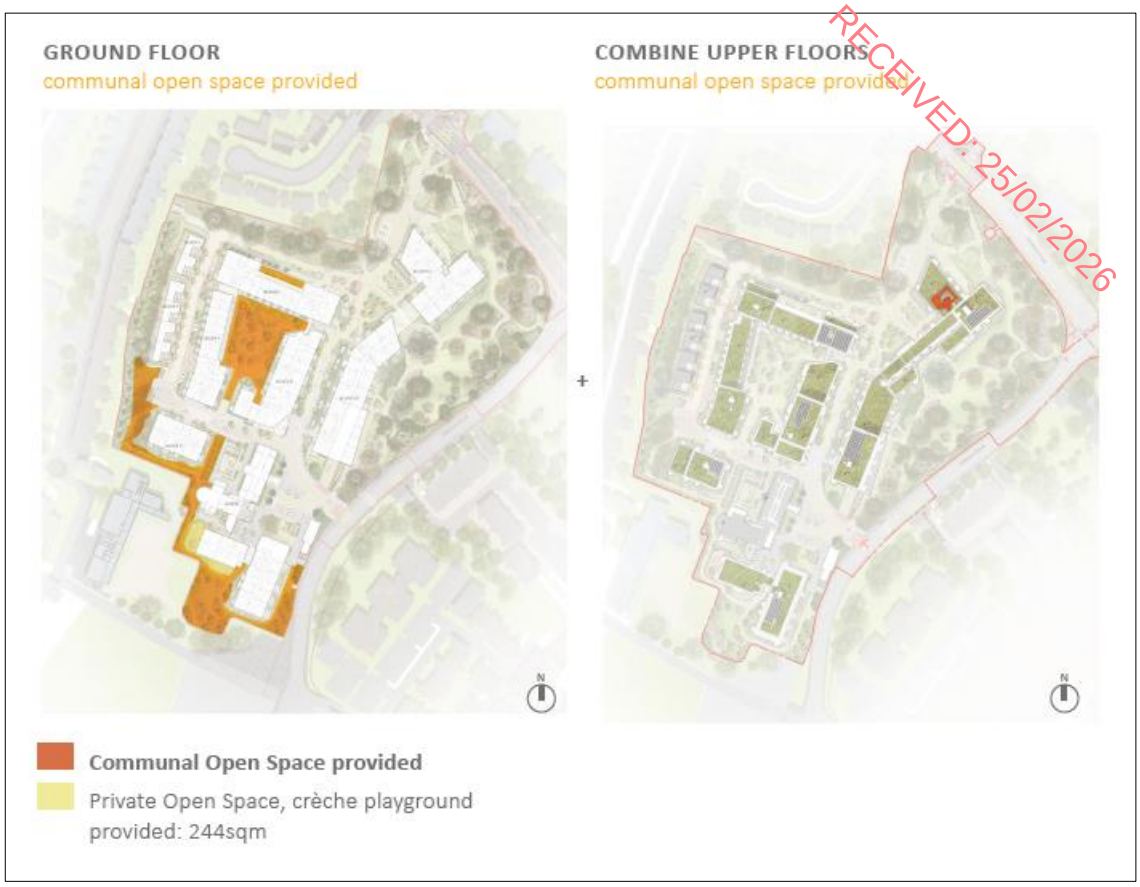

Figure 3.14: Communal Open Space Provision at the Application Site

(Source: Cameo and Partners, 2025)

An example of the landscaped communal areas is provided below:

Figure 3.15: Illustrations of the Belvedere Garden to the North of Block C

(Source: Cameo and Partners Design Studio, 2025)

Figure 3.16: CGI of the Courtyard Between Blocks B and C

(Source: 3D Design Bureau, 2025)

It is clear that the open space proposed has been central to the design of the development and will contribute to the assimilation of the development within its surrounding context, particularly having regard to the total provision of public and communal open space proposed which represents c.45.3% of the site area.

In addition, there will be 109 sq m of an upper level communal terrace in Block A1, which will further add to the communal space provision within the proposed development.

Figure 3.17: Illustrative Images of the Communal Amenity Terrace Proposed

(Source: Cameo and Partners Design Studio, 2025)

Proposed Boundary Treatment and Access Arrangements

The subject development proposes a new vehicular and pedestrian access point from Milltown Road which will be the principal entrance to the subject development and which will facilitate access to the basement car park, the forecourt adjacent to Tabor House and the 6 No. houses along the western boundary (Block E).

Some 2 No. new pedestrian gates will be provided at each access. In addition, a new pedestrian access will be provided at the junction of Milltown Road and Sandford Road which demonstrates that ample permeable opportunities are provided in the proposed development.

A portion of the boundary treatment of the existing wall will be modified along Milltown Road and Sandford Road. In this regard, a proposed upstand wall with railing will be provided in

lieu of the existing cement or stone wall (predominately render removed) at the corner of Milltown Road and Sandford Road, which will allow views into the site and will thus visually open the site up to the public and will enhance legibility in the area.

As requested by the Conservation Department of Dublin City Council, the proposal retains more of the existing boundary wall along Milltown Road, rather than replacing it with fencing and a low wall as was proposed in previous applications on the site.

Cameo and Partners Design Studio have also developed a strategy for the boundary treatment as follows:

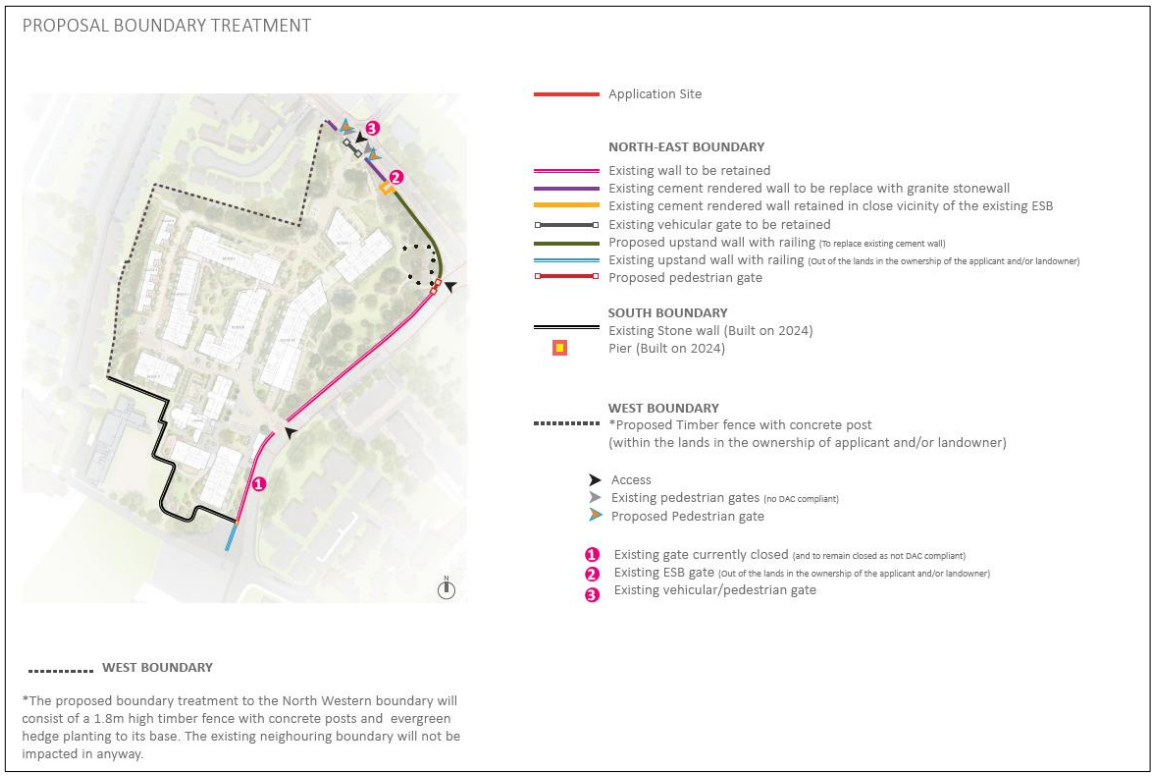

Figure 3.18: Boundary Treatment Strategy

(Source: Cameo and Partners Design Studio, 2025)

We note that the incorporation of permeable visual connections through the site and enhanced boundary treatments were a key consideration during the design process leading to greater public use of the space and represents a key planning gain for the wider community.

4.0 EXAMINATION OF ALTERNATIVES

4.1 Introduction

Chapter 4 of the EIAR sets out why the final layout was selected and provides details of alternative layouts considered throughout the design process. In addition, this chapter discusses alternative locations, alternative processes and alternative mitigation measures associated with the proposed development.

Annex IV (2) of the amended EIA Directive (2014/52/EU) notes that the following is required in relation to the consideration of alternatives in the preparation of an EIAR:

> *"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".*

Therefore, the details provided in Chapter 4 are fully in accordance with Annex IV (2) of Directive 2014/52/EU.

4.2 Alternative Layouts

The main alternatives considered in Chapter 4 relate to alternative layouts considered by the Applicant and Design Team throughout the design process (8 No. layouts included in total). In summary, the following key items were considered in the early iterations of the scheme layout:

1. Consideration of the reuse of existing buildings and provision of new-build elements. It was ultimately decided that Tabor House and The Chapel could be functionally retained and reused within the development;

2. Requirement to provide 25% public open space on the lands in accordance with the zoning objective; and

3. Consideration of the mature tree belt and woodland park as a key site asset forming the eastern portion of the lands.

In summary, many of the reasons that early iterations of the scheme layout were not selected are as follows:

1. The building forming the public park edge required further articulation and variation in massing;

2. A continuous outer 'loop' road made for a car dominated environment and promoted too much emphasis on car movement while acting as a potential short-cut for cars from Milltown Road to Sandford Road causing traffic impact concerns;

3. Further consideration of the interface with the northern edge onto Norwood Park was required in relation to secondary apartment block locations, separation distances and any potential privacy issues;

4. The early studies raised challenges which became apparent during the detailed analysis of the existing buildings, and subsequently further options were developed with the functional reuse and refurbishment of the Chapel and Tabor House incorporated into the development.

The final layout of the proposed scheme will appropriately assimilate into the surrounding context to provide a sustainable residential-led mixed-use development in close proximity to public transport, services, facilities and employment locations. The subject development provides the opportunity to showcase the 2 No. characterful buildings of Tabor House and The Chapel as focal points in the development, which are detachable from the building grouping.

The proposed plot ratio of the developable site (c. 4.26 Ha) is 1.18, which represents efficient densification of core urban lands. The scheme also provides a substantial quantum of open space (c. 15,023 sq m) representing c. 35.3% of the site area, which includes the provision of a large public park. As the site has been historically closed up to the public, the opening up of the site will welcome the public through the site for the first time and will become a gathering place for the community.

In addition to the public open space provision, the provision of permeable links (i.e. through the public park and through the pedestrian boulevard between Blocks A and B), new openings in the boundary wall (providing glimpses through the site) and the provision of new pedestrian gates will encourage permeability through the site which will benefit the wider community, whilst also assisting with the integration of the proposed scheme into the surrounding area. It is thus considered that the proposed development represents a significant planning gain for the area, especially as the site has been historically closed up from the public.

4.3 Alternative Locations

The overarching vision of the Applicant and the Design Team since the outset of the project has been to develop a high-quality scheme on appropriately zoned, serviced land.

When acquiring the site, the Applicant duly considered the zoning objective pertaining to the lands (at the time) which were zoned Objective Z15 *'Institutional and Community'* in the *Dublin City Development Plan 2016 – 2022,* where 25% public open space was required, beyond the standard 10% typically required for a residential development on lands within the administrative area of Dublin City Council ("DCC").

The zoning of the site has now changed to Objective Z12 *'Institutional Land (Future Development Potential)'* under the new *Dublin City Development Plan 2022-2028*. The provision of a Z12 zoning on the land, like the extant permission on the scheme, will continue to provide a minimum of 25% public open space on the site and will open the site up to the public for the first time. As it stands, the subject site is closed to the public and has never had any existing community or public open space function on the lands as the site was always in private religious use, a use that is no longer required as clearly demonstrated in the application documents.

In addressing the particular characteristics of the site, namely a large volume of vacant institutional buildings, a key requirement early in the design process was to determine which buildings could be functionally retained and reused within the development. In addition, the requirement for 25% public open space has been considered in line with the former Z15 zoning objective pertaining to the lands (now Z12, which also requires 25% public open space). In this regard, it is important to note that the lands have always been walled and gated and in private use by the Jesuit Community and closed off from the public up until their sale and will now be opened up for the first time to the public. The public have never enjoyed any right to access these privately owned lands.

The development layout was framed around these key design considerations and thus the development now proposed has utilised the remainder of the site to provide a range of residential units in addition to a creche, a café/restaurant and community/cultural space, as detailed extensively throughout this Chapter and application documentation.

Having regard to the core urban location of the site in proximity to high-frequency public transport, employment locations, services and facilities, the location of the lands within a built-up area, the sequential approach to development and the zoning objective of the subject site pertaining to the lands, alternative locations were not considered. Section 3.4.1 of the *EPA Guidelines 2022* state that *"in some instances some of the alternatives… will not be applicable - e.g. there may be no relevant 'alternative location'…"* The zoning of the site, the size of the site and the site's location close to the urban core, public transport and services and facilities have influenced the site's principal residential use along with the scale, height, and massing considered appropriate for the subject site.

4.4 Alternative Processes

The proposed development includes the provision of 562 No. residential units, a creche, a café/restaurant, community/culture space and associated development. Therefore, as the development proposes in excess of 100 No. residential units and provides below the threshold of commercial development (30% of the Gross Floor Area), it is mandatory that the planning application is lodged as a Large-scale Residential Development Planning Application to Dublin City Council, under the *Planning and Development (Amendment) (Large-scale Residential Development) Act 2021.* Having regard to the nature of the proposed development, alternative processes were considered but ultimately deemed irrelevant given the nature of the project.

4.5 'Do Nothing Alternative'

In the event of a 'do nothing scenario' the site would continue to remain in its current underutilised state which would represent an inefficient use of scarce core urban land within an existing built-up area. The application site currently comprises the original Milltown Park House with subsequent extensions, which are vacant and no longer in use, in a highly accessible core urban location in Dublin in close proximity to high frequency public transport and employment locations. The existing plot ratio of the developable site (c. 4.26 Ha) is 0.12 and the proposed plot ratio of the development site is 1.18, which represents efficient densification of core urban lands.

In addition, we note that the site was historically (and is currently) closed up from the public as the site has always been in private use. Therefore, if the development did not proceed, the site would not be opened up to the public and the extensive public open space representing 35.3% of the site and permeable links incorporated into the scheme layout would not be provided for the wider community to utilise. The development will welcome the public through the site and will become a gathering place for the community for the first time. Therefore, if the development does not proceed, this would be considered a negative impact.

In conclusion, the proposed development will provide much needed housing units in an existing residential area in addition to a creche, café/restaurant and community/cultural space. If the development does not proceed, this would represent a lost opportunity to provide accessible public open space for the community as well as housing (i.e. 562 No. households would not be catered for) and cultural/community facilities for the wider neighbourhood.

4.6 Cumulative Impacts

Each design iteration comprehensively considered any potential impacts on neighbouring developments, modulating the edges of the scheme to provide an appropriate transition to its direct context. This ensures that an appropriate design response has been provided to minimise the cumulative impact of the development with neighbouring developments.

We note that a fully *Community and Social Infrastructure Audit* has been prepared confirming that there are adequate community and social facilities in the surrounding area.

Although the *Childcare Demand Assessment* concluded that *the scheme only generates a demand for 11 No. childcare spaces,* the Applicant has incorporated a crèche into the scheme, which will cater for 75 No. childcare spaces. This will benefit the future residents of the development but will also cater for the immediate existing residents of the area.

In addition, the final layout of the community/cultural spaces will ultimately be agreed through compliance with Dublin City Council, as identifying occupiers at this juncture is likely futile whilst the planning application goes through the planning and construction process.

A full list of proposed and pending applications was considered by the EIAR Team as set out in Chapter 3.0 (Section 3.5) and where relevant were included in the cumulative impacts assessment of the relevant chapter. In terms of the Examination of Alternatives Chapter, the surrounding developments are either at too great a distance or are too small to result in cumulative impacts with the subject proposed development. In addition, in most cases there are existing buildings located between the subject site and the list of developments outlined in Chapter 3. The most relevant planning application relates to the newly permitted modern archive building which was granted permission by Dublin City Council for a (DCC Reg. Ref. 3116/22) within the retained Jesuit lands to the south of the subject site. This building has not yet been constructed.

In addition, Chapter 9 (Landscape and Visual Impact Assessment) prepared by Modelworks notes the following details in relation to cumulative impacts:

'None of these permitted or proposed developments is (a) so close to the subject site, and/or (b) of such large scale that they could interact with the proposed development to result in townscape or visual impacts of greater significance than those predicted in Section 9.7 above. (There would be some cumulative townscape effect – see comment on the Eglinton Road SHD scheme and Jefferson House redevelopment below - but this would not change the significance or quality classificati ons in 9.7.1.2.)

The Eglinton Road SHD scheme (PL29S.307267), now built and operational, is the largest of the permitted developments in the site vicinity. This development is located at the opposite end of Eglinton Road from the site. It comprised the demolition of houses at Nos. 1, 3, 5, 7, 9 and 11 Eglinton Road and their replacement by an apartment building of up to 13 No. storeys. Across Eglinton Road from this development is Jefferson House, a 20th century office building. Planning permission (Reg. Ref. 3386/22) has been granted for the redevelopment of this site, and the replacement of the office building with a 12 No. storey apartment building. Together, these two developments will create a gateway (expressed in built form and height) to Donnybrook (and the city centre) on the Stillorgan Road, transforming the townscape character and views locally, affecting Eglinton Road. These are examples of the change taking place in the site vicinity.

The Eglinton Road and Jefferson House schemes could not be seen along with the proposed development in any one of view (being at opposite ends of Eglinton Road, which has a curved alignment) and some 600 m apart. However, they would jointly contribute to a shift in townscape character experienced by the residents and users of Eglinton Road.

This is an example of how the proposed development would interact with other proposed developments, permitted developments and the already constructed higher density developments in the area (e.g. Cedar Hall, Grove House, etc.) to result in a general shift in townscape character - towards a more urban, mixed density condition.

This change is the result of compact growth policy and it is not a negative change. While the introduction of higher density development will unavoidably cause a change in character and the composition of views, low density housing will remain the predominant development typology in the site vicinity'.

Therefore, it is clear that the potential for any cumulative impacts to occur has been comprehensively considered.

4.7 Conclusion

As a result of a detailed design process, which included the various design iterations outlined in this chapter and a significant number of design team meetings (many further to feedback from Dublin City Council), it is considered that the proposed layout is the optimum arrangement in terms of appropriately densifying the subject lands while also protecting the residential amenity of the neighbouring residential properties.

As noted previously, the proposed layout locates the highest forms at the least sensitive locations throughout the site (fronting Milltown Road and Sandford Road, fronting the large public open space area to the east of the site, and towards the centre and southern portions

of the subject lands), at a distance from sensitive residential receptors. This LRD application has reduced heights across many elements of the site, from those granted by Dublin City Council and An Coimisiún Pleanala in the last LRD (subject to judicial review).

The scheme also provides a substantial quantum of open space (c. 15,023 sq m) representing c. 35.3% of the developable site area, which includes the provision of a large public park. As the site has been historically closed up to the public, the opening up of the site will welcome the public through the site for the first time and will become a gathering place for the community.

In addition to the public open space provision, the provision of permeable links (i.e. through the public park and through the pedestrian boulevard between Blocks A and B), new openings in the boundary wall (providing glimpses through the site) and the provision of new pedestrian gates will encourage permeability through the site which will benefit the wider community, whilst also assisting with the integration of the proposed scheme into the surrounding area. It is thus considered that the proposed development represents a significant planning gain for the area, especially as the site has been historically closed up from the public.

The proposed development will also provide a high-quality living environment for residents in addition to the provision of creche, café/restaurant and community/cultural space, which will benefit the future residents and the surrounding area. In conclusion, the proposed layout is well considered and includes an appropriate mix of residential dwelling sizes, a creche, a café/restaurant and community/cultural space.

5.0 POPULATION AND HUMAN HEALTH

5.1 Population Profile and Housing

Chapter 5 of this EIAR considers any likely impacts that the proposed development may have on population and human health. The subject site is located within the Electoral Division of Rathmines East B according to the Census 2022 information. According to the Summary Results of the Census 2022, which were issued on 30th May 2023, the population of Ireland has exceeded five million for the first time in 171 No. years[5]. This has resulted in an 8% increase since the 2016 Census. Therefore, this highlights the critical need to provide additional housing in our serviced areas, which is also well documented in planning policy and anecdotally and empirically in national media.

The extent of this Electoral Division according to the Census 2022, and the location of the subject site is illustrated at Figure 5.1 below.

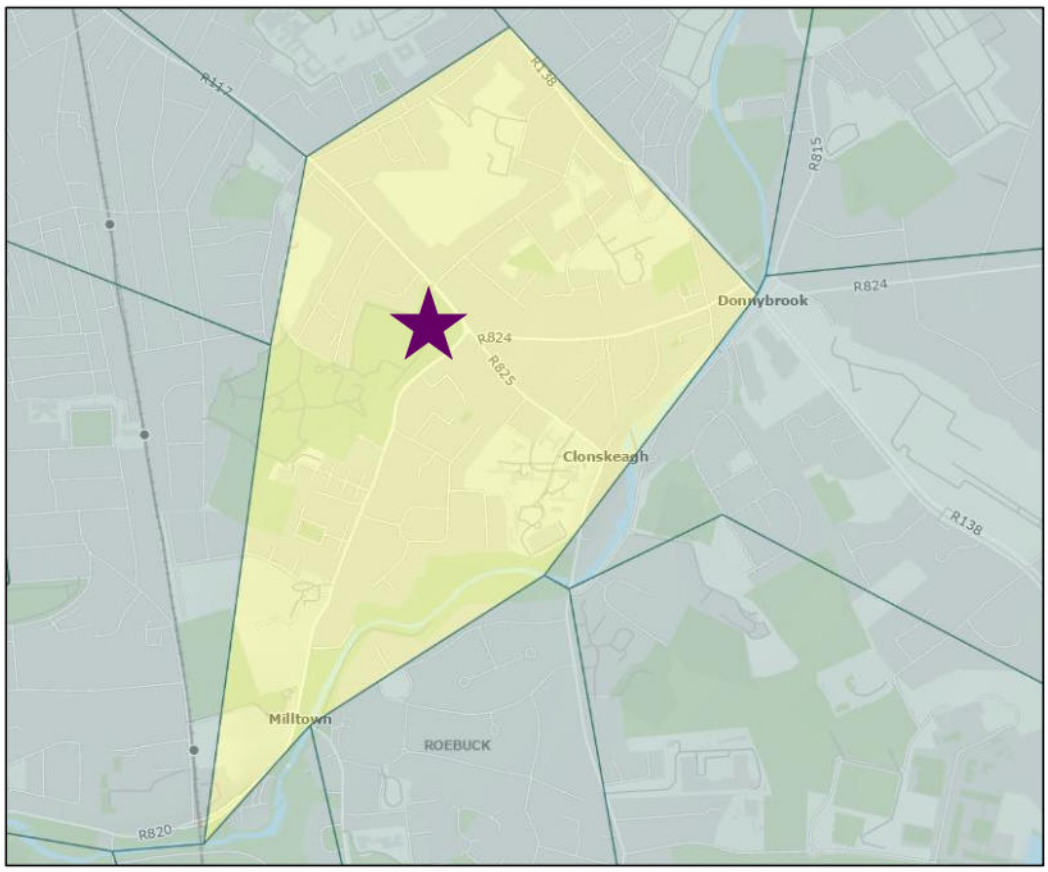

Figure 5.1: **Map Demonstrating the Electoral Division of Rathmines East B with the Subject Site Annotated Indicatively by the Purple Star**

(Source: **Census 2022, Annotated by Thornton O'Connor Town Planning, 2025)**

[5] https://www.cso.ie/en/releasesandpublications/ep/p-cpsr/censusofpopulation2022-summaryresults/populationchanges/

According to the Census 2022, the Rathmines East B Electoral Division had a population of 5,705 No. persons. However, we note that the number of persons accommodated in the 2,413 No. households was 5,571 No. persons (i.e. 134 No. additional persons were present in this Electoral Division on the night of the census who are not normally present in the area).

The 2016 Census recorded a population of 6,058 No. persons within this ED on the night of the Census and the number of persons accommodated in the 2,410 No. households was 5,905 No. persons. Therefore, there has been a decrease in the population recorded on the night of the Census of 353 No. persons (5.83% decrease) and a decrease in the number of persons accommodated in the households in this ED of 34 No. persons (0.6% decrease), although there was an increase in the number of households in this ED of 3 No. households.

There are a range of age groups living in the Rathmines East B ED according to the 2022 Census. As demonstrated in Table 5.1 below, a large concentration of persons are of working age between 20 and 64 No. years old (3,905 No. persons or 68.5% of the ED population), which is higher than the figures for the State (3,022,909 No. persons representing 58.7% of the population) and for Dublin City (394,473 No. persons or 66.6% of the population).

Due to the high number of persons living in the area who are aged between 20 and 64 No. years old, the Dependency Ratio for the Rathmines East B ED is ultimately lower than recorded for the County and the State (Dependency Ratio relates to those not of working age i.e. 0 – 19 years old and 65+).

Population by Age						
Age Group (years)	Republic of Ireland[6] 5,149,139 No. persons		Dublin City[7] 592,713 No. persons		Rathmines East B ED 5,705 No. persons	
0–4	295,415	5.7%	28,946	4.9%	298	5.2%
5–9	342,670	6.7%	29,356	5%	269	4.7%
10–14	374,202	7.3%	30,301	5.1%	272	4.8%
15–19	337,628	6.6%	30,269	5.1%	229	4%
20–24	307,143	6%	45,907	7.7%	396	6.9%
25–29	295,808	5.7%	59,058	10%	691	12.1%
30–34	332,223	6.5%	59,233	10%	716	12.6%
35–39	382,869	7.4%	51,695	8.7%	519	9.1%
40–44	411,524	8%	46,155	7.8%	398	7%
45–49	373,504	7.3%	37,908	6.4%	386	6.8%
50–54	340,003	6.6%	35,115	5.9%	307	5.4%
55–59	307,165	6%	31,577	5.3%	269	4.7%
60–64	272,670	5.3%	27,825	4.7%	223	3.9%
65–69	238,144	4.6%	22,883	3.9%	209	3.7%
70–74	202,884	3.9%	19,283	3.3%	165	2.9%
75–79	154,260	3%	15,167	2.6%	142	2.5%
80–84	96,586	1.9%	10,953	1.8%	105	1.8%
85+	84,441	1.6%	11,082	1.9%	111	1.9%
Total	5,149,139		592,713		5,705	
Dependency Ratio		41.3%		33.4%		31.5%

Table 5.1: Population Profile of the Rathmines East B Electoral Division, Dublin City and the State

(Source: Census 2022/CSO)

As the highest concentration of the Rathmines East B ED population are of working age, the proposed scheme will provide an enhanced choice of unit sizes in the area, affording greater flexibility to those who may be seeking a dwelling in the area.

We note that the scheme will also significantly benefit the existing population who are not in the workforce e.g. retirement age and cohort. There are a high number of persons aged 65 + (12.8%) in the Rathmines East B ED who may welcome the opportunity to downsize to a smaller apartment in their local area. This would relieve pressure on that market sector by opening up larger family dwellings for sale in the surrounding areas.

We also note that 5.2% of the ED population were aged 0 – 4 years old at the time of the 2022 Census. The proposed development includes the provision of a crèche, which in addition to catering for the younger cohort of persons that will be accommodated in the proposed development, will also cater for the younger cohort in the wider ED area.

The scheme provides 56 No. Part V units which will cater for persons in need of a dwelling as per the social housing list.

[6] https://visual.cso.ie/?body=entity/ima/cop/2022 (Province's)

[7] https://visual.cso.ie/?body=entity/ima/cop/2022&boundary=C03789V04537&guid=2ae19629-1433-13a3-e055-000000000001

The ED recorded an average of 2.3 No. persons per private household in 2022, which is lower than the national state average of 2.7 No. persons and the Dublin average of 2.5 No. persons. Therefore, the ED is predominated by smaller households and it is important to provide choice for such household formations.

As shown below in Table 5.2, there are a large number of permanent private households which comprise 4 rooms or more within the Rathmines East B ED (1,608 No. households or 66.6% of the total). The Census 2022 provided the following definition when stating the number of rooms as follows:

- *"Do NOT count bathrooms, toilets, kitchenettes, utility rooms, consulting rooms, offices, shops, halls, landings or rooms that can only be used for storage such as cupboards.*
- *Do count all other rooms such as kitchens, living rooms, bedrooms, studies and conservatories you can sit in.*
- *If two rooms have been converted into one, count them as one room."*

Permanent Private Households by Number of Rooms[8]		
No. of Rooms	**No. of Households**	**No. of Persons Accommodated**
1 room	21	30
2 rooms	283	434
3 rooms	416	812
4 rooms	454	894
5 rooms	321	744
6 rooms	288	702
7 rooms	235	723
8 or more rooms	310	1,000
Not stated	85	232
Total	2,413	5,571

Table 5.2: Permanent Private Households by Number of Rooms for the Rathmines East B Electoral Division

(Source: Census 2022/CSO)

Therefore, having regard to the above table, it can be concluded that the correlation between household sizes and average household sizes is disproportionate as the data demonstrates that despite the smaller average household sizes of 2.3 in the area, a large number of households comprise dwellings with 4 to 8+ rooms.

It is our opinion that there is a significant opportunity to densify this area of Dublin with a mix of studio, 1, 2 and 3 No. bedroom units to achieve a balance between household sizes and dwelling sizes.

[8] https://visual.cso.ie/?body=entity/ima/cop/2022&boundary=C04167V04938&guid=2ae19629-1dd4-13a3-e055-000000000001&theme=5

5.2 Employment, Local Services and Facilities

The unemployment rate of the Rathmines East B ED was 4.7% at the time of the 2022 Census, which is lower than the national unemployment figure of 8%[9]. This is a very favourable comparison to the national unemployment rate and is a direct reflection of the sustainable location of the site within this ED which has easy access to a wide range of employers.

> *"The most recent data show strong growth in consumption expenditure (+3% in Q2), in employment (+2.3% in Q2) and in tax receipts (+4.4% to end August). We expect this positive situation to continue over the forecast horizon and see modified domestic demand (MDD) growing by 3.8% in 2025 and by 2.9% in 2026."*

The ESRI notes that demand for house will like exceed supply in the medium term:

> *"In the second quarter of 2025, a notable and welcome increase in housing output was evident. Housing completions for the quarter, Figure 8, increased to just over 9,200 units with increases in both scheme housing as well as apartment completions. For the first half of 2025, this brings the total number of completions to over 15,000. On average for the years 2019 through 2024 (excluding 2020 due to COVID-19), the first half of any calendar year has equated to just over 43% of total output. If this relativity was to be maintained for 2025, the total output for the year could exceed 35,000 units for the first time since the financial crisis; this represents an increase relative to our full year expectations in the previous Commentary."*

Therefore, the proposed development including 562 No. residential units, primarily comprising of apartment units (556 No. units), will positively contribute to the supply of housing available in the Dublin 6 area, which will assist in alleviating the housing crisis being experienced in the Country.

There are a wide range of services and facilities available in close proximity to the subject site as the site is positioned at the prominent interchange of Sandford Road and Milltown Road which is a key arterial crossroads between Milltown, Clonskeagh, Donnybrook, Ballsbridge and Ranelagh. Therefore, there are a number of neighbourhood centres in proximity to the site within easy cycling and/or walking distance of the subject site.

There are a wide range of services and facilities available in close proximity to the subject site as the site is positioned at the prominent interchange of Sandford Road and Milltown Road which is a key arterial crossroads between Milltown, Clonskeagh, Donnybrook, Ballsbridge and Ranelagh. Therefore, there are a number of neighbourhood centres in proximity to the site within easy cycling and/or walking distance of the subject site. In addition, Chapter 5 references the *Community and Social Infrastructure Audit (incl. Schools and Childcare)* which notes the following in relation to schools:

> *"It is judged that the proposed level of educational infrastructure can support the ongoing residential development occurring in Milltown, and that the Department of Education will progress the sustainable development of new schooling infrastructure to meet future demand."*

[9] https://www.cso.ie/en/releasesandpublications/ep/p-cpsr/censusofpopulation2022-summaryresults/employmentoccupationindustryandcommuting/

The *Community and Social Infrastructure Audit (incl. Schools and Childcare)* concludes that:

> *"The baseline study undertaken identified a significant range of services and facilities which contribute to quality of life for local residents, comprising 162 No. social infrastructure facilities were identified as part of this Audit within a radius of 1 km of the subject site."*

In addition, we note that community/cultural spaces are proposed as part of the development which will serve the local area (in accordance with the requirements of the *Development Plan*). The final layout of the community/cultural spaces will ultimately be agreed through compliance with Dublin City Council, as identifying occupiers at this juncture is likely futile whilst the planning application goes through the planning and construction process.

We note that there are a variety of facilities and services located in close proximity to the subject site that the future residents of the scheme can utilise on foot or bicycle. The proposed scheme also provides co-working space, concierge and lounges to serve the future residents of the scheme. In addition, the significant quantum of public and communal open spaces provided throughout the development and the proposed permeable link through the public park and pedestrian boulevard is considered a unique planning gain for the area given that these lands were in private use and not publicly accessible. The proposed community/cultural spaces will also serve the residents and local community.

In terms of health services and facilities, the *Community and Social Infrastructure Audit (incl. Schools and Childcare)* notes:

> *"A total of 57 No. health services and facilities, comprising 11 No. General Practitioners and Health Centres, 2 No. Hospitals, 10 No. Pharmacies, 4 No. Nursing Homes, and 6 No. Dental Care Practices, were identified within and bordering the Study Area* [c. 1 km radius of the subject site] *during the baseline survey."*

5.3 Potential Impacts of the Proposed Development and Summary of Mitigation Measures Proposed

The development will have a long-term positive impact on population due to the provision of a wide range of dwelling unit types which includes provision for Part V units and will cater for a wide cohort of persons.

As a result of the construction of the proposed development, c. 550 No. workers will be directly employed during the construction period in addition to c. 40 No. indirect workers (e.g. marketing, suppliers etc.). This increase in employment will clearly have a positive impact on existing population in the area as there would be employment opportunities for any workers living in the wider area surrounding the subject lands. We also note that additional workers on the site will utilise local shops and other businesses in the surrounding areas during the construction phase which will benefit the local economy. Therefore, the impact of the proposed development on employment and the economy is considered positive.

The application site will be opened up to the public, allowing access to previously inaccessible private lands. A total of 15,023 sq m (c. 35.3% of the developable site area) has been

designated as public open space at the application lands, which is a significant planning gain for the area, particularly as the lands have never been publicly available.

The subject site has significant frontage onto Sandford Road and Milltown Road and this in tandem with the large quantum of public open space provision, facilitates the unique opportunity to provide permeable connections through the site.

If the development did not proceed, this large site would principally remain in a vacant state. This could have a potentially negative effect on health and safety for security reasons as the large extent of the open site could encourage antisocial behaviour to take place at the subject lands. The buildings could also fall into disrepair as they have no existing active use, which also represents the opportunity for anti-social behaviour to occur.

There would be no change to the existing local services and amenities provision as there is currently no such provision at the subject lands which have always been in private use and not publicly available. As the application lands and buildings are vacant, there is nobody present at the site to support the local economy.

As associated with all new developments, there will be a slight temporary negative impact on the surrounding area during construction stage arising from construction traffic entering and exiting the site and their associated noise, dust and slight nuisance. However, these issues can be appropriately mitigated as set out in Chapter 12 (Air Quality and Climate), 13 (Noise and Vibration) and 15 (Transportation) of this EIAR.

The Contractor shall be responsible for overall management of the site for the duration of the proposed construction works and must progress their works with reasonable skill, care, diligence and to proactively manage the works in a manner most likely to ensure the safety and welfare of those carrying out construction works. The Contractor shall comply with all relevant Statutory requirements such as the *2005 Safety Health and Welfare at Work Act*, the *Construction Regulations (SI 291 of 2013), Safety, Health and Welfare at Work (General Application) Regulations 2007* etc. (and any amendments thereof). In addition, the Contractor shall comply with all the reasonable safety requirements of the Client, the Project Supervisor for the Design Process and the Project Supervisor for the Construction Stage. Measures that would be taken under these Statutory requirements include:

- Appointment of a competent project supervisor for the design process, and a competent project supervisor for the construction stage.
- Contractor to ensure that all staff have received site-specific safety induction instruction.
- Appointment of a safety officer.

  Safe means of access to and egress from site are provided and maintained

To negate any potential impacts during construction stage, a Dust Management Plan will be implemented. In addition, the site will be securely fenced off from adjacent properties, public footpaths and roads.

Chapter 15 notes that a large proportion of construction workers are anticipated to arrive in shared transport. It is likely that some numbers of the construction team will be brought to/from the site in vans/minibuses, which will serve to reduce the trip generation potential. The promotion of sustainable modes of transport from the site during the operational stage will significantly mitigate against any potential impacts that may arise on traffic in the area. Please see Chapter 15 (Transportation) which details the proposed development further in relation to potential traffic impacts and mitigation measures which include the implementation of a *Parking Strategy* and a *Mobility Management Plan*, provision of ample cycle parking, junction enhancements and promotion of car sharing. We note that the scheme has been designed in line with the *Design Manual for Urban Roads and Streets*.

Chapter 11 fully assesses the potential impact of the development on water-hydrology and sets out measures to ensure that the potential impacts do not occur on water and hydrology. As set out in Chapter 11, surface water drainage has been carried out in accordance with Greater Dublin Strategic Drainage Study (GDSDS) and SuDS methodologies will be implemented, therefore no predicted impacts on water and hydrology will arise during the operational stage. Mitigation measures include implementation of the *Preliminary Construction Management Plan* and *Construction Environmental Management Plan* during construction and SuDs measures will be implemented for the operation stage of the development.

In relation to air quality and climate, there may be potential for impacts to occur on human health such as dust emissions from machinery on site. Chapter 12 of this EIAR (Air Quality and Climate) sets out mitigation measures to minimise dust emissions during construction such as the implementation of a Dust Management Plan (Appendix 12.2).

In relation to noise and vibration, in the short term the local area will be impacted during the construction period due to the influx of construction traffic, noise, vibrations and dust. However, we note that these impacts are temporary and are generally associated with all new developments in residential areas. Mitigation measures include selection of quiet plant, noise control at source, screening and liaison with the public.

The impacts on the population and human beings in relation to landscape and visual impact are fully assessed in Chapter 9. The Chapter notes that potential visual impacts during the construction phase are related to site set up (hoarding, construction compound etc.), demolition and site clearance, excavation, site services installation, construction of new buildings, frames and envelopes, interior fit-out of buildings and exterior streetscape, landscaping and site boundary works). However, Chapter 9 notes that any moderate and negative effects on the townscape in the immediate vicinity of the site would be temporary, reducing in significance with distance from the site.

Chapter 9 concludes that significant townscape benefits would be achieved as a result of the proposed development such as place identification, improved legibility, the introduction of buildings of high design and material quality, and the provision of high quality new public open space. The assessment concludes that the townscape effects are predicted to be positive.

Chapter 14 of this EIAR (Material Assets – Waste Management) sets out that a carefully planned approach to waste management and adherence to the project specific *Resource &*

Waste Management Plan (RWMP – Appendix 14.1) will ensure appropriate management of waste and avoid any negative impacts on the local population.

Chapter 8 further notes that there will be an interaction between biodiversity and population and human health as there will be provision of lighting to provide a safe outdoor realm for residents which, without mitigation, could impact on nocturnal species, particularly on bats. Mitigation measures proposed include the provision of a dark corridor with restricted lighting in the core and buffer zones as appropriate, and a lighting design minimising impact on bats and another nocturnal animals, ensuring suitable commuting and foraging habitat is maintained.

The open space within the site will provide amenity areas for residents, including play areas, fitness areas and benches. This will involve thinning of trees within the woodland which, without mitigation, could impact on wildlife in the area for which the woodland provides cover and foraging ground. Mitigation measures involve planting native shrubs in the understory which will enhance the woodland structure and planting of 230 No. new trees across the site. These measures will provide habitat for wildlife to safely commute and nesting/feed opportunity for birds.

In relation to Microclimate-Wind, Chapter 17 outlines specific mitigation measures that have been incorporated into the proposed design to prevent excessive wind speeds during the operational phase of the development. It is expected the wind microclimate will gradually adjust from the existing conditions to the final modelled scenario as construction progress develops. However, measures outlined in Chapter 17 (such as landscaping and inset balconies) will need to be implemented before completion to ensure comfortable conditions once the proposed development becomes operational.

6.0 ARCHAEOLOGICAL AND CULTURAL HERITAGE

An archaeological, architectural and cultural heritage study was undertaken at the subject site in order to identify and record the location, nature and dimensions of any archaeological or cultural heritage features, fabric or artefacts that may be impacted by the proposed works. This assessment included a desk-based study and site walkover survey. The desktop study collated data from the Record of Monuments and Places (RMP), the Topographical files of the National Museum of Ireland (NMI), cartographic sources, aerial photography, documentary research and relevant on-line databases. In addition to the desktop assessment and site inspection, geophysical survey and test excavation assisted in providing an understanding of the receiving archaeological and cultural heritage environment and potential. The site is large in scale, occupying an area of c. 4.26 Ha./4.74 Ha. (developable/total application site) on the southern fringe of Dublin City. While no potential archaeological sites or features were recorded within the subject site, human skeletal remains have been recorded adjacent to the SW site boundary in the Topographical files of the NMI. Consequently, there remains moderate potential for the survival of buried archaeological remains at the site.

Potential Impacts

The proposed development will involve considerable ground disturbance works across the subject site including excavations and other groundworks (e.g. provision of access roads and service trenches), movement of machines and storage of material in sensitive areas. In the absence of the mitigation measures described below, significant impacts on potential buried archaeological remains at the site would be direct, negative and permanent.

Mitigation

Mitigation measures shall be undertaken as directed by the DHLGH in compliance with national policy guidelines and statutory provisions for the protection of archaeology and cultural heritage.

All ground disturbance works across the development site will be monitored by a suitably qualified archaeologist. In the event that archaeological material is recorded during monitoring, further discussion/consultation with the DHLGH will be sought in order to ascertain the appropriate treatment (i.e. preservation by record/preservation in situ) of any additional archaeological remains. Should the DHLGH recommend preservation by record/full archaeological excavation, this work will be undertaken under the appropriate licence.

Should archaeological sites or features be recorded during monitoring of groundworks as per Recommended Mitigation Measure 1, further discussion/consultation with the DHLGH will be sought to ascertain the appropriate treatment (i.e. preservation by record/preservation in situ) of any additional archaeological remains.

7.0 ARCHITECTURAL HERITAGE

The proposed development site is occupied by a large-scale institutional building range, which has been vacant since November 2019. The existing building group ranges in origin from the late-18th century through to the mid-20th century, none of which are protected structures or included in the National Inventory of Architectural Heritage. There are protected structures in the vicinity of the development site, most notably those fronting onto Sandford and Clonskeagh Roads, and to the southeast fronting on Milltown Road. The Belmont Avenue/ Mount Eden Road & Environs Architectural Conservation Area is positioned northeast of the subject site.

Chapter 7 of the EIAR identifies buildings and other features of heritage significance within and in the environs of the development site. It has recorded all building fabric on the site and qualifies the significance of each building to inform a viable strategy of purposeful retention and adaptive re-use. Baseline assessments have led to the retention for adaptive reuse as community/ cultural spaces, of two buildings within the grouping, a chapel and a former residential building (Tabor House), both dating from the late 19th century. It is proposed to demolish all other structures on the site.

The Chapter reviews aspects of change arising from the physical, visual or morphological impacts on architectural and cultural heritage, as a consequence of the proposed development, using a number of resources including the Record of Monuments and Places, the Dublin City Development Plan, cartographic and documentary sources and visual inspections of the building fabric.

It examines existing inter-relationships between the buildings and their singular and collective interactions with architectural heritage in the vicinity of the site, assessing potential impacts from the site's proposed development for their respective fabric, character and setting.

The enclosing boundary wall has an inherent historical character, which contributes to the character of the area. Proposals to introduce additional entrances within this wall will improve the permeability of the site and are not predicted to harm that character.

The development of a suite of residential blocks enclosing the retained structures and set within the extant parkland has been assessed in terms of visual impact, in the interest of maintained integrity of the retained structures and also with regard to morphological changes to the urban setting of protected fabric in the vicinity.

The assessment takes into account the proximity of the designated Architectural Conservation Area to the development site and reviews potential impacts the development may present for its character.

Ameliorative measures are proposed where necessary to safeguard features of interest. In order to protect the sylvan nature of the boundary and to buffer the visual impact of the proposed development, protection of mature specimen trees and supplementary planting within the enclosure is acknowledged as a key mitigation in the Chapter. The implementation of other mitigation measures detailed in the Chapter will ensure that the effect during the construction phase is neutral and imperceptible.

8.0 BIODIVERSITY

An assessment of the likely effects on biodiversity (flora and fauna) arising due to the Proposed Development was undertaken by DNV. The assessment involved several steps and was conducted by suitably qualified ecologists during the appropriate seasons.

Firstly, baseline ecological surveys were undertaken to assess the nature conservation importance of the Proposed Development. Secondly, the direct, indirect and cumulative ecological implications or effects of the Proposed Development during its lifetime were assessed. Finally, where possible, mitigation measures to remove or reduce negative effects during the construction and operational phases the of the Proposed Development were proposed, along with proposed biodiversity enhancements. All of which have been tailored to the ecology of the area.

For this biodiversity chapter, baseline ecological surveys were carried out using a combination of desk-based research and fieldwork. The desk study reviewed existing data and records from national databases to understand the site's natural environment. Field surveys included habitat surveys, dedicated bat and breeding bird surveys, multidisciplinary walkovers which included a search for evidence of mammals, preliminary bat surveys and invasive species surveys. All surveys followed standard and/or best practice guidelines.

Comprehensive ecological surveys were undertaken between 2022 and 2025, including habitat mapping, invasive species surveys, mammal and bird surveys, and a full suite of bat surveys. The site supports habitats of local to regional importance, notably mixed broadleaf/conifer woodland and mature treelines, which provide ecological connectivity in an otherwise urban landscape.

The Site also comprises a variety of habitats reflecting its historic parkland character within a predominantly urban setting. Key habitats include stone walls (BL1), which provide limited shelter and minor connectivity; buildings and artificial surfaces (BL3), where the Chapel and Tabor House offer potential bat roosting opportunities; and dry meadows and grassy verges (GS2), formerly improved amenity grassland, now supporting a tall, rank mixed sward of grasses and forbs, with succession to scrub (WS1) habitat occurring around the margins. Two areas of mixed broadleaf/conifer woodland (WD2) in the northwest and northeast support mature trees and diverse understorey vegetation, contributing to ecological connectivity and assigned Regional/County Importance given their urban context.

Additional habitats include scattered trees and parkland (WD5) in the northern section; hedgerows (WL1), which are few, species-poor, and in poor condition; and several treelines (WL2), including mature Beech and Yew, which function as wildlife corridors. Scrub (WS1) occurs along the western and north-western boundaries, dominated by Bramble and providing food and cover for birds and insects. Ornamental and non-native shrub habitats (WS3) and WS3/GS2 mosaics occur around buildings and are considered of Less than Local Importance.

While the site is located within an area that has been assessed as having low to medium suitability for bats, no bat roosts were identified on-site. There are six main buildings located on site with the majority of these buildings being well sealed with no potential bat roost features observed during the initial assessment, resulting in an overall negligible suitability for roosting bats. Of the five buildings, two were assessed as having moderate bat roost

potential (Tabor House and the Chapel) and a combination of static and emergence surveys were conducted to determine bat usage if any. No bats were recorded during either of these surveys which were carried out on these buildings in 2024 and 2025.

In terms of habitat, the site provided potential commuting and foraging habitat for bats, and a suite of transect surveys were completed on site to determine activity and usage. Two trees which were identified as containing potential roost features (PRFs) for bats, owing to recent storms in 2024 were also assessed via emergence surveys, however, no roosting bats were identified.

Overall, the results of this suite of surveys determined that bat activity was low. A total of 3 species of bat were shown to utilise the site for commuting and foraging, largely following the existing tree and woodland habitat present on site. These were Common pipistrelle (*Pipistrellus pipistrellus*), Soprano pipistrelle (*Pipistrellus pygmaeus*), and Leisler's bat (*Nyctalus leislerii*).

This is considered to be consistent with the nature of the site, is situated within the wider urban context of Dublin City, and already subject to a level of urban light influence / activity.

Bird surveys confirmed breeding of common garden and woodland species such as Robin (*Erithacus rubecula*), Wren (*Troglodytes troglodytes*), and Blue Tit (*Cyanistes caeruleus*), as well as Herring Gull (*Larus argentatus*) nesting on the roof of Tabor House. Swift (*Apus apus*), a Red-listed species, was observed feeding overhead but not nesting.

No evidence of badger, otter, or other protected mammals was found, though habitat could support hedgehog (*Erinaceus europaeus*) and pygmy shrew (*Sorex minutus*). Amphibians, reptiles, and wintering waterbirds are unlikely to occur due to lack of suitable habitat. Additionally, the Site was determined unsuitable for wintering bird species such as Brent Goose (*Branta bernicla hrota*).

Potential effects of the Proposed Development were predicted to range from not significant to significant at the local scale and can be readily addressed with the mitigation measures proposed, along with any embedded design stage measures (e.g. landscaping for disturbance avoidance and enhancement of habitats, as-well as architectural design to minimise collision risk etc).

During construction, potential impacts include vegetation clearance, disturbance to birds and bats, and risk to small mammals. Operational impacts could arise from lighting and increased human activity.

Mitigation measures (measures to reduce or avoid impact) include pre-construction checks for bats and mammals, timing works outside the bird nesting season, ecologist supervision during clearance, exclusion zones (invasive species control), and implementation of a bat-friendly lighting strategy with dark corridors. Additional measures include invasive species control and sensitive habitat management. During the operational phase, surface water runoff from the Site will be treated via incorporation of sustainable drainage systems (SuDS) into the project design.

Biodiversity enhancements include native planting, installation of bird and bat boxes, and the creation of wildflower meadows. A habitat management plan will guide long-term maintenance.

The operational phase lighting plan has been designed to prevent potential impacts on light sensitive species which may occur within the Site and immediate surrounds, or that might use the Site (commuting and foraging). While the proposed landscape plan comprises a suite of measures to enhance the site, making it a more attractive place for pollinators (important food source for birds, bats and small mammals), and providing greater commuting, foraging, and connectivity through the site and extending to the surrounding area.

Interactions between biodiversity and other elements of the project have been addressed in the interactions section of the biodiversity chapter, and the suite of mitigations included in said chapter, and the CEMP which accompany this submission.

The development incorporates significant biodiversity enhancements, including native tree and shrub planting, wildflower meadows, green and blue roofs, and installation of 70 No. swift bricks, bird and bat boxes, insect hotels, and log piles. These measures aim to deliver biodiversity net gain and improve ecological connectivity. Post-construction monitoring will include one year of bat activity surveys and static detector monitoring in line with NPWS (2016) and Marnell et al. (2022), with scope agreed with Dublin City Council Biodiversity Department.

Provided all mitigation and enhancement measures are implemented in full, no significant residual negative effects on local ecology or designated sites are expected. The Proposed Development is anticipated to result in an overall slight positive impact on biodiversity through habitat creation and ecological enhancements.

9.0 LANDSCAPE AND VISUAL IMPACT

9.1 Receiving Environment

The principal development site (hereafter referred to as the site) is a c. 4.26 ha. land parcel formerly a part of the Milltown Park Jesuit Centre. It is comprised of two main parts:

- A complex of buildings (Milltown Park House, the 'Extension', Tabor House, the Chapel, Finlay Wing and the Archive) in the southern part of the site near the existing Milltown Park entrance off Milltown Road;

- A large area of parkland character, through which an access road leads from Sandford Road to the buildings. This area includes grassland fields, a hard standing area, and - most significantly - a broad belt of mature woodland inside the east and north boundaries (along Milltown Road and Sandford Road respectively). There is also a line of mature trees inside the north boundary (shared with the neighbouring estate, Norwood Park), and a line of maturing trees inside the west boundary (shared with a row of houses fronting Cherryfield Avenue).

A notable feature of the site is the tall (2m+) boundary wall along the north and east boundaries. The wall is of cement render along Sandford Road and mostly of exposed stone along Milltown Road. The character and presence of the site in the townscape are largely determined by the woodland belt and the boundary wall. Even in winter with the trees out of leaf, these screen most of the interior of the site from view from the surrounding roads and properties.

The character of the site environs is mixed, with a distinct difference between the townscapes of the Sandford Road area to the north and the Milltown Road area to the east and south. The Sandford Road and Clonskeagh Road corridor is primarily low density residential, with a high proportion of period houses of up to three storeys, mostly in large, mature gardens. (One notable exception is the petrol filling station diagonally across Sandford Road from the northern site entrance.) Many of the houses are zoned Residential Conservation Area, and a number are protected structures. In contrast, the Milltown Road corridor to east and south of the site, includes several modern, higher density developments. The Milltown Road character area contributes, along with the institutional buildings on the site itself, to a diversity of townscape character in the site environs. It is one of the factors, in addition to the site vegetation and its position at a key junction in the urban structure, contributing to the site's capacity to accommodate large buildings.

There are several sensitive receptors (areas and elements/features of the townscape) in the receiving environment. These include:

- **Belmont Avenue ACA**;
- **Sandford Road, Clonskeagh Road, Eglinton Road and Cherryfield Avenue** Residential Conservation Areas;
- **Norwood Park**, a more recently developed estate enclosed by the site to the east and south, also zoned Residential Conservation area;
- **The protected structures in close proximity to the site**, including 132, 134, 136, 138 Sandford Road, and the western end of St James's Terrace on Clonskeagh Road;

- **The historic buildings on the site**;
- **The mature trees/woodland on the site**.

Balancing the area's sensitivities, there are also indications of capacity to accommodate change in the townscape, which are given heightened importance by compact growth policy. These characteristics include:

- **Milltown Road** character area. This corridor is characterised by (a) a wide variety of plot and building typologies, scale and architecture, with a high proportion of modern development including mid-high density residential developments, and (b) infill development on previously institutional lands. The site has a greater presence in the Milltown Road character area than it does in the Sandford Road area.

- **Location at a key junction**. The junction of Sandford Road, Milltown Road, Clonskeagh Road and Eglington Road funnels traffic from three urban cores, i.e. Clonskeagh/UCD, Milltown and Donnybrook, towards the city centre via Ranelagh. The site occupies the most prominent of the four quadrants around the junction. Due to a number of factors, including the non-orthogonal configuration of the junction, the absence of buildings at the corner of the site, and the wall and trees along the site boundary, the junction does not manifest as a distinct 'place' in the townscape. Despite the large houses and trees around the junction it does not figure clearly in people's mental map of the area and does not contribute positively to legibility.

The junction as a place, and the streets to which the site has frontage, warrant greater emphasis in the townscape – to give better definition to the junction locally, and to improve the legibility of the urban structure. This can be achieved only by built form on the site (the other quadrants around the junction all being already developed). However, the site's main landscape asset, the belt of trees inside the boundary, is a constraint to development that would seek to address the roads and junction. Any building in the corner must be set back behind the trees. It is only through substantial height that a building on the site will achieve the dual objective of place-making and legibility.

- **The historic buildings on the site**. As well as being a sensitivity, the historic buildings present an opportunity for creating positive tension and visual interest in the evolving townscape, through juxtaposition with contemporary buildings and spaces, and for giving identity to new development.

- **The mature trees/woodland on the site**. As well as being a sensitivity, the woodland belt (up to 40m wide in places) and tree lines inside the north and west boundaries constitute opportunities due to their screening effect. These trees also add character and amenity to the site itself as a residential land use resource.

Informed by the above, **the sensitivity of the receiving environment can be classified 'medium'** (definition: *Areas where the landscape has certain valued elements, features or characteristics but where the character is mixed or not particularly strong, or has evidence of alteration, degradation or erosion of elements and characteristics. The landscape character is such that there is some capacity for change. These areas may be recognised in landscape policy at local or county level and the principal management objective may be to consolidate landscape character or facilitate appropriate, necessary change*).

9.2 Predicted Visual Effects

Some 22 No. viewpoints were selected for assessment of the proposal's visual effects informed by Verified View Montages (VVMs or photomontages). The viewpoints were selected to represent visual receptors in all of the potentially affected character areas around the site, and to show the proposal from a range of angles and distances. VVMs were produced for both the summer and winter scenarios, to show the varying screening effect of vegetation between the seasons. The predicted visual effects are as follows:

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No	Viewpoint Location	Sensitivity	Magnitude of Change	Significance & Quality of Visual Effects		
				Construction (Temporary)	Operation (Permanent)	Residual (Permanent)
1	Sandford Rd mid-distant view (approx. 200m)	Medium	Low	Not significant negative	Not significant neutral	Not significant neutral
2	Sandford Road – local view (approx. 65m)	Medium	None	No effect	No effect	No effect
3	Sandford Road opposite site	Medium-High	Medium	Slight negative	Moderate positive	Moderate positive
4	Belmont Ave approaching Sandford Road	Medium	Low	Not significant negative	Slight neutral	Slight neutral
5	Belmont Avenue distant view (inside ACA)	Medium-High	Low	Not significant negative	Slight neutral	Slight neutral
6	Eglinton Road distant view (230m)	Medium-High	Negligible	Not significant negative	Not significant neutral	Not significant neutral
7	Eglinton Road mid-distant view (115m)	Medium-High	Negligible	Not significant neutral	Not significant neutral	Not significant neutral
8	Junction of Eglinton Road and Clonskeagh Road	Medium	Medium	Slightnegative	Moderate positive	Moderate positive
9	Clonskeagh Road mid-distant view (110m)	Medium-High	Negligible	Not significant negative	Not significant neutral	Not significant neutral
10	Norwood Park – view south	Medium-High	Low-Medium	Slight negative	Moderate neutral	Moderate neutral
11	Norwood Park – view east	Medium-High	Low-Medium	Slight negative	Moderate neutral	Moderate neutral
12	Cherryfield Avenue Lower	Medium-High	None	No effect	No effect	No effect
13	Cherryfield Avenue Upper	Medium	Low	Slight negative	Slight neutral	Slight neutral
14	Milltown Road opposite site	Medium	Low	Not significant negative	Slight neutral	Slight neutral
15	Mount Sandford entrance – view west	Medium	Medium	Slightnegative	Moderate neutral	Moderate neutral
16	Mount Sandford entrance – view north west	Medium	Low	Slight negative	Slight neutral	Slight neutral
17	Milltown Road footpath alongside site	Low-Medium	Low	Not significant negative	Slight neutral	Slight neutral

18	Milltown Road – Distant view	Low-Medium	Low	Slight negative	Slight neutral	Slight neutral
19	View representing Garrynure	Medium	Medium	Slight negative	Moderate positive	Moderate positive
20	Milltown Park access road	Medium	Medium	Slight negative	Moderate positive	Moderate positive
21	Milltown Park – from rear of accommodation block	Medium	Medium	Slight negative	Moderate neutral	Moderate neutral
22	Albany Road distant view (approx. 350m)	Medium	Negligible	Imperceptible neutral	Imperceptible neutral	Imperceptible neutral

The most notable results of the visual effects assessment are as follows:

- **Limited, neutral or positive visual effect on the Sandford Road corridor**. The only elements of the proposed development that would be visible from Sandford Road, Belmont Avenue, Eglinton Road and Clonskeagh Road, are Block A1 and the changes to the boundary wall along Sandford Road (replacing part of the cement render and stone wall with a low wall and railing). In most views (e.g. Viewpoints 1, 4, 5, 6, 7, 9), Block A1 would protrude only marginally above the tree line on the site (or not at all, e.g. Viewpoint 2), with no significant effect on the character or quality of the view. In the two views closer to the site (Viewpoints 3, 8), Block A1 (only) would be more exposed to view, and it would combine with the retained trees in the new public park (visible through the new boundary railings), to form an attractive composition. In neither case would there be any negative visual effect.

- **Limited effect on the setting and views of protected structures**. The protected structures closest to the site are the houses across Sandford Road to the north and St James's Terrace across Milltown Road to the east. The proposed Block A1 is separated from these houses by c. 60 m, and there are wide, busy streets and the retained mature trees in the park on the site between them. Therefore, despite the relative height of Block A1, it would have limited effect on the setting or views of or from these protected structures (refer to the photomontages for Viewpoints 3, 4, 8 and 9).

- **Limited visual effects on Cherryfield Avenue (Residential Conservation zoned-area)**. The reduction in height of the proposed buildings towards the western site boundary limits the extent to which the proposed development would intrude in views from Cherryfield Avenue and the houses on the east side of the street, which back onto the site. While these houses would experience change in their views, the residual views would be similar to those of the majority of the houses in the area, which are typically arranged back-to-back with other houses.

- **Moderate but neutral visual effects on Norwood Park**. The retention of the trees inside the boundary shared with Norwood Park, the positioning of Blocks C and A1 well back from the boundary, and the limited height of the elements of these buildings nearest to the boundary, would mitigate the visual effects on Norwood Park. The buildings would be visible (from the street – see Viewpoints 10, 11 - and from the rear windows and gardens of the houses), but overbearance would be

avoided.

- **Limited, neutral or positive effects on Milltown Road and adjacent properties/ developments**. Due to the retention of mature trees inside the east boundary and the setting back of Block A1 (and part of A2) behind the wide open space, the development would have limited effect on views from Milltown Road or the properties across the road (e.g. Viewpoints 14-19). Where the buildings would be visible (Viewpoints 15, 18, 19) they would make a positive contribution to the townscape character and visual amenity of the already mixed density urban neighbourhood of Milltown Road.

9.3 Predicted Townscape Effects

The magnitude of townscape change which would result from the proposed development can be classified 'medium' (definition: *Change that is moderate in extent, resulting in partial loss or alteration to key elements, features or characteristics of the landscape, and/or introduction of elements that may be prominent but not necessarily substantially uncharacteristic in the context. Such development results in change to the character of the landscape*).

The proposed development is relatively large in spatial extent, and the buildings - at up to eight storeys - are relatively tall for the context. However, the photomontages show that (a) the retention of a large number of trees on the site, providing visual screening, and (b) the considered positioning of the buildings, and the arrangement of height with respect to the most sensitive neighbouring residential properties and other receptors, would moderate the effects on the townscape.

Measuring the magnitude of change against the townscape sensitivity, the significance of the effects is predicted to be 'moderate' (definition: *An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends*).

Townscape change of some significance is unavoidable with the development of a large opportunity site, in a prominent position (at a key junction in the urban structure, with long frontage to two main thoroughfares), at the interface between two different character areas (one being characterised by low density development). Contemporary, high-density development that fits comfortably into the Milltown Road area will inevitably contrast with the Sandford Road area.

Such tensions in the townscape are increasingly common and are not undesirable in the evolving urban environment. There is an established, policy-driven trend of redevelopment of previous institutional lands in inner suburban areas. The access of these areas to public transport, neighbourhood centres and other urban amenities is too valuable not to exploit. The resulting change should therefore be viewed as neutral in principle, and if it can also deliver benefits additional to density, e.g. public open space, improved legibility, place identification or the introduction of buildings of high design and material quality, thereby adding to the character and visual interest of the townscape, its effects can be positive - even if it contrasts with some of the context development. It will not be possible to achieve high density in historically low density areas without such change in townscape character and the composition of views.

The GLVIA (Section 5.37) states: *"One of the more challenging issues is deciding whether the landscape effects should be categorised as positive or negative. It is also possible for effects to be neutral in their consequences for the landscape. An informed professional judgement should be made about this and the criteria used in reaching the judgement should be clearly stated. They might include, but should not be restricted to:*

- *the degree to which the proposal fits with existing character;*
- *the contribution to the landscape that the development may make in its own right, usually by virtue of good design, even if it is in contrast to existing character…"*

The proposed development is deliberately a departure from the existing character of (part of) its immediate environs. It is driven by the policy of compact growth, the purpose of which is to see the introduction of new buildings of larger scale to previously lower density urban contexts. The Building Height Guidelines, National Planning Framework and DCDP 2022-2028 recognise that such change needn't necessarily be (or be considered to be) negative. Developments of scale, that cause change in the landscape character and the composition of views, can be designed with consideration of their context, so that their effects, while significant, are not harmful to the receiving environment.

Table 3 of Appendix 3 of the DCDP 2022 provides a set of criteria which can be used in assessing schemes of high density, to evaluate whether they may be considered to be of high urban design and architectural quality and would achieve positive placemaking. The proposed development has been assessed against the DCDP 2022 criteria (in Table 9.9 of the Chapter 9 of the EIAR). The following were among the findings:

- The proposed development respects and seeks to complement the existing urban character and structure, and retains the most valued elements of built and natural heritage to the advantage of the development and the surrounding townscape.
- The grid-like arrangement and the use of conventional forms such as the perimeter block (formed by Blocks B and C) creates a rational and legible urban grain with well-defined streets and spaces.
- The provision of the new public park, visible (through the new railing replacing part of the existing the boundary wall) and accessible to the local community, would benefit the landscape and the community.
- By positioning the main entrance in front of the retained Tabor House, with the entrance forecourt in front of it, flanked by two new buildings, the historic building and its cultural/ community use are given prominence both as part of the development and in views from Milltown Road.
- By responding to specific elements, features and characteristics of the site and the context, the proposed design – in layout, arrangement of built form (height, massing, stepping) and open space, materials, landscaping and boundary treatments – is bespoke, distinctive and appropriate to the site and context.

In summary, the assessment of the proposal against the relevant DCDP 2022 criteria, indicates that its landscape effects can be classified as positive.

An important consideration in the assessment was the proposed development's effects on the trees on the site. A survey by CMK Horticulture and Arboriculture identified 386 No. trees. The trees are in varying condition, ranging from high quality (Category A) to moderate quality (Category B), low quality (Category C) and unsuitable for retention (category U):

It is proposed to remove 252 No. and retain 135 No. of the 387 No. trees identified on the site, to facilitate the development (and/or due to their current poor condition). The strategy is to retain as many as possible of the Category A and B trees (better quality specimens) and remove Category U and C (low quality) trees where necessary to accommodate the development, and also to thin the overly dense woodland areas for healthier growth of the retained trees and enable the use of these areas as open space.

As part of the development, 230 No. new trees and large shrubs are proposed to be planted. Given that these specimens would all be in better condition than the majority of the 252 No. trees to be removed, and that the 135 No. retained trees would mostly be in better condition than they currently are (due to the thinning of the woodland and the maintenance of each retained specimen), there would be a similar quantity, and a net improvement in quality of tree cover on the site as a result of the development. The planting of native shrubs will enhance the understory in the woodland as it presently is dominated by non-native shrub species, and the species selected will also ensure that the area along the perimeter is largely inaccessible to the public, maintaining a commuting/foraging corridor for species that may be using the woodland habitat.

10.0 LAND, SOILS AND GEOLOGY

This chapter of the EIAR comprises of an assessment of the likely impact of the proposed development on the soils and the geological environment as well as identifying proposed mitigation measures to minimise any impacts.

In summary, the proposed development ("the site") comprises of 562 No. residential dwellings, refurbishment of Tabor House and the Chapel to provide cultural/community space and the provision of a café/restaurant and a creche within Block F (with an outdoor play area) on a c. 4.26 Ha site (developable area).

An assessment of the likely impact of the proposed development on soils and the geological environment included a preliminary ground investigation study and review of information available on the Geological Survey of Ireland (GSI) online mapping service.

Ground conditions at the site, as observed during Preliminary Ground Investigations, are summarised as follows: topsoil layer overlying made ground deposits (described generally as slightly sandy, slightly gravelly CLAY) overlying cohesive deposits (described generally as slightly sandy slightly gravelly CLAY) overlying a stiff or very stiff slightly sandy slightly gravelly CLAY. The strength of the cohesive deposits typically increased with depth.

Ground water measurements taken in June 2020 and October 2020 indicated ground water depths of 1.0m to 7.5m BGL.

Review of GSI's online mapping service ("Bedrock Geology") generally describes geology in the vicinity of the site as "*Dark limestone & shale*". GSI have classified the site's groundwater vulnerability as "Low" and have classified underlying aquifers as "Locally Important".

Site development works will include stripping of topsoil, excavation of subsoil layers (to allow road construction, foundation excavation, basement excavation for underground carpark, drainage and utility installation and provision of underground attenuation of surface water) and importation of fill (structural fill beneath buildings and roadways and backfill of services).

The current foundation proposal of standard strip and pad footings is based on results of the site investigations, the structural modelling, loading calculations and site constraints. Other foundation solutions considered include augered bored piles or driven piles. Ground improvement techniques were also considered for low rise lightly loaded structures such as the courtyard houses e.g. lime stabilisation.

In order to mitigate impacts noted above, stripping of topsoil will be carried out in a controlled and carefully managed way and coordinated with the proposed staging for the development. Disturbed subsoil layers will be stabilised as soon as practicable (i.e. minimise the duration that subsoil layers are exposed to weather effects). Measures will also be implemented to capture and treat sediment laden surface water runoff (e.g. sediment retention ponds and surface water inlet protection).

Regarding construction traffic, earthworks plant and vehicles delivering construction materials to site will be confined to predetermined haul routes around the site.

Vehicle wheel wash facilities will be installed in the vicinity of any site entrances with road sweeping along Sandford Road / Milltown Road and dust suppression implemented as necessary.

In order to mitigate against spillages contaminating underlying soils, all oils, fuels, paints and other chemicals will be stored in a secure bunded hardstand area. Refuelling and servicing of construction machinery will take place in a designated hardstand area (when not possible to carry out such activities off site).

All temporary construction compounds are to be removed upon completion of the construction phase. Such areas are to be reinstated in accordance with the landscape architects plan and engineer's drawings. All construction waste and / or scrapped building materials are to be removed from site on completion of the construction phase.

Implementation of the measures outlined in Chapter 10 of this EIAR and the Preliminary Construction Management Plan will ensure that the potential impacts of the proposed development on soils and the geological environment do not occur during the construction phase.

11.0 WATER-HYDROLOGY

This chapter of the EIAR comprises of an assessment of the likely impact of the proposed development on the surrounding surface water and hydrogeological environments (including flood risk, surface water drainage, foul drainage and water supply), as well as identifying proposed mitigation measures to minimise any impacts.

In summary, the proposed development ("the site") comprises of 562 No. residential dwellings, refurbishment of Tabor House and the Chapel to provide cultural/community space and the provision of a café/ restaurant and a creche within Block F (with an outdoor play area) on a c. 4.26 Ha site (developable area).

An assessment of the likely impact of the proposed development on the surrounding surface water and hydrogeological environments included site inspection / walkover, review of topographic survey information, review of Irish Water network plans, ground investigations, review of information available on the Environmental Protection Agency (EPA) online mapping service, review of information available on the Geological Survey of Ireland (GSI) online mapping service, review of OPW National Flood Hazard Mapping and CFRAM Studies, review of the *Dublin City Development Plan 2022-2028* SFRA, consultation with Dublin City Council's Water Services Section and consultation with Irish Water.

As part of assessing the likely impact of the proposed development, surface water runoff, foul drainage discharge and water usage calculations were carried out in accordance with the Greater Dublin Strategic Drainage Study (GDSDS) and methods outlined in Irish Water's Codes of Practice for Waste Water Infrastructure and Water Supply.

The primary hydrological feature in the vicinity of the site is the Dodder River (approx. 500m to south-east of the site). An existing surface water drain runs along Eglinton Road east of the site. As the site generally falls from south-west to north-east, the existing surface water drain in Eglinton Road provide a suitable surface water outfall for the proposed development.

The existing surface water drain in Eglinton Road ultimately discharges to the Dodder River.

GSI's Groundwater Data Viewer indicates that the site is located within the "Dublin" Groundwater Body. The underlying bedrock aquifer is classified as "Locally Important Aquifer – Bedrock which is Moderately Productive only in Local Zones". GSI also classify the site's groundwater vulnerability as Low.

A flood hazard assessment has been undertaken by reviewing information from the Office of Public Works (OPW) National Flood Hazard Mapping (www.floods.ie) and the Eastern CFRAM Study. This assessment has been carried out in accordance with the procedures for a "Flood Risk Assessment" as outlined in the OPW's Guidelines for Planning Authorities – The Planning System and Flood Management (November 2009). Following the Flood Risk Assessment, it was determined that the site is located in Flood Zone C as defined by the Guidelines i.e. the proposed development is appropriate for the site's flood zone category.

An existing 600mm diameter combined sewer is located adjacent to the site's northern-eastern boundary (Sandford Road). An existing 375mm diameter combined sewer is also located adjacent to the site's south-eastern boundary (Milltown Road) which outfalls to the 600mm diameter combined sewer in Sandford Road. Pre-connection enquiry feedback has been received from Irish Water which confirms that, as it is proposed to discharge surface water flows from the development to existing surface water drainage infrastructure in Eglinton Road, discharge of foul drainage flows to existing combined sewers adjacent to the site is feasible.

An existing 9" cast iron watermain runs along the Sandford Road (north east of the development) and Milltown Road (south east of the development). Irish Water have confirmed that new connections to the existing water supply network are feasible.

Potential impacts that may arise during the construction phase include, surface water runoff becoming polluted by construction activities, accidental spills and leaks associated with storage of oils and fuels, leaks from construction machinery and spillage during refuelling and maintenance, concrete runoff (particularly discharge of wash water from concrete trucks), improper discharge of foul drainage from contractor's compound and cross contamination of potable water supply to construction compound.

In order to mitigate construction phase impacts a site-specific Construction and Environment Management Plan (CEMP) will be developed and implemented during the construction phase, supplementing the CEMP prepared at application stage. Site inductions will include reference to the procedures and best practice as outlined in the Construction and Environment Management Plan.

Oil, fuel etc. storage areas are to be decommissioned on completion of the construction phase. Any remaining liquids are to be removed from site and disposed of at an appropriate licenced facility. Dublin City Council's Environmental Control Section is to be notified of the proposed destination for disposal of any liquid fuels.

Potential operational phase impacts include increased impermeable surface area potentially increasing surface water runoff and accidental hydrocarbon leaks with subsequent discharge into piped surface water drainage network.

In order to mitigate operational phase impacts, surface water runoff from the site will be attenuated to the greenfield runoff rate as outlined in the Greater Dublin Strategic Drainage Study (GDSDS). Methodologies such as permeable paving, green roofs, blue roof, raingardens, soakaway pits, attenuation basins and discharge of surface water via a fuel / oil separator are being implemented as part of a SuDS surface water treatment train approach.

Proposed mitigation measures to address residual flood risks include maintenance of the drainage system on a regular basis to reduce the risk of a blockage and in the event of storms exceeding the 1% AEP design capacity of the attenuation system, possible overland flow routing towards open space areas and adjacent public roads should not be blocked.

Implementation of the measures outlined in Chapter 11 of this EIAR and the Preliminary Construction Management Plan will ensure that the potential impacts of the proposed development on the surrounding surface water and hydrogeological environments do not occur during the construction phase.

12.0 AIR QUALITY AND CLIMATE

AWN Consulting Limited has assessed the likely air quality and climate impacts associated with the construction and operational phases of the proposed residential-led mixed-use development at Milltown Park, Sandford Road, Dublin 6.

In terms of the existing air quality environment, data available from similar environments indicates that levels of nitrogen dioxide (NO_2), particulate matter less than 10 microns (PM_{10}) and particulate matter less than 2.5 microns ($PM_{2.5}$) are generally well below the current 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 alignment with Ireland's 2030 sectoral emissions ceilings and carbon budgets. The EPA state that Ireland had total GHG emissions of 57.6 Mt CO_2e in 2024. This is 1.03 Mt CO_2e higher than Ireland's annual target for emissions in 2024. EPA projections indicate that Ireland has used 82.5% of the 295 Mt CO_2e Carbon Budget for the five-year period 2021-2025. This leaves 17.5% of the budget available for 2025, requiring a substantial 10.3% annual emissions reduction for 2025 to stay within budget.

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. In terms of the operational stage, air quality and climate impacts will predominantly occur as a result of the change in traffic flows on the local roads associated with the proposed development.

The surrounding area was found to have a high sensitivity to dust soiling and low sensitivity to dust related human health impacts. There is an overall high risk of potential dust soiling impacts and low human health impacts as a result of the proposed construction works. Any potential dust impacts can be mitigated through the use of best practice and minimisation measures which are outlined in Chapter 12. Therefore, dust effects will be direct, short-term, negative and slight, which is an overall not significant at all nearby sensitive receptors.

The changes in traffic volumes associated with the operational phase of the development were substantial enough to meet the assessment criteria requiring a detailed air quality and climate modelling assessment. Therefore, a modelling assessment NO_2, PM_{10} and $PM_{2.5}$ has been undertaken for road links including the Sandford Road and Milltown Road as these met the TII scoping criteria and were within 200m of receptors. The TII guidance PE-ENV-01106 (TII, 2022a) details a methodology for determining air quality impact significance criteria for TII road schemes and infrastructure projects however, this significance criteria can be applied to any development that causes a change in traffic. The potential effect of the proposed development on ambient air quality in the operational stage when compared to the EU limit values is considered long-term, localised, neutral, imperceptible and non-significant.

The best practice dust mitigation measures that will be put in place during construction of the proposed development will ensure that the impact of the development complies with all EU ambient air quality legislative limit values which are based on the protection of human health. Therefore, the effect of construction of the proposed development is likely to be direct, short-term, negative and slight impacts to air quality, which is an overall not

significant with respect to human health. Operational phase predicted concentrations of pollutants are predicted to be significantly below the EU standards, the effect on human health is predicted to be long-term, direct, localised, negative and not significant.

There is the potential for release of a number of greenhouse gas emissions to atmosphere during the full lifecycle of the proposed development including construction and operation. Calculation of the GHG emissions associated with the construction of the proposed development was calculated using information the OneClick LCA 3D Carbon Designer tool and the online Transport Infrastructure Ireland Carbon Tool. The GHG emissions associated with the proposed development are predicted to be a small fraction of Ireland's 2030 carbon budget of 27.7 $MtCO_2e$ and a small fraction of the relevant sectoral 2030 emissions ceilings. The proposed development will incorporate some mitigation measures which will aim to reduce climate impacts during construction and once the development is operational. At a minimum these include the Nearly Zero Energy Building (NZEB) compliance and targeting a Building Energy Ratio (BER) in line with the NZEB requirements.

GHG emissions during the operational phase due to road traffic were assessed. Modelling of operational CO_2e emissions from traffic associated with the proposed development on the surrounding road network was undertaken as per Transport Infrastructure Ireland (TII) 2022 guidance *"PE-ENV-01104: Climate Guidance for National Roads, Light Rail and Rural Cycleways (Offline & Greenways) – Overarching Technical Document"*. It was concluded that traffic related CO_2e emissions will not have a significant impact on climate due to the low level changes in emissions.

Once mitigation measures are put in place, the effect of the proposed development in relation to Greenhouse Gas emissions is considered long-term, minor adverse and not significant in EIA terms.

A Climate Change Risk Assessment was conducted to consider the vulnerability of the proposed development to climate change, as per the TII 2022 PE-ENV-01104 guidance. This involves an analysis of the sensitivity and exposure of the development to future climate hazards which together provide a measure of vulnerability. The hazards assessed included flooding (coastal, pluvial, fluvial); extreme heat; extreme cold; drought; extreme wind; lightning, hail and fog; wildfire and landslides. The proposed development is predicted to have at most low vulnerabilities to the various climate hazards and therefore climate change risk is considered direct, long-term, negative and imperceptible, which is considered overall not significant with regard to the construction and operational phase.

13.0 NOISE AND VIBRATION

AWN Consulting Limited has been commissioned to conduct an assessment of the likely noise and vibration impacts associated with the proposed Large Residential Development Milltown Park, Sandford Road, Dublin 6, D06 V9K7.

The existing noise climate in the vicinity of the proposed development has been surveyed. Prevailing noise levels are primarily due to local road traffic.

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.

During the main construction phase involving site clearance, demolition and building construction works, the assessment has determined that, while there is potential for short-term significant impacts while works are ongoing near the closest sensitive receivers adjacent to the site, the construction noise criteria can be complied with during the majority of the programme. A schedule of good practice measures including noise limits and screening will all be employed to reduce any noise and vibration impacts during this phase.

During the operational phase, the outward noise impact to the surrounding environment will include additional traffic on surrounding roads and plant noise from plant items serving the development. The impact assessment has concluded that additional traffic from the proposed development will have an imperceptible impact on the surrounding noise environment and that plant items will be designed to ensure any noise and vibration impacts during this phase will not exceed the recommended limit values. The resulting impact is of neutral, long-term and imperceptible.

Inward noise from the surrounding environment has been assessed and mitigation measures proposed where necessary to ensure internal noise targets are achieved.

14.0 MATERIAL ASSETS – WASTE MANAGEMENT

AWN Consulting undertook the waste management assessment. The receiving environment is largely defined by Dublin City Council (DCC) as the Local Authority responsible for setting and administering waste management activities in the area through regional and development zone specific policies and regulations.

14.1 Baseline Environment

There is currently no waste generated at the proposed development site, however educational and residential activities that generated waste were undertaken on this site.

14.2 Potential Impacts of the Proposed Development

Construction Phase

During the demolition and construction phase (C&D) the mismanagement of waste, including the inadequate storage of waste, inadequate handling of hazardous waste, the use of inappropriate or insufficient segregation techniques, and the use of non-permitted waste contractors, would likely lead to negative impacts such as waste unnecessarily being diverted to landfill, litter pollution which may lead to vermin, runoff pollution from waste, fly tipping and illegal dumping of waste. In the absence of mitigation, the effect on the local and regional environment is likely to be **long-term, significant** and **negative**.

Operational Phase

The potential impacts on the environment during the operational phase of the proposed development would be caused by improper, or lack of waste management. In the absence of mitigation, the effect on the local and regional environment is likely to be ***long-term, significant*** *and* ***negative***.

14.3 Mitigation and Residual Effects (Post-Mitigation)

Construction Phase

During the C&D phase, typical demolition and construction waste materials will be generated and will be segregated at source on-site (where possible) into appropriate skips/containers, within designated waste storage areas and removed from site by suitably permitted waste contractors as required, to authorised waste facilities, by appropriately licensed waste contractors. When it is not possible to segregate at source, C&D waste will be segregated at the receiving waste facility by the waste contractor. All waste leaving the site will be recorded and copies of relevant documentation maintained.

This will all be overseen by the main contractor, who will appoint at demolition and construction phase a Resource Manager (RM) to ensure effective management of waste during the demolition, excavation and construction works. All C&D staff will be provided with training regarding the waste management procedures on site.

A carefully planned approach to waste management and adherence to the site-specific Resource and Waste Management Plan (Appendix 14.1) and chapter 14 during the

construction phase will ensure that the effect on the environment will be *short-term, neutral* and *imperceptible.*

Operational Phase

During the operational phase, waste will be generated by the residents and tenants. Dedicated waste storage areas (WSAs) have been allocated throughout the development for the use of residents and tenants. The WSAs has been appropriately sized to accommodate the estimated waste arisings from the development. The WSAs 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 by permitted waste contractors and removed off-site for re-use, recycling, recovery and/or disposal.

An *Operational Waste Management Plan* has been prepared and included as Appendix 14.2. The new development will give rise to a wide variety of waste streams during the operational phase, i.e. when the project is completed, open and occupied. Operational waste will be generated on a daily basis by the operator including cardboard, plastic, paper, glass, dry mixed recyclables, mixed non-recyclables, cooking oil, lightbulbs, batteries, WEEE waste, and organic waste.

All recyclable materials will be segregated at source where possible to reduce waste contractor costs and ensure maximum diversion of materials from landfill in line with the development *OWMP*. This strategy will be supplemented, as required, by facilities management as required with any new information on waste segregation, storage, reuse and recycling initiatives that are subsequently introduced.

Provided the mitigation measures in the development *OWMP* (Appendix 14.2) and in Chapter 14 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.

14.4 Cumulative Impact of the Proposed Development

Construction Phase

There are existing residential and commercial developments close by, along with the multiple permissions remaining in place in the area. In a worst-case scenario, multiple developments in the area could be developed concurrently or overlap in the construction phase. Due to the high number of waste contractors in the DCC region, as provided from the National Waste Collection Permit Office and the EPA, there would be sufficient contractors available to handle waste generated from a large number of these sites simultaneously, if required. Similar waste materials would be generated by all of the developments.

Other developments in the area will be required to manage waste in compliance with national and local legislation, policies and plans which will mitigate against any potential cumulative effects associated with waste generation and waste management. As such the cumulative effect will be *short-term, imperceptible* and *neutral.*

Operational Phase

There are existing residential and commercial developments close by, along with the multiple permissions remaining in place. All of the current and potential developments will generate similar waste types during their operational phases. Authorised waste contractors will be required to collect waste materials segregated, at a minimum, into recyclables, organic waste and non-recyclables. An increased density of development in the area is likely improve the efficiencies of waste collections in the area.

Other developments in the area will be required to manage waste in compliance with national and local legislation, policies and plans which will mitigate any potential cumulative impacts associated with waste generation and waste management. As such the cumulative effect will be a *long-term, imperceptible* and *neutral.*

15.0 TRANSPORTATION

This section of the Environmental Impact Assessment Report (EIAR) document has been prepared by DBFL Consulting Engineers and addresses all transport and related sustainability issues including means of vehicular access, pedestrian, cyclist and local public transport connections. The principal objective of this chapter is to quantify any level of impact across the local road network and subsequently ascertain the operational performance of the local road network.

The subject site benefits from excellent public transport accessibility levels including the Green Line Luas services through the Beechwood Luas Stop (c. 1km) which provides interchange opportunities northwards towards (i) the LUAS Red Line, (ii) Busáras central coach station, (iii) Connolly Railway Station and (iv) Heuston Railway Station. Bus services operated by Dublin Bus and Go Ahead are also easily accessible from the subject site.

The development proposals include the demolition of some of the existing structures on-site, the refurbishment and reuse of Tabor House and the Chapel and the provision of a residential development comprising 556 No. apartments, 6 No. courtyard houses, one 375m² creche, one 179m² café/restaurant and 1,698m² net of internal community space.

The development also provides a new access from Milltown Road (which will be the principal vehicular entrance to the site) in addition to utilising the existing access from Sandford Road as a secondary access for emergencies and deliveries and a number of new pedestrian and cyclist access points with pedestrian/bicycle connections throughout the site.

The proposals include the provision of a total of 319 No. car parking spaces on-site at basement and surface level, which is equivalent to a car parking ratio of approximately 0.546 car parking spaces to every residential unit (excluding creche, taxi and drop-off spaces). In addition, a total of 1,343 No. cycle parking spaces are provided for both residents and visitors to the development. The proposals include the provision of a total of 959 No. long term bicycle parking spaces at basement level and 384 No. short stay visitor spaces at surface level assigned for residential, creche and community uses. The level of bicycle parking proposed on-site for the residential units has been provided in the context that the development car parking proposals are below the DCC development plan maximum standards. This reduction is consistent with the 'substantial' reduction that the DHPLG guidelines recommend for car parking and at which the high DHPLG bicycle parking requirements would be of greater relevance.

For the purpose of this report, it was conservatively assumed that all 562 No. residential units have been built and occupied by 2028. A range of peak hour scenarios were investigated for an opening year of 2028, an interim year of 2033 and a future design year of 2043 including the following six different assessment scenarios: -

Do Nothing

- A1 – 2028 Base Traffic Flows + Committed Development Flows
- A2 – 2033 Base Traffic Flows + Committed Development Flows
- A3 – 2043 Base Traffic Flows + Committed Development Flows

Do Something

- B1 - 2028 Do Nothing (A1) + Proposed Residential Development Flows (562 units)
- B2 - 2033 Do Nothing (A2) + Proposed Residential Development Flows (562 units)
- B3 - 2043 Do Nothing (A3) + Proposed Residential Development Flows (562 units)

The potential level of impact that may be generated by the subject proposals has been investigated at the site access junctions with the R117 Sandford Road and the R117 Milltown Road in addition to the R117 Milltown Road / R117 Sandford Road / R824 Eglinton Road / R825 Saint James' Terrace junction.

At these key off-site junctions, it was demonstrated that the proposed development (562 No. units) would not result in a percentage increase in motorised traffic level above the 10% threshold, with the exception of the Southern site access junction with Milltown Road. Accordingly, only a more detailed evaluation of the operational performance of this site access junction was carried out within the EIAR. The analysis demonstrated that the Milltown Road site access junction will operate well within capacity for all "Do Something" scenarios, with a maximum RFC value of 16% for the 2043 Do Something PM peak hour.

With the objective of mitigating the potential impact of the proposed development during its operational stage, the following initiatives and associated timescale for their implementation have been identified and subsequently form an integral part of the subject development proposals.

- Parking Management Strategy - A management regime has been set out which will be implemented by the development's management company to control access to the on-site car parking spaces thereby actively managing the availability of on-site car parking for residents and visitors to the development. This provision equates to a car parking ratio of approximately 0.546 car parking spaces per residential unit.

- Management – A preliminary Mobility Management (MMP) has been compiled with the aim of guiding the delivery and management of co-ordinated initiatives by the scheme promotor to be implemented upon occupation of the site. The MMP will ultimately seek to encourage sustainable travel practices for all journeys to and from the proposed development.

- Infrastructure – Infrastructure measures identified to reduce reliance of private vehicles include the provision of ample secure cycle parking on site, exceeding minimum guidance (DHPLG & DCC), and ensuring a design which promotes permeability for pedestrians and cyclists to, through and from the development (DMURS).

- Infrastructure – Junction enhancements have been identified and proposed at the R117 Sandford Road site access junction with the objective of creating a highly permeable environment for pedestrians and cyclists. A signalised pedestrian crossing is also proposed at the R117 Milltown Road, adjacent to the site access location.

- Car Sharing – The provision of 10 No. dedicated car share (GoCar and development-owned) spaces at surface and basement level for the use of the scheme's residents and staff. The availability of these on-site provide a viable alternative to residents needing to own a private vehicle whilst still having access to a car as and when required.

Accordingly, it is concluded that through the implementation of the proposed mitigation measures and the rollout / uptake of the Mobility Management Plan and Parking Strategy initiatives, the proposals will not result in a material deterioration of road traffic conditions.

16.0 MATERIAL ASSETS – SITE SERVICES

16.1 Introduction

This chapter of the EIAR comprises of an assessment of the likely impact of the proposed development on existing utility services in the vicinity of the site as well as identifying proposed mitigation measures to minimise any impacts. The material assets considered in this chapter of the EIAR include Power, Gas and Telecommunications. . Note that Surface Water Drainage, Foul Drainage and Water Supply are addressed in Chapter 11 (Water & Hydrology).

In summary, the proposed development ("the site") comprises of 562 No. residential dwellings, refurbishment of Tabor House and the Chapel to provide cultural/community space and the provision of a creche within Block F (with an outdoor play area) on a c. 4.26 Ha site (developable area).

Assessment of the likely impact of the proposed development on existing utility services in the vicinity of the site included a desktop review of ESB's Networks Utility Plans, Gas Networks Ireland's Service Plans and Eir's E-Maps. A GPR Utility Survey has also been carried out along Sandford Road, Milltown Road and Eglington Road.

Existing MV/LV underground cables are located adjacent to the site's northern-eastern boundary (Sandford Road) and south-eastern boundary (Milltown Road). Existing HV underground cables are also located along Milltown Road. Existing LV overhead lines (public lighting) are located adjacent to the site's south-eastern boundary (Milltown Road). Existing ESB infrastructure is also located along Eglinton Road.

Low pressure and medium pressure Gas Networks Ireland distribution pipelines are located adjacent to the site (along Sandford Road and Milltown Road). The Gas Networks Ireland record drawing shows a low pressure service pipe entering the site along Milltown Road. This pipe formerly served the Jesuit's lands to the west of the site. Service separation works have been carried out to cap this gas supply within the site (an alternative gas supply route has been established for the Jesuit's lands). Existing Gas Networks Ireland infrastructure is also located along Eglinton Road.

Telecommunications infrastructure is located along Sandford Road and Milltown Road (immediately adjacent to the site's northern-eastern boundary and south-eastern boundary). Existing Eir infrastructure is also located along Eglinton Road.

The existing infrastructure noted above will provide electrical, gas and telecommunication connections for the proposed development.

There is potential interruption to ESB's network, Gas Networks Ireland's infrastructure and Eir's infrastructure while carrying out road works along the Milltown Road / Sandford Road (e.g. during formation of site access), while constructing the developments surface water outfall along Eglinton Road and while carrying out works to provide service connections to the proposed development.

A GPR Utility Survey has also been carried out along Sandford Road, Milltown Road and Eglington Road to confirm the location of the power, gas and telecommunication infrastructure. This survey is to be supplemented with slit trench investigations as required by the contractor in advance of commencing works along Sandford Road, Milltown Road and Eglington Road.

Reinstatement of any excavations, trenches etc. relating to the provision of electrical, gas and telecommunications connections is to be carried out in accordance with the relevant utility provider's requirements.

Implementation of mitigation measures outlined in Chapter 16 of this EIAR and the Preliminary Construction Management Plan will ensure that the potential impacts of the proposed development on site services do not occur during the construction phase.

17.0 MICROCLIMATE – WIND

17.1 Introduction

The purpose of this chapter is to outline the predicted microclimate wind conditions experienced within and surrounding the proposed Sandford Road development located in Dublin 6.

The proposed method for compliance validation is via the industry best practice standard for pedestrian comfort (Lawson Criteria). The Lawson Criteria sets acceptable levels of wind speed and velocity for various human activities.

Given the specific location of the buildings and recorded metrological data available for the area, and standard interpolation calculation procedures, it is possible to predict the expected wind speeds and their annual occurrence.

17.2 Study Methodology

The methodology adopted for the study combines the use of Computational Fluid Dynamics (CFD) to predict air flow patterns and wind velocities around the proposed development, the use of wind data from the nearest suitable meteorological station and the recommended comfort and safety standards (The Lawson Criteria).

The study considered the following factors:

- The effect of the geometry, height and massing of the proposed development and existing surroundings on local wind speed and direction;
- The wind speed as a function of the local environment such as topography, ground roughness and nearby obstacles (buildings, bridges, etc.);
- The effects of site location (open field, inner city, etc.);
- Orientation of the buildings relative to the prevailing wind direction; and
- The pedestrian activity to be expected (sitting, standing, leisure and business walking).

The extent of the built area that is represented in the computational domain is dependent on the influence of the features on the region of interest which includes the site and its nearby surroundings. The analytical CFD model analyses the proposed development. It also includes existing buildings surrounding the development. The analytical CFD model is assessed against the full Lawson Criteria to identify the pedestrian comfort and safety conditions within and surrounding the development.

The assessment considers the following scenarios:

- Existing Receiving Environment: The assessment examines the wind conditions on the existing receiving environment prior to the construction of the proposed development. Wind climate data over a 30-year period has been analysed to provide a statistical assessment of the expected wind conditions and resultant pedestrian comfort conditions within the existing site.

- Potential Impact of the Proposed Development: The assessment examines the impact the proposed development will have on the existing receiving environment during both the construction and operational phases.

17.3 Potential Impact of the Proposed Development

The assessment determines the impact the proposed development will have on the existing receiving environment during both the construction and operational phases.

17.3.1 Construction Phase

The assessment of the wind microclimate during the construction phase has been based on professional judgement by reviewing the existing site conditions and the expected conditions once the development is in place via the CFD modelling. It is expected the wind microclimate will gradually adjust from the existing conditions to the final modelled scenario as construction progress develops.

17.3.2 Operational Phase

The impact during the operational phase has been determined using CFD modelling with the results summarised as follows:

- Most areas at street level are suitable for sitting.
- The majority of the remaining areas that do not comply with the "Sitting" class are suitable for "Standing".
- The pedestrian comfort at ground/street level is excellent throughout the development with the layout of the buildings and the existing and proposed trees having a significant positive effect in terms of mitigating excessive wind speeds.
- Based on the results presented, the proposed development will have an imperceptible impact on the pedestrian wind comfort at street level.

17.3.2.2 Shared Amenity Spaces

The pedestrian wind comfort results on the shared roof/terrace amenity spaces are summarised as follows:

- As amenity terraces are not considered common pedestrian areas, they have not been assessed against the typical comfort classes for pedestrian comfort. However, they have been assessed based on the safety criteria with the most stringent condition being considered, i.e. "sensitive". Based on the sensitive class, all amenity spaces are currently considered safe.
- Based on the results presented, the proposed development will have an imperceptible impact on the pedestrian wind comfort on the shared amenity spaces.

17.3.2.3 Private Balconies & Terraces

The pedestrian wind comfort results on all private balconies and terraces are summarised as follows:

- Similar to amenity spaces, private balconies are not considered common pedestrian areas. As such, they have not been assessed against the typical comfort classes for pedestrian comfort. However, they have been assessed based on the safety criteria with the most stringent condition being considered, i.e. "sensitive". Based on the sensitive class, all terraces and private balconies are currently considered safe.

- Features integrated into the design such as inset balconies at more exposed locations ensure that all private balconies are considered safe based on the sensitive pedestrian class.

- Based on the results presented, the proposed development will have an imperceptible impact on the safety of pedestrians on the private balconies and terraces.

17.4 Mitigation Measures

17.4.1 Construction Phase

The assessment of the wind microclimate during the construction phase has been based on professional judgement by reviewing the existing site conditions and the expected conditions once the development is in place via the CFD modelling.

It is expected the wind microclimate will gradually adjust from the existing conditions to the final modelled scenario as construction progress develops. However, the mitigation measures outlined in the following sections will need to be implemented before completion to ensure comfortable conditions once the proposed development becomes operational.

17.4.2 Operational Phase

The following specific mitigation measures have been incorporated into the proposed design to prevent excessive wind speeds during the operational phase of the development:

- **Apartment Block Arrangement:** The arrangement of the apartment blocks has been carefully chosen to help mitigate increased wind speeds throughout the site. The central areas within the development are well protected from the predominant south-west wind direction via the buildings located to the south-west. Furthermore, an internal courtyard space has been incorporated within Block B and C which provides a sheltered area for pedestrians to utilise throughout the year.

- **Inset Balconies:** The Block A1 building which is most exposed to the wind due to its height, incorporates inset balconies. Inset balconies offer increased wind protection for people utilising the balcony spaces as they provide a natural shelter from the elements.

- **Landscaping:** The landscaping has been strategically designed to mitigate increased wind speeds and to provide shelter for pedestrians at ground level within the central courtyard spaces and on the rooftop amenity area. The landscaping design incorporates trees, hedges and raised planters and sheltered seating pockets which all act as wind mitigation measures. Trees are to be planted close to primary entrance ways and along the streetscape, mitigating excessive wind speeds and providing shelter for pedestrians at street level. The use of trees and low-level shrubs all assist in the localised reduction of wind speed.

17.4.3 Potential Cumulative Impacts

The CFD assessment has accounted for the cumulative impact associated with the existing site and the proposed development. The analysis has shown that even with the proposed development in place, the wind speeds will still be comfortable for pedestrians with no areas of concern highlighted.

A list of granted developments surrounding the proposed project has been provided by the Design Team. Due to the substantial distance from the proposed project and the extent of those granted applications, a neutral cumulative impact will be perceived.

17.4.4 'Do Nothing' Impact

If the proposed development does not go ahead, based on the assessment carried out on the existing site and the statistical analysis of 30 No. years of climate data from the nearby Dublin airport, the existing site will remain well sheltered from the prevailing wind directions and will continue to be considered a comfortable environment for pedestrians.

17.5 Residual Impacts

The trees and planting associated with the landscape design will continue to grow and develop after the proposed mitigation measures have been implemented, thus providing increased protection from the wind resulting in increased pedestrian comfort conditions in these areas which will be a positive impact.

18.0 RISK MANAGEMENT

It is critical that any Proposed Development is screened against potential risks which it might encounter and/or impose on the nearby environment during its construction and operational phase. This chapter of the Environmental Impact Assessment Report (EIAR) sets out the assessment of the vulnerability of the Proposed Development to risks of major accidents and/or disasters. It assesses the expected effects of the Proposed Development to the risk of major accidents and disasters.

To understand the potential consequences and predicted effects of any major accident or disaster due to the Proposed Development and the vulnerability of the Proposed Development, a desk study was undertaken. The assessment reviewed:

- The vulnerability of the Proposed Development to major accidents or disasters; and
- The potential for the Proposed Development to cause risks to human health, cultural heritage and the environment, because of that identified vulnerability.

A methodology has been used including the following assessment:

- Identifying and screening the hazards;
- Screening the hazards;
- Identifying the effect;
- Assessing the likelihood of the major accident or disaster occurring, and
- Assessing any risks that remain.

The design has considered the potential for flooding, road accidents, invasive species or fire within the design methodology.

The assessment considered a range of potential risks relevant to the site and its surroundings, including:

- Flooding, due to the site's location within Flood Zones C, with mitigation through a site-specific flood risk assessment;
- Fire, with the design criteria of the buildings being in accordance with all relevant building and fire safety standards;
- Air quality events, with dust suppression and emissions control measures during construction to protect ambient air quality;
- Invasive species, addressed through biodiversity protection measures to prevent the spread of non-native plants recorded on-site; and
- Infrastructure risks and utilities failure, including water supply, wastewater treatment, and telecommunications, all supported by existing services and coordinated planning to ensure resilience.

Having conducted all of the requisite identification, screening and assessments, it has been concluded that the vulnerability of the Proposed Development to major accidents and/or disasters is not significant.

19.0 INTERACTIONS AND CUMULATIVE IMPACTS

19.1 Introduction

Chapter 19 of this EIAR outlines the most significant interactions associated with the proposed development. Table 19.1 provides a matrix which summarises the significant interactions associated with the proposed development.

19.2 Description of Significant Interactions

19.2.1 Interactions between Population/Human Health and Air Quality/Climate

Interactions between population/human health and air quality/climate are discussed in Chapters 5 and 12. The main interactions are predicated to arise during construction stage, which can cause health and dust nuisance issues. There is a low risk of dust-related human health impacts during the construction phase of the proposed development. Best practice mitigation measures will be implemented during the construction phase to ensure that the impact of the proposed development complies with all ambient air quality legislative limits. Therefore, the predicted impact is *direct, short-term, negative, localised* and *not significant* with respect to Air Quality and Population & Human Health during the construction phase.

During the operational phase, vehicles accessing the site will emit pollutants which may impact Air Quality and Population & Human Health. However, the increased number of vehicles associated with the proposed development will not cause a significant change in air pollutant emissions in the locality. It has been assessed that emissions will be in compliance with the ambient air quality standards which are set for the protection of human health. Impacts will be *long-term, localised, direct, negative* and *not significant* with respect to Air Quality and Population & Human Health during the operational phase.

19.2.2 Interactions between Population/Human Health and Transportation

The scheme will be developed in line with the Transportation Chapter (Chapter 15 of this EIAR) and the separately enclosed *Preliminary Construction Management Plan* (PCMP) and Construction and Environmental Management Plan (CEMP) to ensure any impacts on local traffic is minimised during the construction stage.

Chapter 15 notes that a large proportion of the construction employees are anticipated to principally arrive in shared transport therefore reducing the potential for associated temporary negative impacts on the surrounding road network. Due to the scale of the site, appropriate on-site parking and compounding will be provided on this site to prevent overflow onto the local network. Deliveries will be actively controlled and subsequently arrive at a dispersed rate during the course of the working day. Provided that mitigation measures and management procedures detailed in Chapter 15 are implemented, the residual impact on the local receiving environment during the construction stage will be short-term, imperceptible and neutral.

As the development proposes some 562 No. residential units and associated (albeit) reduced car-parking, along with a creche, café/restaurant and culture/community space, there will be additional traffic movements at the site and in the vicinity. The implementation of mitigation measures such as the implementation of the *Mobility Management Plan* will ensure that the

residual effect on the local receiving environment is both managed and minimised. The promotion of sustainable modes of transport from the site, the large quantum of bicycle parking provided and the incorporation of permeable links through the site will contribute towards modal shift in travel patterns and increased physical activity, which will have a positive, significant and long-term effect on the area.

If the development does not proceed at the subject lands, there would be a potential negative impact for pedestrians and cyclists in the local area as the significantly enhanced pedestrian and cyclist permeability through the site would not be provided to shorten journeys to public transport, services and facilities.

19.2.3 Interactions between Air Quality and Climate, Transportation and Population/Human Health

Chapters 12 and 15 outline interactions between air quality and traffic/transportation respectively. 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 roads close to the site. Chapter 12 concludes that the impact of the interaction between traffic and air quality is considered to be long-term, direct, negative and not significant during the operational phase. The effects are considered to be *direct, short-term, neutral, localised* and *not significant* during the construction phase.

As set out above in Sections 19.2.1 and 19.2.2, the interaction between air quality/climate and transportation with population and human health is not expected to generate any significant impacts.

19.2.4 Interactions between Population/Human Health and Noise/Vibration

Interactions between population/human health and noise/vibration are discussed in Chapters 5 and 13. The potential impacts on human beings in relation to the generation of noise and vibration during the construction phases are that high levels of noise and vibration could cause nuisance to people in nearby sensitive locations. Best practice noise and vibration control measures will be employed by the contractor during the construction phase in order to avoid significant impacts at the nearest sensitive buildings. Implementation of the mitigation measures set out and adherence to good practice noise reducing measures will ensure that the short-term, slight to significant, negative impacts on human health will be lessened.

Similarly, during the operational phase, plant selections designed to achieve the relevant noise criteria will result in a residual impact that is long-term, imperceptible and neutral to people in nearby noise sensitive locations. External noise sources have been assessed and mitigation to ensure internal noise levels achieve the relevant noise criteria have been provided.

19.2.5 Interactions between Population/Human Health, Landscape and Wind

Chapter 9 provides a Landscape and Visual Impact Assessment prepared by Modelworks. The chapter sets out that the proposed development would introduce a new, higher density

residential neighbourhood to the townscape, making more sustainable use of the valuable urban land resource. The proposal includes a substantial area of communal and public open space, most notably a new public park (including a playground and a network of footpaths) inside the site boundaries along Sandford Road and Milltown Road. The park would be visible and accessible from the public realm around the site, representing a significant gain in public open space with long-term, positive and significant impacts on the health of the existing population and the new resident community. Additionally, in its arrangement of built form and height, the proposal demonstrates consideration of the sensitivities in the receiving environment, specifically the neighbouring residential streets and nearby protected structures.

The interactions between the proposed development and its environs and human health have been evaluated within the Wind Assessment. The modelling has included the proposed design, the proposed landscaping strategy and the existing landscape which will remain, in conjunction with the existing buildings surrounding the development. The combination of all interactions has resulted in a comfortable environment for pedestrians within the proposed development, and the interaction between population/human health, landscape and wind will be long-term, neutral and imperceptible.

19.2.6 Interactions between Population/Human Health and Waste Management

As set out in Chapter 14, the potential impacts on human beings in relation to the generation of waste during the demolition, construction and operational phases are the incorrect management of waste. This could result in littering which could cause a nuisance to the public and attract vermin. A carefully planned approach to waste management and adherence to the project specific Resource & Waste Management Plan and Operational Waste Management Plan, will ensure appropriate management of waste and avoid any negative impacts on the local population, and thus the interactions between population/human health and waste management will be long-term, imperceptible and neutral.

19.2.7 Interactions between Population/Human Health and Biodiversity

The open space within the site will provide amenity areas for residents and the public alike, which includes play areas, fitness areas and benches. This will involve thinning of trees within the woodland which, without mitigation, could impact on wildlife in the area for which the woodland provides cover and foraging ground. Mitigation measures involve planting native shrubs in the understory which will enhance the woodland structure and planting of 230 No. new trees across the site.

Interaction with population and human health involves the provision of lighting to provide a safe outdoor realm for residents which, without mitigation, could impact on nocturnal species, particularly on bats. Mitigation measures proposed include the provision of a dark corridor with restricted lighting in the core and buffer zones as appropriate, and a lighting design minimising impact on bats and another nocturnal animals, ensuring suitable commuting and foraging habitat is maintained.

With the implementation of the outlined mitigation measures, the interaction between population/human health and biodiversity will be long-term, not significant and neutral.

19.2.8 Interactions between Population/Human Health and Water-Hydrology

Potential impacts on human health have been considered in the Water-Hydrology chapter (Chapter 11). The chapter sets out that the implementation of the measures outlined within the chapter will ensure that the potential impacts do not occur on water and hydrology.

As set out in Chapter 11, surface water drainage has been carried out in accordance with Greater Dublin Strategic Drainage Study (GDSDS) and SuDS methodologies will be implemented. Potential impacts on population and human health have also been considered, particularly with regard to provision of water supply and foul drainage infrastructure. This interaction between population/human health and water-hydrology is considered to be long-term, imperceptible and neutral.

19.2.9 Interactions between Biodiversity and Landscape

Open spaces will be provided within the site to provide amenity areas for residents, which will include play areas, fitness areas and benches. Trees will be thinned within the existing woodlands to facilitate this, which, in the absence of mitigation, could impact on wildlife using the woodland habitats for cover or foraging.

As a result, mitigation measures involve the planting of native shrubs in the understory which will enhance the woodland structure and the planting of 230 No. new trees across the Site. The planting of native shrubs will enhance the understory in the woodland as it presently is dominated by non-native shrub species, and the species selected will also ensure that the area along the perimeter is largely inaccessible to the public, maintaining a commuting/foraging corridor for species that may be using the woodland habitat. In addition, many of the removed trees will be compensated somewhat by the planting of other native and non-native tree species throughout the Site. Overall, these measures will provide a habitat for wildlife to safely commute around the wilder margins of the site and will also provide nesting/feeding opportunity for birds.

Therefore, the interactions between biodiversity and landscape are considered to be long-term, slight and neutral.

19.2.10 Interactions between Land, Soils and Geology, Biodiversity and Air Quality

The Air Quality and Climate Chapter (Chapter 12) notes 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. As set out in Chapter 10 (Land, Soils and Geology), dust generation can occur during extended dry weather periods as a result of construction traffic. Dust suppression measures (e.g. dampening down) will be implemented as necessary during dry periods and vehicle wheel washes will be installed for example.

The works involve stripping of topsoil and excavations will remove some vegetation such as trees and scrub. It will also generate dust and potentially impact on the air quality in the locality. However, the generation of dust will be temporary during the construction phase and is not anticipated to have a significant impact on biodiversity.

The impact of the interactions between land, soils and geology, biodiversity and air quality are considered to be short-term, imperceptible and neutral.

19.2.11 Interactions between Archaeology and Land, Soils and Geology

It is set out in Chapter 6 of the EIAR (Archaeology and Cultural Heritage) and Chapter 10 (Land, Soils and Geology) that should archaeological material be recorded in the course of monitoring, this may necessitate areas being left open to the elements for a period in order to facilitate consultation with Department of Housing Local Government and Heritage (DHLGH), processing of licences and/or full excavation/preservation-by-record of archaeological features. Consequently, in this scenario, there will be interactions with land and soils, which are considered short-term, not significant and neutral.

19.2.12 Interactions between Archaeology and Architectural Heritage

The Archaeology and Cultural Heritage Chapter (Chapter 6) details that should earlier building footprints be recorded in the course of archaeological monitoring, the results of any subsequent archaeological works will contribute to our knowledge of the evolution of the Milltown Park complex (see Chapter 7 – Architectural Heritage), which is considered long-term, not significant and positive.

19.2.13 Interactions between Archaeology and Biodiversity

Interaction with archaeology relates to the construction phase where archaeological monitoring could record archaeological material adjacent to preserved mature trees. This has potential implications for arboriculture requirements. However, the potential impact on individual trees due to any archaeological findings is not anticipated to have a significant impact on the overall biodiversity on site. The impact of the interactions between archaeology and biodiversity is considered to be long-term, not significant and neutral.

19.2.13 Interactions between Architectural Heritage and Landscape

Chapter 9 of this EIAR (LVIA prepared by Modelworks) sets out that the proposed development would retain Tabor House and the Chapel, the two most valuable existing architectural features of the site, as part of the cluster of buildings. Their condition, and the character and condition of their setting would be improved by the development, with both buildings opened up to view from Milltown Road.

As a remnant of the Milltown Park demesne, the woodland belt inside the Sandford Road and Milltown Road boundaries is also a cultural heritage feature. While the proposed development includes the removal of a number of trees from the woodland belt, the majority of specimens in good condition would be retained (and supplemented by new planting), so that the woodland belt remains as a distinct landscape feature of the site, forming part of the new public park.

The development will improve the character and condition of the setting of Tabor House and the Chapel with views provided towards the refurbished buildings from Milltown Road, and the proposed replacement/modification of part of the tall boundary wall with a low wall and railing will also allow greater public appreciation of the woodland as a landscape/cultural

heritage feature. The impact of the interaction between architectural heritage and landscape is considered to be long-term, moderate and positive.

19.2.14 Interactions between Land, Soils and Geology, Transportation and Noise/Vibration

Delivery of materials to site (e.g. aggregates for road construction, concrete for foundations, delivery of construction plant to site) and removal of excavated topsoil/subsoil will lead to potential impact on the surrounding road network. Measures to optimize design and minimise material generation are detailed in the relevant chapters.

However, mitigation works outlined in Chapter 10 (Land, Soils and Geology) such as the provision of vehicle wheel wash facilities will be installed in the vicinity of site entrances and road sweeping will be implemented as necessary in order to maintain the road network in the vicinity of the site.

The impact of the interaction is considered to be short-term, imperceptible and neutral during construction. On completion of the construction phase no further mitigation measures are proposed as there will be no further impact on soils and the geological environment.

There will be a level of construction related noise and vibration during the construction of the development on the lands. In relation to the interaction between transportation and noise/vibration, with the implementation of mitigation measures, the interaction between construction noise and vibration and transportation will be short-term, slight to significant and neutral. In the operation stage, the interaction will be permanent, imperceptible and neutral.

The volumes of surplus soils generated by the scheme and the earthworks import requirement will affect construction stage traffic generation.

19.2.15 Interactions between Land, Soils and Geology and Water-Hydrology

Stripping of topsoil will result in exposure of the underlying subsoil layers to the effects of weather and construction traffic and may result in subsoil erosion and generation of sediment laden surface water runoff. Due to relatively high level of groundwater encountered in some boreholes, there may be a need to dewater excavations during construction.

Chapter 10 (Land, Soils and Geology) sets out that the stripping of topsoil will be carried out in a controlled and carefully managed way and coordinated with the proposed staging for the development. Topsoil stockpiles will be protected for the duration of the works and not located in areas where sediment laden runoff may enter existing surface water drains. Topsoil stockpiles will also be located so as not to necessitate double handling. This interaction is considered to be short-term, imperceptible and neutral.

19.2.16 Interactions between Land, Soils and Geology and Waste Management

During the construction phase excavated soil, stone and made ground (between c.74,000m^3 and c. 80,000 m^3) will be generated from the excavations required to facilitate site levelling, construction of the basement and construction of new foundations. It is estimated that

between c. 64,000m³ and c. 70,000m³ of excavated material will need to be removed offsite, however it is envisaged that c. 10,000m³ material will be reused onsite.

Where material has to be taken off site it will be taken for reuse or recovery, where practical, with disposal as a last resort.

The management of waste during the construction phase in accordance with the Resource & Waste Management Plan will meet the requirements of regional and national waste legislation and promote the management of waste in line with the priorities of the waste hierarchy. Adherence to the mitigation measures in Chapter 14 (Material Assets: Waste Management) such as on-site segregation of waste and contacting nearby sites to investigate reuse opportunities for clean and inert materials, and the requirements of the Resource & Waste Management Plan (Appendix 14.1), will ensure the effect is long-term, imperceptible and neutral.

19.2.17 Interactions between Land, Soils and Geology and Material Assets – Site Services

Trench excavations to facilitate site service installation will result in exposure of subsoils to potential erosion. Mitigation measures are outlined in Section 10.6 of Chapter 10 Land, Soils and Geology (i.e. service trenches to be backfilled as soon as practicable to minimise potential erosion of subsoils), and the impact of the interaction is considered to be short-term, imperceptible and neutral.

19.2.18 Interactions between Water-Hydrology and Transportation

Construction and operation stage traffic have the potential to impact water quality via hydrocarbon spills and leaks. Measures to mitigate against impacts are detailed in Chapter 11 (Water-Hydrology), and the impact of the interaction is considered to be short-term, imperceptible and neutral.

19.2.19 Interactions between Transportation and Material Assets – Waste Management

Construction and operational stage traffic have the potential to be impacted by waste generation and resource management on site. 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 development. The increase in vehicle movements as a result of waste generated during the construction phase will be temporary in duration but these can be minimised by the appropriate management of waste materials, reducing the total number of HGVs accessing and egressing the site through the appointed haulage routes and thereby reduce the potential impact on the site's surrounding traffic network.

Construction and demolition waste will be managed in accordance with a Construction & Demolition Waste Management Plan which outlines the planning, prevention, management, duty of care and tracking of all construction and demolition waste.

Construction and demolition will be planned to identify and implement ways to prevent, reduce, reuse and recycle waste. Work will be planned with waste minimisation in mind.

With regard to operational waste, whilst there will be an increase in vehicle movements in the area as a result of waste collections during the operational phase, these movement will be imperceptible in the context of the overall traffic and transportation increase and has been addressed in Chapter 15 (Material Assets: Transportation).

Provided the mitigation measures detailed in Chapter 15 (Transportation) and the requirements of the Operational Waste Management Plan (included as Appendix 14.2) are adhered to, the interaction will be short to long-term, imperceptible and neutral.

19.3 Cumulative Impacts

Any potential cumulative impacts have been considered in the preparation of this EIAR and are detailed where relevant in the various EIAR Chapters e.g. construction stage impacts, surface water drainage infrastructure, foul drainage, water supply, landscape and visual impact and traffic for example. We confirm that this EIAR has assessed environmental impacts from existing developments as part of the baseline assessments.

At the time of writing this Environmental Impact Assessment Report, we note the following relevant applications. This list of planning applications has been reviewed and considered by the authors of each EIAR Chapter and included in the cumulative assessment where deemed appropriate.

Reg. Ref.	Address	Summary of Development	Decision	Status
DCC Reg. Ref. 3937/23 (amended under DCC Reg. Ref. WEB2142/24)	RDS, Dublin 4	The demolition of the existing Anglesea Stand and Anglesea Terrace structure and the provision of to a new grandstand (6,775 person capacity), a 2 level (storey) hospitality and services building (Pocket Building), a club shop and substation (overall 8,892 sq.m). Amendment: minor alterations to the internal arrangement; alterations to the external elevations to include an increase in the overall height to c.24.04m (c.2.74m increase); increase in total capacity of the stand to 6,844 (69 no. additional spectators).	**Final Grant**: DCC Granted Permission on 14th September 2023 (Amendment: DCC Granted Permission on 16th December 2024)	Under Construction
DCC Reg. Ref. 3307/24	RDS, Dublin 4	The relocation of players' changing rooms and facilities from the existing Anglesea stand to the south stand, also known as the Grandstand. The	**Final Grant**: DCC Granted Permission on 30th May 2024	Commencement Notice issued, no compliance submissions made.

		proposal will comprise partial removal and replacement of the stand scaffold to allow for the insertion and construction of a single-storey structure (gross floor area 439 sq m).		
DCC Reg. Ref. 3386/22	The Eglinton, (formerly Jefferson House), No. 2 Eglinton Road, Donnybrook, Dublin 4	The development will consist of the demolition of the existing 5-storey office/residential building on site (the total area for demolition is 2,910 sq.m.) and the construction of a new residential scheme on 11 floors at a height of 42.1m above ground level over an existing and extended basement. The residential development will comprise 20 no. 3-bed units all with winter gardens, communal roof garden and winter garden, terraces at fifth and seventh floors, residential amenity space at ground floor including meeting room, concierge and gym.	**Final Grant:** DCC Granted Permission on 17th August 2022	Not Commenced.
DCC Reg. Ref. WEB5434/25	Former Donnybrook Laundry at The Crescent, Donnybrook, Dublin 4	The provision of 38 No. residential units comprising the refurbishment of the existing laundry building to provide 4 no. units (2 no. duplex units and 2 no. houses) and the construction of 3 no. new blocks ranging in height from 3-6 storeys to provide 34 no. units comprising (31 no. apartments & 3 no. houses).	**Status:** Pending Decision	N/A - Live Application
DCC Reg. Ref. WEB5106/25	Junction of Donnybrook Road and Brookvale Road, Donnybrook, Dublin 4, D04K3T8	The demolition of existing buildings and structures on site and the construction of a 143 No. aparthotel development with a restaurant/ take-away unit and a café/retail unit provided within a 7 No. storey building.	**Status:** Live Application (submitted to DCC on 25th November 2025)	N/A - Live Application
DCC Reg. Ref. 2843/21 **ABP Reg. Ref. ABP-311692-21**	The Royal Hospital Donnybrook, Morehampton Road,	Construction of Donnybrook Primary Care Centre comprising 4 No. storeys over basement level accommodating HSE medical	**Final Grant:** ACP Granted Permission on 22nd December 2021	Not Commenced

	Donnybrook, Dublin 4, D04 HX40	diagnostics, consulting and treatment rooms plus ancillary offices		
DCC Reg. Ref. 2477/21	No. 47 Ranelagh Road, Ranelagh, Dublin 6	The demolition of a single storey rear return and provision of 2 No. residential units; and the provision of a new part 2 to part 4 No. storey structure to the rear of the site accommodating 10 No. residential units.	**Final Grant:** DCC Granted Permission on 19th January 2022	Not Commenced
DCC Reg. Ref. 4115/21 (ACP Ref. ABP-313048-22) **(Amended under DCC Reg. Ref. WEB2775/24)**	11C and 9/14 Milltown Road, Milltown, Dublin 6	The proposed development will consist of the following: Demolition of the existing buildings on site, with a total combined gross floor area (GFA) of 1,739 sq.m; Construction of a Build-to-Rent (BTR) residential development, comprising 97 No. BTR apartments with a mix of 48 No. 1 bed units and 49 No. 2 bed units in 3 No. blocks of part 3, part 4, part 5 and part 6 storeys in height, over basement level, including resident support and amenity facilities. The total GFA, including the basement level, of the proposed development is 9,216 sq m. (Amendment Application: alter the permitted development from a Build to Rent apartment scheme to a standard apartment scheme with no change in units proposed)	**Final Grant**: ACP Granted Permission on 26th July 2023 (Amendment: Granted by DCC on 28th July 2025)	Not Commenced
DCC Reg. Ref. 3116/22	The Jesuit House of Studies, Milltown Road, Dublin 6	Planning permission for the development will consist of the construction of a two-storey archive storage and office building with c.765 sq m of combined floorspace provided including the following: (i) a reception area, an oratory, an archive storage room, research reading room, offices, storage rooms, staff canteen, toilets,	**Final Grant**: DCC Granted Permission on 30th June 2022	Not Commenced

		shower, passenger lift, audio room and ancillary space; (ii) rooflights, photovoltaic panels and lift over-run at roof level; (iii) 9 No. parallel car parking bays along the existing roadway with the existing fence relocated to the site boundary and 15 No. new cycle parking spaces; (iv) residual car parking, hard and soft landscaping, heat pump and all associated site development works.		
DCC Reg. Ref. 4578/22 (ACP Ref. PL29S.322089)	'Dunelm', Rydalmount, Milltown Road, Dublin 6	The demolition of the existing building and structures on site and the construction of a 63 No. unit Build-to-Rent scheme within 2 No. blocks ranging between 4 No. storeys and 8 No. storeys in height.	**Status**: ACP Granted Permission on 18th January 2024. Decision quashed by Order of the High Court and is remitted to ACP under new case number ACP Ref. PL29S.322089. Still awaiting decision at the time of writing.	N/A - Live Application
DCC Reg. Ref. WEBLRD6063/25-S3 (ACP Ref. LH29S.323142)	Former Paper Mills site and adjoining properties Clonskeagh Road, Dublin 6	The construction of a purpose-built student accommodation (439 No. bedspaces) and residential development (16 No. apartments) in 5 no. blocks ranging from part 1 to part 7 no. storeys in height above a lower ground level, and extension and renovation of 14 no. existing residential dwellings at Clonskeagh Road.	**Status**: ACP Granted Permission 12th November 2025	Not Commenced
DCC Reg. Ref. WEB2190/24	Gonzaga College, Sandford Road, Dublin 6, D06 KF95	The development will consist of: the internal reconfiguration and full renovation of an existing 2 storey science block (c. 830 sq m) and the construction of a new 3 storey extension with a rooftop observatory (c. 1,431 sq m) located to the north-east of	**Final Grant**: DCC Granted Permission on 21st January 2025	Not Commenced

		the college. The extension will connect to the existing 2 storey science building to the south via a double-height atrium and to the existing Sandford Grove House (educational use) to the west via a new glazed walkway at second floor level.		
DCC Reg. Ref. 4283/24	Rear of 50 Sandford Road, Ranelagh, Dublin 6	Permission is being sought for development a protected structure, comprising construction of a 72 sqm one bed two storey mews with access onto Marlborough Lane, Dublin 4, and all associated services and site works	**Final Grant**: DCC Granted Permission on 16th December 2024	Not Commenced
DCC Reg. Ref. 3011/24 (ACP Ref. ABP-320695-24)	No. 79, Sandford Road, Dublin 6, D06 CK83	Demolition of 169 sq.m of existing commercial buildings and construction of 6 two-storey (plus attic) townhouses.	**Final Grant**: ACP Granted Permission on 23rd July 2025.	Compliance submissions made
DCC Reg. Ref. LRD6003/22-S3 (ACP Ref. ABP-315488-23) **(Live Amendment Application No. 1: DCC Reg. Ref. WEBLRD6081/25-S3)** **(Live Amendment Application No. 2: DCC Reg. Ref. WEBLRD6092/25-S3)**	A site which previously formed part of the overall RTÉ Campus at Montrose, Donnybrook, Dublin 4	Demolition of the existing structures and construction of a 608 No. apartment scheme and creche, all within 9 No. blocks ranging in height between 2 No. storeys and 10 No. storeys. (Amendment Application No. 1: The amendments proposed will reduce the total number of permitted residential units by 98, resulting in an overall total of 510 no apartment units now proposed. The revised residential mix will comprise 8 no. Studios; 125 no. 1-beds, 326 no. 2-beds and 51 no. 3-bed apartments. It is also proposed to omit Condition Nos. 7 & 8 to remove the Build-to-Rent aspect of the development) (Amendment Application No. 2: the change of use from the permitted restaurant/café and retail use to a wellness facility	**Final Grant**: DCC Granted Permission on 12th July 2023	Not commenced

		and café/retail use and the provision of a new single storey swimming pool building)		
DCC Reg. Ref. WEB2320/25 (ACP Ref. ACP-323451-25)	No. 14 Morehampton Lane, Donnybrook, Dublin 4, D04Y6W0	The demolition of the existing single-storey garage and the construction of a new three-storey mews dwelling.	**Notification of Decision**: DCC decided to Grant Permission on 1st August 2025 **Status**: Pending Decision from ACP	Live Application
DCC Reg. Ref. 4437/23	No. 4 Chelmsford Close, Ranelagh, Dublin 6, D06XW20	The development will consist of the construction of a new 2 No. storey 2-bedroom house with study to the side of existing dwelling.	**Final Grant**: DCC Granted Permission on 11th December 2023	Commencement Notice issued & Compliance submissions made.
DCC Reg. Ref. 3129/21 (ACP Ref. ABP-314166-22)	Errigal House, Eglinton Court, Eglinton Road, Dublin 4	The development will consist of alterations to an apartment block known as Errigal House which will increase the quantum of residential units from 20 No. apartments to a total of 28 No. apartments and will result in the provision of a five-storey apartment building.	**Final Grant**: ACP Granted Permission on 8th December 2023	Not commenced.
DCC Reg. Ref. 4093/23 (ACP Ref. ABP-318615-23)	No. 66 Eglinton Road, Donnybrook, Dublin 4, D04P2X9	Demolition of existing garage and the construction of a single storey dwelling to the rear of the existing dwelling.	**Final Grant**: DCC Granted Permission on 10th July 2024	Not commenced.
DCC Reg. Ref. 3854/21 (ACP Ref. ABP-313312-22)	Woods Way to the rear of No. 20 Mount Eden Road, Donnybrook, Dublin 4	Demolition of the existing workshop/shed and boundary wall to Woods Way and the construction of a 2 No. storey 2-bedroom terraced mews dwelling.	**Final Grant**: ACP Granted Permission on 14th September 2023	Not commenced.

Therefore, it is clear that the potential for any cumulative impacts to occur have been comprehensively considered in the preparation of this EIAR, as detailed where relevant throughout the various chapters.

Interactions →	Population and Human Health	Archaeological and Cultural Heritage	Architectural Heritage	Biodiversity	Landscape and Visual Impact	Land, Soils and Geology	Water-Hydrology	Air Quality and Climate	Noise and Vibration	Material Assets - Waste Management	Transportation	Material Assets - Site Services	Material Assets – Daylight and Sunlight	Microclimate – Wind
Population and Human Health				✓	✓		✓	✓	✓	✓	✓			✓
Archaeology			✓	✓		✓								
Architectural Heritage					✓									
Biodiversity					✓	✓		✓						
Landscape and Visual Impact														✓
Land, Soils and Geology							✓	✓	✓	✓	✓	✓		
Water-Hydrology											✓			
Air Quality and Climate											✓			
Noise and Vibration											✓			
Material Assets - Waste Management											✓			
Transportation														
Material Assets - Site Services														
Material Assets – Daylight and Sunlight														
Microclimate – Wind														

Table 19.1 Matrix of Significant Interactions Discussed Throughout Chapter 19

20.0 MITIGATION MEASURES AND MONITORING

A summary of mitigation measures and monitoring proposed throughout this Environmental Impact Assessment Report is set out in this section. We note that this is a summary of measures proposed and further detail should be sought in each individual chapter.

Chapter 5: Population and Human Health

- Implementation of a *Dust Management Plan, a Mobility Management Plan, Parking Strategy, Preliminary Construction Management Plan* and *Outline Construction and Environmental Management Plan.*

- The Contractor shall be responsible for overall management of the site for the duration of the proposed works and must progress their works with reasonable skill, care, diligence and to proactively manage the works in a manner most likely to ensure the safety and welfare of those carrying out construction works.

- The Contractor shall comply with all relevant Statutory requirements such as the *2005 Safety Health and Welfare at Work Act, The Construction Regulations (SI 291 of 2013), the General Application Regulations (SI 299 of 2007),* etc. (and any amendments thereof). In addition, the Contractor shall comply with all the reasonable safety requirements of the Client, the Project Supervisor for the Design Process and the Project Supervisor for the Construction Stage. Measures that would be taken under these Statutory requirements include:

    - Appointment of a competent project supervisor for the design process, and a competent project supervisor for the construction stage.

    - Contractor to ensure that all staff have received site-specific safety induction instruction.

    - Appointment of a safety officer.

    - Safe means of access to and egress from site are provided and maintained.

- A large quantum of the on-site employees will arrive in shared transport; therefore, the encouragement of car sharing will reduce the quantum of vehicles arriving at the site during construction, which will therefore minimise any potential impacts on the surrounding road network during construction.

- In relation to noise and vibration, mitigation measures include selection of quiet plant, noise control at source, screening, liaison with the public and monitoring for example.

- A carefully planned approach to waste management and adherence to the project specific Resource & Waste Management Plan (C&DWMP – Appendix 14.1) and the Operational Waste Management Plan (OWMP – Appendix 14.2) will ensure appropriate management of waste and avoid any negative impacts on the local population.

- In relation to Wind-Microclimate, mitigation measures such as landscaping, and solid balustrades to balconies on Floors 5 to 9 of Block A1 will need to be implemented before

completion to ensure comfortable conditions once the proposed development becomes operational.

Chapter 6: Archaeological and Cultural Heritage

Mitigation Measures

There are currently no archaeological remains identified within the site. However, it has been established as an area of moderate archaeological potential. In particular, the discovery of human remains adjacent to the site in an adjoining property is significant. The recommendations below are made subject to the approval of the Department of Housing Local Government and Heritage (DHLGH). As the statutory body responsible for the protection of Ireland's archaeological and cultural heritage resource, they may issue alternative or additional recommendations.

Pre-Construction Phase

Pre-construction assessments (desktop study, walkover survey, geophysical survey and test trench assessment) have been undertaken at the site. No further pre-construction assessment is proposed at this stage.

Recommended Mitigation Measure

All ground disturbance works across the development site will be monitored by a suitably qualified archaeologist. In the event that archaeological material is recorded during monitoring, further discussion/consultation with the DHLGH will be sought in order to ascertain the appropriate treatment (i.e. preservation by record/preservation in situ) of any additional archaeological remains. Should the DHLGH recommend preservation by record/full archaeological excavation, this work will be undertaken under the appropriate licence. The DHLGH may recommend preservation in situ, should avoidance of any newly discovered archaeological remains be possible.

Monitoring

Construction groundworks will be monitored by a suitably qualified archaeologist. Any future licensed archaeological works will require an application process including approval of proposed methodologies by the National Monuments Service of DHLGH in consultation with the National Museum of Ireland and notification of works.

Chapter 7: Architectural Heritage

Mitigation Measures

Chapter 7 of this EIAR outlines various mitigation measures as follows:

- It is recommended that all the building range's exteriors, interiors and settings be thoroughly recorded. All records will be of a quality meriting inclusion in the Irish Architectural Archives.

- The careful management of the demolition process in the designed temporary protection of extant structures prior to the commencement of their permanent works will ensure that retained buildings are protected from damage, with no direct impacts envisaged. As described in Chapter 6, archaeological investigations will record evidence of earlier embedded structures, if found to exist beneath extant upstanding fabric. New interventions consequential to the loss of physical connections to buildings, which are proposed to be demolished, will be measured and sympathetic to existing architecture.

- Flanking sections will be protected during the removal stage and consolidated to ensure their long-term co-existence with new perforations. Any proposed interventions will be executed using high-quality materials, in a palette to complement the muted tones of the existing wall. The sylvan nature of the existing site will be protected in so far as possible and enhanced by further planting. Flanking sections of retained, early masonry, will be protected during demolitions and consolidated to ensure their continuance as a characterful boundary onto Milltown Road. Modifications to the boundary wall adjoining the entrance will be the sympathetic to the existing entrance in terms of scale and materiality to minimise the visual impact on the established streetscape.

- Potential impacts associated with the construction phase of the development will be considered by way of introducing a range of mitigating measures to protect existing site boundaries and mature trees. On completion of the development, the sylvan screening that presently defines the architectural setting of protected structures in the vicinity of the subject site will be supplemented to overcome possible environmental changes arising from the construction phase of the development. The Sandford Road entrance will be retained to minimise the visual impact on the southward views from the Architectural Conservation Area.

The chapter considers potential impacts to Protected Structures in the vicinity and outlines whether mitigation measures are envisaged. For the majority of the Protected Structures, no mitigations are envisaged given their considerable distance. In relation to Nos. 132-138 Sandford Road, the following mitigation is proposed:

> *"The proposal to retain sections of original boundary wall, together with introducing new sections with permeability through the site where its sylvan character will be safeguarded, will lessen visible change from the enclosing urban realm in one sense, whilst enhancing it in revealing the proposed parkland as an extension to the public realm."*

In relation to No. 1 Saint James's Terrace to No. 12 Saint James's Terrace, the following mitigation is proposed:

> *"The protection of mature trees and supplementary planting will reduce the visual impact of the new development. Contemporary interventions to the boundary wall will be undertaken using high quality self-finished materials, and selection of a muted colour palette sympathetic to the existing historic context to reduce impact on the streetscape."*

Chapter 7 also states the following in relation to the redevelopment of the site:

> *"Development of the existing site is inevitable. The existing building range has evolved in direct response to its religious institutional function and is inseparable architecturally from that function. Its function has now become obsolete and the buildings vacated. An uncertain future for the building range was determined when their original function was permanently lost. In the absence of a corresponding compatible function, their wholescale re-use is architecturally and economically unviable. None of the buildings within the grouping are protected structures or included on the NIAH, and not being afforded statutory protection are subject to the same rigours of statutory compliance as new build structures.*
>
> *As a consequence, the removal of certain buildings to generate a viable residential scheme is not unexpected. Their removal is mitigated in the selected retention and careful presentation of the groupings most significant pair of historic buildings, as has been described in previous sections and in the attached Appendix 7.3. Further mitigations are proposed in the execution of a detailed building inventory, supported with accurately documented survey drawings.*
>
> *The retention of two buildings for purposeful re-use within the vast building range presents an inherently positive impact for the legibility of the original function of the site.*
>
> *In their retention, the Chapel and Tabor House are considered to present landmark features within the development and as a consequence must be purposefully used to ensure long term animation in their central position within the masterplan.*
>
> *Whilst an end user has not yet been identified and the full detail of works to the buildings must yet be resolved, in broad terms, it is intended that the buildings be sensitively conserved, with all interventions arising in changes to accommodate new uses compatible with original compositions and features insofar as possible.*
>
> *In respect of the masterplan design, the proposed development has emerged in direct response to the positioning, orientation and setting of the retained pair of buildings. The presented integrated approach to this unique site's redevelopment absorbs the challenges of cohesive urbanism to a greater extent than would be possible if it were developed piecemeal.*
>
> *The scale and positioning of the site affords it special consideration in its capacity to offer a unique urban contribution. In response, the design of the proposed replacement building grouping has evolved in efforts to merge with its established, historic and characterful urban environment."*

Monitoring

Archaeological monitoring and recording will follow the demolition of structures and the excavation of the site. The main contractor for the scheme will monitor works in the vicinity of retained historic buildings and enclosing boundary walls on a daily basis, to ensure that protection measures are observed at all times.

Chapter 8: Biodiversity

Mitigation Measures

Construction Phase

Recommendation 1: Tree Protection

Protective tree fencing in compliance with BS 5837:2012 'Trees in relation to design, demolition and construction – Recommendations' will be erected prior to any Construction works being undertaken to prevent damage to the canopy and root protection areas of existing trees at the Site. The fencing should be signed off by a qualified arborist prior to Construction to ensure it has been properly erected. No ground clearance, earthworks, stock-piling or machinery movement will be undertaken within these areas.

Recommendation 2: Reduction of noise-related impacts

Short-term increases in disturbance levels as a direct result of human activity and through increased generation of noise during the Construction/Infill Phase can have a range of impacts depending upon the sensitivity of the ecological receptor, the nature and duration of the disturbance and its timing.

To mitigate this disturbance, the following measures will be implemented:

- Selection of plant with low inherent potential for generating noise.
- Siting of plant as far away from sensitive receptors as permitted by Site constraints.
- Avoidance of unnecessary revving of engines and switch off plant items when not required.
- Keep plant machinery and vehicles adequately maintained and serviced.
- Proper balancing of plant items with rotating parts.
- Keep internal routes well-maintained and avoid steep gradients.
- Minimize drop heights for materials or ensure resilient material underlies.
- Where noise originates from resonating body panels and cover plates, additional stiffening ribs or materials should be safely applied where appropriate.
- Limiting the hours during which Site activities likely to create high levels of noise are permitted.
- Appointing a Site representative responsible for matters relating to noise.
- Monitoring typical levels of noise during critical periods and at sensitive locations.

These measures will ensure that any noise disturbance to nesting birds or any other fauna species in the vicinity of the Site of the proposed development will be reduced to a minimum.

Recommendation 3: Timing of Vegetation Clearance/Building Renovation

Vegetation Clearance

To ensure compliance with the Wildlife Act 2000 as amended, the removal of areas of vegetation will not take place within the nesting bird season (March 1st to August 31st inclusive) to ensure that no significant impacts (i.e., nest/egg destruction, harm to juvenile

birds) occur as a result of the proposed development. Where any removal of vegetation within this period is deemed unavoidable, a qualified Ecologist will be instructed to survey the vegetation prior to any removal taking place. Should nesting birds be found, then the area of habitat in question will be noted and suitably protected until the Ecologist confirms the young have fledged.

Error! Reference source not found. in Chapter 8 provides guidance for when vegetation clearance is permissible. Information sources include The Herpetological Society of Ireland, the British Hedgehog Preservation Society's *Hedgehogs and Development* and *The Wildlife (Amendment) Act, of 2000*.

The preferred period for vegetation clearance is within the months of September and October. Vegetation will be removed in sections working in a consistent direction to prevent entrapment of protected fauna potentially present (e.g., Hedgehog). Where this seasonal restriction cannot be observed, a check for active roosts and nests, as well as signs of amphibians, will be carried out immediately prior to any Site clearance by an appropriately qualified ecologist and repeated as required to ensure compliance with legislative requirements.

Tabor House and Chapel Renovation Works

Should renovation works to The Tabor House roof or loft space be required e.g., insulation, roof repair, grouting etc., further surveys are required to ensure inadvertent impacts to roosting bats do not occur if they are present. These surveys will be conducted by a suitably qualified ecologist.

Demolition or reroofing of buildings must also take place outside of the bird nesting season (March to August inclusive) to avoid impacts to nesting bird species. If works are to take place in 2023, or years thereafter, it should take place outside of the bird nesting season or the chimneys should be bird proofed by a specialist contractor prior to nest building/egg laying and a new breeding bird survey by a qualified ecologist should take place before any demolition works start.

Recommendation 4: Small Mammal and Fauna Protection

The following general avoidance measures will be incorporated to minimise impacts to mammals during the Construction Phase:

Hours of work

The hours of working will be limited to daylight hours where possible, so as to limit disturbance to nocturnal and crepuscular animals.

Waste management

As best practice, all construction-related rubbish on Site e.g., plastic sheeting, waste, wires, bags, netting in which animals can become entangled etc. will be kept in a designated area and kept off ground level so as to prevent small mammals such as hedgehogs from entrapment and death.

Excavations & Pipes

Trenches/pits must be either covered when not in use/at the end of each working day with caps (especially at night) or include a means of escape for any animal falling in and getting stuck. If this is not possible, then a strategically placed plank or object should be placed in the corner of an excavation to enable animals to safely escape (Badgers will continue to use established paths across a Site even when construction work has started).

Any temporarily exposed open pipe system will be capped in such a way as to prevent badgers from gaining access as may happen when contractors are off-site.

Recommendation 5: Invasive Alien Plant Species Management

Several invasive alien plant species were recorded during ecological surveys carried out on Site. The IAPS Site Assessment and Management Plan Report (Invasive Plant Solutions, 2023) has been updated following the most recent survey in April 2023, to include Three-cornered Leek in the scope of the IAPS management. Listed below are the measures proposed in this report prepared by Invasive Plant Solutions to mitigate and treat IAPS on Site.

Biosecurity Measures for management and treatment of IAPS on Site:

The following measures will be adhered to, to avoid the introduction or dissemination of medium/low-risk invasive species to and from the Site of the proposed development. For the Construction Phase, the contractor will prepare a project-specific IAPS standard operating procedure document, in advance of work commencement. The document should be prepared by an IAPS specialist and should cover the bio-security measures to be taken, including the maintenance of records, to screen for the introduction of IAPS onsite, and to enable their tracing if such an introduction occurs; and to ensure no transmission of IAPS offsite. These measures to include:

- Based on the outcome of the IAPS Site surveys carried out in December 2020, April and September 2021, April 2022, March 2023 and April 2023, the continuing and expanding presence of IAPS on Site was confirmed, namely Three-cornered Leek and Spanish Bluebell.
- Adopting the precautionary principle, regular Site monitoring is to be maintained, with further IAPS inspections to be scheduled during the 2023 growing period in order to validate the emergence of IAPS on Site.
- The IAPS Report and Management Plan (including subsequent updates) are to be circulated to any adjoining landowners that may be affected by the IAPS presence and to the relevant authorities, where appropriate.
- The IAPS Site Management Plan should be updated following further IAPS inspections during the growing period in 2023.
- All areas of infestation should remain securely fenced off, including a 5-7m buffer zone, where appropriate. Fencing should be strong and incorporate advisory signage. Where stands are small or have been successfully treated, then advisory signage on a timber post will be sufficient.
- No ground maintenance, opening up or any other ground disturbance is to take place within fenced (infested) areas without prior approval, or consultation and under

explicit direction and supervision of an IAPS Specialist, with strict bio-security conditions.

- Where works in the fenced (infested) areas must take place, the activity must first be approved by an IAPS specialist, with the development of a suitable 'Task Specific' method statement, that ensures no viable plant material of rhizome should be disturbed or removed from zones of infestation.
- Where future development proposals could encroach onto the IAPS-infected areas, a Site-specific ground remediation programme (including vertical and horizontal protection) should be developed and deployed to provide for the removal and bio-secure disposal of all infested soils and include any other relevant measures required to ensure strict biosecurity compliance across the Site and works.
- All relevant staff and Site visitors are to be briefed on the identification, risks and dangers of IAPS on Site, as well as the Site-specific protocols in place for the management of same. Specialist advice should be sought where there is uncertainty as to the identity of any plant species encountered.
- The accompanying Management Plan and treatment methodology should be screened for potential impacts on ecological receptors and sensitivities, where they exist per S.I. 155/2012; the European Communities (sustainable use of pesticides) Regulations.
- When using herbicides as part of the Management Plan/remediation programme, consideration must be given to the proximity of ecological receptors and designated sites. Non-residual, aquatic-approved herbicides should be specified for treatment, where herbicide use is deemed suitable.

In addition to the above, the following best practice procedures should be adhered to (As per Section 18 of the IAPS Site Assessment and Management Plan Report (2023)):

- Validation that all machinery/vehicles are free of IAPS, prior to their first introduction to the Site.
- Certification should be obtained from suppliers that all imported soils and other fill/landscaping materials are free of IAPS.
- A regular schedule of Site inspections across the IAPS growing seasons, for the duration of the construction works programme.
- Appropriate and effective Site biosecurity hygiene to ensure that no IAPS are transmitted off-site for the duration of the proposed works.
- The IAPS management plan should be updated as required.

This management and treatment programme will be continued multi-annually, until either eradication has been fully achieved or future development proposals have been approved and scheduled, whichever is sooner.

In the event of development being approved in the short term, this management plan recommends the deployment of an IAPS-infested soil remediation programme, comprising the bio-secure off-site disposal of all IAPS-infested soils, under NPWS licence, to an approved and licenced waste acceptance facility. This process will be based on up-to-date survey information, to validate the full extent of IAPS present, carried out over the intervening period and immediately in advance of the remediation process commencing. The management plan also recommends that the remediation process should be carried out

independently of, and in advance of, the primary development works commencing. It should be executed by, or carried out under the direct management of, an IAPS specialist.

In its ongoing implementation, this management plan will ensure that initial bio-security measures are deployed at all IAPS locations, that a structured, multi-annual, Site monitoring and herbicide control programme will be employed across the duration planning consent process, and that, if then necessary, a full IAPS infested soil remediation process will be carried out and completed in advance of the commencement of any proposed development project.

Further information on IAPS on Site can be found in the following document produced by Invasive Plan Solutions: "Invasive Alien Plant Species: Site Assessment Report and Management Plan" (Invasive Plan Solutions, 2023).

Recommendation 6: Ecological Clerk of Works (ECoW) for demolition/tree/PRF removal works

Adopting a precautionary approach, as Milltown Park House is to be demolished and some trees offer Low roosting potential are to be felled, it is proposed that a suitably qualified Ecologist will be present to act as an Ecological Clerk of Works (ECoW) for the duration of these works.

The approach to the demolition works will be developed with input from the ECoW and this approach, and any bat specific mitigation measures, will be detailed within a Method Statement and agreed with the Local Authority; to ensure no bats are present/impacted by the works. Should a bat be present works will cease and NPWS is to be consulted.

Similarly, a precautionary approach is required regarding vegetation removal on Site, particularly in case breeding or hibernating Hedgehogs occur within the woodland habitat within the Site. Therefore, the Site will be visually checked by an ECoW prior to bringing in any machinery and will be cleared on a rotational basis leaving scrubby patches in selected areas so as to provide and maintain suitable habitat and cover for Hedgehog.

In addition, piles of dead wood and brash piles shall be created in undisturbed areas of the site during the Construction Phase.

Recommendation 7: Construction Phase Lighting Regime

Where possible, Construction Phase lighting will be switched off during non-working hours. However, during use, directional lighting will be the lighting of choice as this will minimise light spill from the site, into any surrounding areas which may be in use by bats or other nocturnal animals that may be commuting/foraging in the area.

It is recommended that LED luminaires possessing a warm white spectrum (270ok – 300ok) be used so as to reduce the blue light component. LED lights are also ideal due to their sharp cut-off, lower intensity, and dimming capabilities.

Operational Phase

Recommendation 8: Bat-friendly Lighting

The proposed development will see a shift from baseline lighting levels within the site, owing to the fact that the Site, in its current state, is largely disused and experiences low levels of maintenance. As such mitigation measures must be incorporated to ensure that there is no significant adverse effect on bats and other nocturnal species that may be using the site.

Therefore, a bat friendly lighting plan has been developed by Enviroguide and the lighting Consultants to ensure that significant impact from same, on bat species which may be using the Site, will not occur. There are three key elements to the lighting plan which are considered and discussed below. These are:

- Light emitted from the proposed buildings;
- Light emitted from public lighting proposed as part of the development works; and
- Light emitted from external sources, e.g., traffic on Milltown Road.

It is considered that light emitted from the proposed buildings is unlikely to impact on commuting and foraging bat species as they will be located predominantly within the centre of the Site, whereas the commuting and foraging habitat for bats is largely associated with the linear features of the site which occur contiguous to the site boundary (with the exception of the western extent) and the adjacent grassland/wildflower meadows. However, the following measures are proposed to further ensure that light spill from the proposal will not occur; night-time light spill via windows/entrances; and the levels of spill/glare from outdoor lighting in place on the building exterior and throughout the Site will be minimised through selective lighting measures, such as fittings set back into the room, particularly those utilised for units facing towards the buffer zone (discussed further).

Regarding public lighting at the proposed development, the following design mitigation is incorporated into the Lighting Report and Drawings prepared by Pritchard Themis (2023) which will alleviate the risk of light disturbance to bats:

Hours of illumination:
Feature lighting of trees and on the west side facades of Tabor House and the Chapel will be turned off at curfew 22:30 all year round.

Light levels and type:
The specification and colour temperature of light treatments is chosen based on their tolerability by bats. UV-free LED luminaires will be used as they are ideal due to their sharp cut-off, lower intensity, and dimming capability. A warm white spectrum (no higher than 3000K) will be used to reduce the blue light component. The LED luminaires will also feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to the Bats. Bollards that sit within the buffer zone of the dark corridor will have a light output set to a down-rated driver to ensure a lower lux level.

Street lighting in the area behind Building F is within the buffer zone of the dark corridor and so lights here will be set with lower outputs to provide for the lower lux levels required. Column heights of lamp posts and direction of light.

Additionally, as bats most likely forage and commute in the unlit areas surrounding the Site, the following measures are in place to reduce the amount of light spillage where it is not needed:

- The height of lamp columns will be 6m or less.
- Lighting will be directed away from retained vegetation that provide foraging and commuting potential for bat species on site, i.e., the woodland habitat along the north and eastern boundaries.
- The use of uplighting will be restricted to the central route between the proposed buildings. Any uplighters will be fitted with louvres to control light spill. Downlighting will be used in locations close to the woodland and retained vegetation. Uplighting of trees and west side facades of Tabor House and the Chapel will be turned off at 22:30 during summer months.
- Bollards with a height of 800mm will be used on tertiary pedestrian routes, including the footpath along the woodland. The bollards along the woodland will have a spacing of 9-13m apart. The footpath surface will be of a natural material which does not create a reflection, minimising any potential upward reflection of the light.

A dark corridor is also proposed as part of the lighting plan, whereby the areas identified as of high importance/value for foraging and commuting bats will not be subject to any artificial lighting, thereby maintaining suitable light levels for the bat species. The dark corridor will encompass a core dark zone, and a buffer area with limited lighting, and will include the woodland habitat to the north and eastern extent of the site as well as the southern section of the Site around the existing buildings. Planting is proposed along these routes to provide foraging opportunities for bats and will comprise native wildflower meadows and fruit trees, which will replace the commuting and foraging areas lost to the development e.g., the holly treeline in the centre of the Site and the meadow grassland to the west of Tabor House, whilst the open spaces will be subject to the above listed mitigations from public and building lighting, and will provide a significant buffer habitat between the proposed dark corridor and the built area.

Furthermore, landscaping on site has been designed in such a way that it maintains connectivity not just throughout the site, but also to the surrounding areas and the wider urban landscape.

Finally, lighting from the surrounding environment, particularly at Milltown Road, could have the potential to impact on the commuting and foraging habitat for bats to the east. Particularly where the existing old stone wall will be lowered in parts. However, dense planting of native vegetation is to be planted here along the wall and under the existing mature tree canopy of the woodland, which will prevent any significant increase in light to the area, thus maintaining the dark corridor as proposed.

Recommendation 9: Wildflower Meadows

The Landscape Plan includes the reinstatement of wildflower meadows lost due to Construction works. It is recommended that all wildflower seeds will be Irish Provenance Certified Seed, from a reputable source such as Design by Nature (Wildflowers.ie). To maximise the biodiversity value of the landscaping at the Site, consideration has been made to the All-Ireland Pollinator Plan planting code (NBDC, 2022).

Recommendation 10: Biodiverse Roofs

Green roofs are proposed on the majority of the proposed buildings within the development Site to further enhance biodiversity at the Site. Per the landscape plan only native wildflower species will be utilised. This will provide another area suitable for foraging bats and birds.

Recommendation 11: Native Planting

The Landscape Plan also includes the reinstatement of trees, scrub, and hedgerows lost due to Construction works. Whilst higher value trees will be retained, the majority of trees planted as part of the proposed development will be native species and will comprise a mix of species already present on Site.

There are currently six elm trees on Site comprising 5 No. *Ulmus Procera* & 1 No. *Ulmus glabra* species. Following pre-planning application consultations with Dublin City Council (in the previous SHD application) it was recommended to consider the importance of retaining elm trees extant on the Site where possible.

As such, tree protection of this species has been a key tenet of the proposed design. Tag #220 *Ulmus procera* & tree tag #214 *Ulmus glabra* present on site are to be retained. It is proposed that the elms removed will be replaced with trees with better long-term prospects, as advised by CMK, due to the limited long-term potential of elm as a result of Dutch Elm Disease, which has had a significant impact on the native elm tree population.

The planting of native shrubs in the ground layer of the woodland habitat will provide cover and nesting opportunities for birds and small mammals. While the mixed planting of wildflowers, heritage lawn, fruit trees and green roofs will attract insects which is a food resource for multiple species including birds, bats, and hedgehog.

Recommendation 12: Bird Box/Swift Brick Scheme

A bird box/Swift brick scheme is proposed to be installed at the site of the proposed development and should be implemented with the landscape plan so as to enhance the potential bird nesting habitat in the area during its Operational Phase.

A total of 10 No. bird boxes are proposed to be installed on suitable trees around the site, to provide nesting habitat for breeding birds that may be using the Site. The location of bird boxes will be advised by a suitably qualified ecologist.

In addition, and as part of this scheme, it is proposed to include 70 No. Swift bricks. These nest bricks will be installed at least 5 metres above the ground, in safe areas where they will not be disturbed. As the bricks tend not to overheat, they can be placed on any aspect, N, S, E, W. Care will be taken to ensure no obstacles or plate glass windows are located below the bricks.

The Swift bricks are installed side by side, in sets of 10 on each block, as Swifts are a social nesting species, on suitable buildings within the proposed development.

Guidelines for the bird box scheme should also follow guidelines published by Swift Conservation Ireland, and those published by Birdwatch Ireland entitle "Saving Swifts" (2009/2010).

Recommendation 13: Bat Boxes

It is proposed to place a total of 3 No. bat boxes on suitable retained trees within the site. These will provide an important roost habitat for bat species which may be using the site. As such, a suitably qualified ecologist will be required to select and oversee the placement of these bat boxes in suitable locations, paying consideration factors such as aspect and height. These bat boxes, will work in tandem with the following, to ensure that the proposed development will not result in a significant adverse impact on bat species:

- The reinstatement of grassland habitat and wildflower meadows along edge habitat (e.g., woodland/scrub/hedgerow edges);
- The reinstatement of scrub and hedgerow habitat, with low intervention hedgerow management;
- The planting of multiple tree species within the Site;
- The bat friendly lighting plan (including dark corridor along Site margins with high value habitat for bats); and
- The planting of green roofs on select buildings to provide additional foraging and commuting habitat.

Recommendation 14: Insect Hotels

The landscape plan includes the insertion of 2 No. insect hotels in select areas around the Site, during its Operational Phase. Insect hotels should ideally be located in areas that are destined to be undisturbed, such as the areas bounding the perimeter where dense scrub vegetation is proposed.

Recommendation 15: Understorey with Woodland

In order to preserve the boundary woodland, which comprises multiple species in the canopy layer, it is proposed to include a dense understory layer along the perimeter of the Site in the northern and eastern boundaries where the woodlands are located. Said understory is to comprise of native species such as Bramble (*Rubus fructicosus)*, Common Dogwood (*Cornus sanguinea)*, Common Hawthorn (*Crataegus monogyna)*, Common Holly, Elder and Guelder Rose (*Viburnus opulus)*.

These will provide a great source of nectar and pollen further enhancing biodiversity within the site, and limit access to these wilder areas, whilst also providing an aesthetic function. In addition, the understory will provide suitable habitat for small mammals to commute and forage safely, whilst also connecting the Site to the wider ecological landscape.

Recommendation 16: Log Piles for invertebrates and fauna

Piles of logs and other woody vegetation arising from the proposed tree felling will be left in suitable secluded margins of the site where they will remain undisturbed. These will provide habitat for Common Frog and small mammals such as Hedgehog and Pygmy Shrew. These

areas of woody debris will also benefit local invertebrate species through the provision of shelter and food sources.

Recommendation 17: Low Intervention Woodland Understorey Management

The existing woodland understorey areas proposed to be retained within the site within the woodland along its outer margins, will be managed in a way that maximises the ecological value they provide at the site, with habitat connectivity maintained along the margins of the site; connecting the various in the area.

This connectivity is vital for wildlife such as birds, bats, mammals, and insect pollinators in a human landscape such as that which will be provided by the proposed development.

Additionally, by managing scrub/understorey areas more naturally, they will provide more in terms of biodiversity; through increased plant diversity, increase provision of food resources and higher quality shelter to wildlife inhabiting and commuting through the area.

It is acknowledged that there will be significant landscaping undertaken at the Site, resulting in changes to the nature of some of the woodland understorey habitats found on Site. For the woodland understorey areas running along the outer margins of the Site, the following management approach is proposed to maximise their biodiversity value and offset the loss of any sections of existing understorey/scrub habitat at the Site.

- The woodland understorey located along the outer boundaries of the site will, as much as is practicable, link up with each other. The provision of an almost continuous vegetative margin around the site; through planted scrub and trees, will maintain habitat connectivity with the surrounding environment.
- The understorey areas along the outermost sections of the site will be maintained in a wild state as dense, scrub habitat with minimal intervention. This will recreate the natural scrub habitat conditions present within the existing woodland.
- Where trimming of dense scrub understorey needs to occur, delay trimming as late as possible – until January and February as the surviving berry crop will provide valuable food for wildlife. The earlier this is cut; the less food will be available to help birds and other wildlife survive through the winter. Any scrub/understorey cutting will be done outside of the nesting season (March 1st-August 31st) and due consideration of the Wildlife Act 1976 (as amended) needs to be taken.
- Where possible, minimise the frequency woodland understorey areas are cut, if at all, (as cutting annually stops the scrub species flowering and fruiting) and cut in a three year rotation rather than all at once - this will ensure some areas of dense vegetation will always flower (Blackthorn in March, Hawthorn in May etc.).
- Where they occur naturally, Bramble and Ivy should be allowed to grow, as they provide key nectar and pollen sources in summer and autumn.

Methods to Avoid:

Woodland understorey will not be over-managed. Tightly cut vegetation means there are fewer flowers and berries, thus reducing available habitats, feeding sources and suitable nesting Sites.

Scrub/understorey vegetation will not be cut between March 1st and August 31st inclusive. It is both prohibited (except under certain exemptions) and very damaging for birds as this is the period, they will have vulnerable nests containing eggs and young birds. Red-listed bird species such as Yellowhammer in particular nest up until the end of August.

Monitoring

Pre-construction Phase Monitoring

Ecologist – Pre-construction Phase Bat Roost Assessment

Pre-construction bat roost assessment surveys will be conducted by a suitably qualified Bat Ecologist 2-3 months before site clearance is due to begin within an appropriate time of year; to confirm the status of the site with regard to bat roosts.

This will focus on the potential for bats to roost within the loft space of Tabor House in particular, which is accessible to bats via roof damage, but also the Chapel and the buildings marked for demolition. The trees proposed for removal at the site will also be reassessed for their roost potential; to ensure that any changes to the status of the trees since the Enviroguide surveys are accounted for (trees can deteriorate in quality over time and their bat roost potential improves as a result).

This will ensure that there will be sufficient time to comply with all licensing requirements and that the necessary actions are undertaken to protect bat populations, which may be present, prior to the commencement of construction.

Construction Phase Monitoring

Ecologist – Building Watching Brief for Bats

An Ecologist will be instructed as an Ecological Clerk of Works to supervise the renovation of the Chapel and Tabor House in the event that bats are found during works on the roofs and loft spaces in particular. Should any bats be found, all works in that area will cease and a derogation licence may be required.

Operational Phase Monitoring

Bat Ecologist – Public Lighting

Once the development has been completed a suitably qualified bat ecologist will be required to assess the night-time lighting in place at the site and will make recommendations where required to mitigate any impacts to local bats. The bat ecologist will consult this report to understand the priority areas for bat commuting/foraging at the site.

Bat Ecologist – Bat Monitoring Surveys

Following guidelines (NPWS, 2016) bat use of the site will be monitored for one-year post construction to evaluate implemented measures to provide foraging and commuting habitat and roosting sites for bats. The monitoring should be carried out by a qualified Ecologist and

take place in the summer months of May – September in the form of activity surveys including transects and automatic static detectors, the detailed scope to be agreed with Dublin City Council Parks Department.

Chapter 9: Landscape and Visual Impact

Mitigation Measures

Construction Phase

Apart from (a) the measures incorporated in the proposed design (see 9.6.2 below), (b) the measures for tree protection (as recommended in the Tree Protection Strategy prepared by CMK Horticulture & Arboriculture Ltd) and biodiversity protection (as recommended in Chapter 8), and (c) standard best practice construction site management (e.g. erection and maintenance of site hoarding, orderly storage of materials and vehicles, etc.), no additional mitigation measures are proposed for townscape and visual effects.

Operational Phase

The proposal has been subject to detailed environmental impact assessment, including of potential townscape and visual effects, throughout the design and pre-planning process – for the previous SHD application and the current application. Informed by this assessment, the proposal has been designed to avoid causing any significant negative townscape and visual effects. Important mitigation measures built into the proposal from the outset include:

- The retention of the tree/ woodland belt inside the north and east boundaries as part of the scheme's main open space (not all of the trees, but most of the better quality trees – a sufficient volume to retain the tree belt as a feature of the landscape), with the buildings (Block A and C) set back well behind the trees. This would (a) retain the site's 'parkland' character in views from Sandford Road and Milltown Park, (b) provide screening of the buildings, and (c) lend maturity, character and landscape/ visual amenity to the new neighbourhood.

- The retention of Tabor House and the Chapel on the site. The dual intention was to (a) preserve these assets in the interest of cultural/ architectural heritage conservation, and (b) to lend maturity, character and landscape/ visual amenity to the new neighbourhood.

- Retention of trees, setting back of the buildings (Block C) and modulation of building height along the north (Norwood Park) boundary. Block C is set back from the boundary behind a linear open space incorporating the retained trees, to function as a landscape/ visual buffer between the building and the nearest houses of Norwood Park. The northern range of Block C is also broken into four volumes of two, four, six and eight storeys. The intention of this articulated form is to reduce the perception of massing/height in the views from Norwood Park.

- Positioning of lower buildings (Block E and the lower volume of Block D) inside the west (Cherryfield Avenue) boundary. The proposed Block E terraces are three storeys and are positioned against the west boundary in a back-to-back

arrangement with the Cherryfield Avenue houses. This is a typical suburban arrangement. The Block D apartment building steps down from five to three storeys towards the boundary, with the same intention of minimising the intrusion of the building in views from Cherryfield Avenue.

- High quality design and materials. The proposed scheme is conceived as a higher density neighbourhood of the highest architectural and landscape quality, commensurate with the qualities of the context. Therefore, even when visible from the surroundings (as a higher density development in a low density area unavoidably would be), the buildings and landscape would be attractive. The townscape character and views would change, but their quality would be maintained.

In addition to these decisions taken at the start of the design process, an important mitigation measure (taken during the SHD pre-planning process) was the reduction in scale of Block A1. This element of the proposal is deliberately tall in order to achieve place-making and townscape legibility gains. However, at 13 No. storeys (as originally proposed), the step up in height from the surrounding built form was considered by DCC to be excessive and the building excessively intrusive in views. Block A1 was therefore reduced to 10 No. storeys and set back several metres further from the Sandford Road boundary (the setting back was also to improve the open space inside the north boundary). The result is that the building would be visible and recognisable from the surrounding area (i.e. it would function as a landmark) without dominating or otherwise harming its context.

A further change to mitigate against visual effects was the removal of four units at the southern end of Block E, to the rear of the Cherryfield Avenue houses. This was a condition of the permission granted by ABP for the SHD scheme. This change (the shortening of Block E with the loss of four duplex units) has been retained for the LRD application.

No further mitigation measures are recommended.

Monitoring

The retention of existing trees on site is an important element of the proposal. Any unplanned loss of trees beyond that considered and designed for in the subject application could result in negative townscape and visual impacts.

The planning application is accompanied by a Tree Protection Strategy prepared by CMK Horticulture & Arboriculture Ltd., which includes the requirement for (a) a Site Arborist tobe appointed for the project, (b) the monitoring of tree protection measures by the Site Arborist throughout construction, (c) supervision by the Site Arborist of all works in the vicinity of trees, and (d) the specification by the Site Arborist of remedial works in the event of any damage to trees. The strategy also requires a re-survey of the retained trees post construction to ensure their survival in optimum condition.

Chapter 10: Land, Soils and Geology

Mitigation Measures

Construction Phase

Stripping of Topsoil

Stripping of topsoil will be carried out in a controlled and carefully managed way and coordinated with the proposed staging for the development. As noted previously, approximately 40% of striped topsoil will be reused on site (incorporated into landscaping) with remaining topsoil reused on another site as a by-product in accordance with Regulation 27 of the EC (Waste Directive) Regulations (2011) or disposed of at a licenced waste receiving facility (subject to the approval of the facility operator in accordance with their facility permit or licence).

At any given time, the extent of topsoil strip (and consequent exposure of subsoil) will be limited to the immediate vicinity of active work areas.

Topsoil stockpiles will be protected for the duration of the works and not located in areas where sediment laden runoff may enter existing surface water drains.

Topsoil stockpiles will also be located so as not to necessitate double handling.

Excavation of Subsoil Layers

The need to excavate existing subsoil layers has been minimised as the proposed ground floor levels and external pavement levels have been designed to follow the natural topography of the site. The basement excavation has also been minimised in as far as the structural and functional constraints will allow.

Disturbed subsoil layers will be stabilized as soon as practicable (e.g. backfill of service trenches, construction of road capping layers, concrete blinding of the basement excavation, construction of building foundations and completion of landscaping). The duration that subsoil layers are exposed is to be minimised in order to mitigate against weather effects.

Similar to comments regarding stripped topsoil, stockpiles of excavated subsoil material will be protected for the duration of the works. Stockpiles of subsoil material will be located separately from topsoil stockpiles.

Measures will be implemented to capture and treat sediment laden surface water runoff (e.g. surface water inlet protection and earth bunding adjacent to open drainage ditches).

Imported Fill

importation of fill to site will be required. Materials imported to site for use as fill will be natural stones sourced from locally available quarries or materials that have been approved as by-products by the EPA in accordance with the EPA's criteria for determining a material is a by-product, per the provisions of Regulation 27(1) of the European Communities (Waste Directive) Regulations, 2011.

No large or long-term stockpiles of fill material will be held on the site. At any time, the extent of fill material held on site will be limited to that needed in the immediate vicinity of the active work area.

Smaller stockpiles of fill, where required, will be suitably protected to ensure no sediment laden runoff enters existing surface water drains. Such stockpiles are to be located in order to avoid double handling.

Construction Traffic

Earthworks plant and vehicles delivering construction materials to site will be confined to predetermined haul routes around the site and designated delivery areas. This mitigates the risk of rutting and deterioration of the topsoil layer and any exposed subsoil layers.

Vehicle wheel wash facilities will be installed in the vicinity of any site entrances and road sweeping implemented as necessary in order to maintain the road network in the immediate vicinity of the site.

Dust suppression measures (e.g. dampening down) will be implemented as necessary during dry weather periods.

Accidental Spills and Leaks

In order to mitigate against spillages contaminating underlying soils, all oils, fuels, paints and other chemicals will be stored in a secure bunded hardstand area.

Refuelling and servicing of construction machinery will take place in a designated hardstand area (when not possible to carry out such activities off site).

A response procedure will be put in place to deal with any accidental pollution events and spillage kits will be available and construction staff will be familiar with the emergency procedures and use of the equipment. Concrete batching will take place off site when possible to minimise the risk of ground contamination on site during the concrete batching process.

Geological Environment

No mitigation measures are proposed in relation to the geological environment.

Risks to Human Health

- Contractor / Project Supervisor Construction Stage (PSCS) to implement safe systems of construction including but not limited to battering the sides of trench excavations and installation of excavation shoring systems.

- Full precautions to be taken when working in vicinity of boundary structures for protection of same. Method and sequence of construction to be agreed with design team prior to commencement of work. Contractor's Temporary Works Designer to prepare Method Statement and Temporary Works Cert to ensure stability of excavations and adjacent structures.

- Contractor to obtain utility company network plans and arrange observation as required.
- Contractor to locate and record all services on site prior to commencement of excavations.
- Contractor to prepare and implement a Construction Traffic Management Plan that will be agreed with the Design Team and local authority and which will ensure the safety of the public during construction (note, an outline Traffic Management Plan is included in the Preliminary Construction Management Plan).
- Contractor must supervise vehicle movements to and from the site during construction in order to ensure that this traffic management plan is fully implemented. Plan to include deliveries to the site, staff parking, works outside the defined site such as utility connections.
- Public pedestrian routes to be established at site entrance as required.
- All personnel using machinery/plant to have undergone training on the use of said machinery/plant. Ongoing site supervision to be undertaken to ensure all use of machinery/plant is in accordance with the training undertaken.
- Contractor's employees to be provided with all required PPE in accordance with Safety, Health and Welfare at Work Act, 2005.
- Contractor to prepare a Dust Minimisation Plan with reference to the mitigation measures outlined in Chapter 12.0 (Air Quality and Climate).

Operational Phase

On completion of the construction phase, no further mitigation measures are proposed as there will be no further impact on soils and the geological environment.

Monitoring

Proposed monitoring during the construction phase in relation to the soil and geological environment are as follows:

- Adherence to Construction Management Plan (note, a *Preliminary Construction Management Plan* and *Outline Construction and Environment Management Plan* are included with the planning application documents which must be adhered to).
- Construction monitoring of the works (e.g. inspection of existing ground conditions on completion of cut to road formation level in advance of placing capping material, stability of excavations etc.).
- Inspection of fuel / oil storage areas.

- Monitoring cleanliness of adjacent road network, implementation of dust suppression and provision of vehicle wheel wash facilities.

- Monitoring of contractor's stockpile management (e.g. protection of excavated material to be reused as fill, protection of soils for removal from site from contamination).

No ongoing monitoring is proposed on completion of the construction phase.

Chapter 11: Water-Hydrology

Mitigation Measures

Construction Phase

The following measures are proposed during the construction phase to mitigate against risks to the surrounding hydrological environment:

- A *Preliminary Construction Management Plan* and *Outline Construction Environmental Management Plan* have been prepared as part of this planning application and will be implemented during the construction phase. Site inductions will include reference to the procedures and best practice as outlined in the *Preliminary Construction Management Plan* and *Outline Construction Environmental Management Plan*.

- Weather conditions and typical seasonal weather variations will also be taken account of when planning stripping of topsoil and excavations with an objective of minimizing soil erosion.

- In order to mitigate against spillages contaminating the surrounding surface water and hydrogeological environments, all oils, fuels, paints and other chemicals will be stored in a secure bunded hardstand area. Refuelling and servicing of construction machinery will take place in a designated hardstand area (where not possible to carry out such activities off site).

- Concrete batching (for use in in situ concrete pours) will take place off site and wash down and wash out of concrete trucks will take place off site (at authorised concrete batching plant in full compliance with relevant planning and environmental consents).

- The construction compound will include adequate staff welfare facilities including foul drainage and potable water supply. Foul drainage discharge from the construction compound will be tankered off site to a licensed facility until a connection to the public foul drainage network has been established.

- The construction compound's potable water supply shall be protected from contamination by any construction activities or materials. The contractor shall obtain a temporary connection from the existing water supply network along Milltown Road / Sandford Road in accordance with Irish Water requirements for same.

Operational Phase

The design of proposed site levels (roads, FFL etc.) has been carried out to ensure the proposed development is elevated and set in such a way as to avoid concentrating additional surface water flow in any particular location.

Following the *Site-Specific Flood Risk Assessment*, it has been determined that the proposed development is located in Flood Zone C as defined by the Guidelines i.e. proposed development is considered to have the required level of flood protection up to and including the 1% AEP flood event.

Proposed mitigation measures to address residual flood risks are summarised below;

- Proposed drainage system to be maintained on a regular basis to reduce the risk of a blockage.

- Overland flow routes, directed towards open space areas, are identified / established in the event of storms exceeding the 1% AEP design capacity of the attenuation system.

The development's basement shall not have an adverse effect on the existing ground water regime as the basement extends into the low porosity boulder clays (refer to DBFL's *Basement Impact Assessment* for the proposed development).

Surface water runoff from the site will be attenuated to the greenfield runoff rate as outlined in the Greater Dublin Strategic Drainage Study (GDSDS). Surface water discharge rates will be controlled by a Hydrobrake type vortex control device in conjunction with below ground attenuation storage.

The following methodologies are being implemented as part of a SuDS surface water treatment train approach:

- Permeable paving in driveway areas.

- Surface water runoff from duplex roofs will be routed to the proposed surface water pipe network via the porous aggregates beneath permeable paved driveways.

- Surface water runoff from apartment roofs and podium areas will be captured by green/blue roofs (sedum blanket/drainage board) prior to being routed to the piped surface water drainage network.

- Surface water runoff from the majority of site's internal street network will be directed to the proposed pipe network via tree pits or other SUDS features (with overflows to conventional road gullies). Part of the site's internal street network (adjacent to Block E) drains via 2 No. bio-retention areas. In limited instances, surface water runoff from paved areas will be directed to the proposed pipe network via conventional road gullies.

- Attenuation of the 30 and 100-year return period storms (refer to DBFL Infrastructure Design Report).

- Installation of a Hydrobrake (limiting surface water discharge from the site to 2.0 l/sec/ha).

- Surface water discharge will also pass via a fuel / oil separator (sized in accordance with permitted discharge from the site).

A contract will be entered into with a suitably qualified contractor for maintenance of the attenuation system, Hydrobrake and full retention fuel / oil separator noted above.

No specific mitigation measures are proposed in relation to foul drainage however, all new foul drainage lines will be pressure tested and be subject to a CCTV survey in order to identify any possible defects prior to being made operational (in accordance with Irish Water's QA Field Inspection Requirement Manual).

No specific mitigation measures are proposed in relation to water supply, however, water conservation measures such as dual flush water cisterns and low flow taps will be included in the design.

The potential impact of climate change has been allowed for as follows;

- Pluvial flood risk - attenuation storage design allows for a 20% increase in rainfall intensities.

- Pluvial flood risk - drainage system design allows for a 20% increase in flows.

- Provision of minimum freeboard (500mm) from 1% AEP as required by GDSDS (mitigation against impact of climate change).

It is also noted that AWN's *Hydrological & Hydrogeological Risk Assessment* concludes that:

> "*During operation the potential for an impact to ground or storm water is negligible and there are measures incorporated within the proposed development to manage stormwater run-off quality. These specific measures will provide further protection to the receiving soil and water environments*."

Monitoring

Proposed monitoring during the construction phase in relation to the water and hydrogeological environment are as follows:

- Implementation of measures included in the *Preliminary Construction Management Plan* and *Outline Construction and Environment Management Plan* included in application documents).

- Inspection of fuel / oil storage areas.

- Monitoring cleanliness of adjacent road network, implementation of dust suppression and vehicle wheel wash facilities.

During the operational phase an inspection and maintenance contract are to be implemented in relation to the proposed drainage network, Class 1 full retention fuel / oil separator, hydrobrakes and attenuation devices).

Chapter 12: Air Quality and Climate

Mitigation Measures

Construction Phase

Air Quality

The pro-active control of fugitive dust will ensure the prevention of significant emissions, rather than an inefficient attempt to control them once they have been released. The main contractor will be responsible for the coordination, implementation and ongoing monitoring of the Dust Management Plan. The key aspects of controlling dust are listed below. Full details of the Dust Management Plan can be found in Appendix 12.1. These measures will be incorporated into the *Construction Environmental Management Plan* (CEMP) prepared for the site. An *Outline CEMP* has been prepared by Thornton O'Connor Town Planning and is enclosed separately.

The *Dust Management Plan* notes the following measures in summary:

- Prior to demolition blocks will be soft stripped inside buildings (retaining walls and windows in the rest of the building where possible, to provide a screen against dust).

- During the demolition process, water suppression will be used, preferably with a hand-held spray. Only the use of cutting, grinding or sawing equipment fitted or used in conjunction with a suitable dust suppression technique such as water sprays/local extraction will be used.

- Drop heights from conveyors, loading shovels, hoppers and other loading equipment will be minimised, if necessary fine water sprays should be employed.

In addition, a *Preliminary Construction Management Plan* has been prepared by DBFL Consulting Engineers and is enclosed. In summary, the measures which will be implementedwill include:

- The Contractor shall prepare a dust minimisation plan (including a documented system for managing site practice with regard to dust and specification of effective measures to deal with any complaints received) which shall be communicated to all site staff.

- Hard surface roads will be swept to remove mud and aggregate materials from their surface while any un-surfaced roads will be restricted to essential site traffic.

- Any road that has the potential to give rise to fugitive dust must be regularly watered, as appropriate, during dry and/or windy conditions.

- Vehicles using site roads will have their speed restricted, and this speed restriction must be enforced rigidly (on any un-surfaced site road, this will be 20 kph and on hard surfaced roads as site management dictates).

- Vehicles delivering material with dust potential (soil, aggregates etc.) will be enclosed or covered with tarpaulin at all times to restrict the escape of dust.

- Public roads outside the site will be inspected on a daily basis for cleanliness and cleaned as necessary.

- Debris, sediment, grit etc. captured by road sweeping vehicles is to be disposed off-site at a licensed facility.

- Vehicles exiting the site shall make use of a wheel wash facility where appropriate prior to entering onto public roads.

- Material handling systems and site stockpiling of materials will be designed and laid out to minimise exposure to wind. Water misting or sprays will be used as required if particularly dusty activities are necessary during dry or windy periods.

- During movement of materials both on and off-site, trucks will be stringently covered with tarpaulin at all times. Before entrance onto public roads, trucks will be adequately inspected to ensure no potential for dust emissions.

At all times, these procedures will be strictly monitored and assessed. In the event of dust nuisance occurring outside the site boundary, movements of materials likely to raise dust would be curtailed and satisfactory procedures implemented to rectify the problem before the resumption of construction operations.

Climate

Embodied carbon of materials and construction activities will be the primary source of climate impacts during the construction phase. Measures to reduce the embodied carbon of the demolition works include:

- Creating a demolition and construction program which allows for sufficient time to determine reuse and recycling opportunities for demolition wastes (69% recycling of demolition waste proposed in Section 7.1 of the proposed development resource and waste management plan).

- Appointing a suitably competent demolition contractor who will undertake a pre-demolition audit detailing resource recovery best practice and identify materials/building components that can be reused/recycled.

- Materials will be reused on site within the new build areas where possible.

During the construction phase the following best practice measures shall be implemented on site to prevent significant Greenhouse Gas emissions and reduce impacts to climate:

- Prevention of on-site or delivery vehicles from leaving engines idling, even over short

periods.

- Ensure all plant and machinery are well maintained and inspected regularly.
- Minimising waste of materials due to poor timing or over ordering on site will aid to minimise the embodied carbon footprint of the site.
- Sourcing materials locally where possible to reduce transport related CO_2 emissions.

Operational Phase

Air Quality

There is no mitigation required for the operational phase of the development as impacts to air quality are predicted to be neutral and imperceptible.

Climate

A number of measures have been incorporated into the design of the development in order to mitigate against the impacts of future climate change. For example, adequate attenuation and drainage have been incorporated into the design of the development to avoid potential flooding impacts as a result of increased rainfall events in future years. These measures have been considered when assessing the vulnerability of the proposed development to climate change (see Section **Error! Reference source not found.**).

The proposed development has been designed to reduce the impact on climate as a result of energy usage during operation. The *Climate Action, Energy and Sustainability Report* prepared by OCSC Consulting and submitted under separate cover with this planning application details a number of incorporated design mitigation measures that have been incorporated into the design of the development to reduce the impact on climate wherever possible. Such measures included in the proposed development to reduce the impact to climate from energy usage are:

- The development will be in compliance with the requirements of the Near Zero Energy Building (NZEB) Standards.
- A renewable energy rating (RER) of 20% will be achieved to comply with Part L (2021) of the NZEB regulations.
- A Building Energy Rating (BER) of A2/A3 is being targeted.
- Improved building thermal transmittance (U-Values), air permeability and thermal bridging (see Section 8.1.1 of the Climate Action, Energy and Sustainability Report for detail).
- Use of solar PV panels.
- Use of air source heat pumps (Minimum COP of 2.5).

These above identified measures will aid in reducing the impact to climate during the

operational phase of the proposed development in line with the goals of the *Dublin City Development Plan 2022 – 2028* and CAP23.

Monitoring

Construction Phase

Monitoring of construction dust deposition along the site boundary to nearby sensitive receptors during the construction phase of the proposed development is recommended to ensure mitigation measures are working satisfactorily. This can be carried out using the Bergerhoff method in accordance with the requirements of the German Standard VDI 2119. The Bergerhoff Gauge consists of a collecting vessel and a stand with a protecting gauge. The collecting vessel is secured to the stand with the opening of the collecting vessel located approximately 2m above ground level. The TA Luft limit value is 350 mg/(m2*day) during the monitoring period between 28 - 32 days.

Operational Phase

There is no monitoring recommended for the operational phase of the development.

Chapter 13: Noise and Vibration

Mitigation Measures

Construction Stage

With regard to construction activities, best practice control measures for noise and vibration from construction sites are found within BS 5228 (2009 +A1 2014) Code of Practice for Noise and Vibration Control on Construction and Open Sites Parts 1 and 2. Whilst construction noise and vibration impacts are expected to vary during the construction phase depending on the distance between the activities and noise sensitive buildings, the contractor will ensure that all best practice noise and vibration control methods will be used, as necessary in order to ensure impacts at off-site Noise Sensitive Locations are minimised.

The best practice measures set out in BS 5228-1 and BS 5228-2 includes guidance on several aspects of construction site mitigation measures, including, but not limited to:

- selection of quiet plant;
- noise control at source;
- screening; and,
- liaison with the public.

Construction activities will vary depending on the phase of construction. The following matrix identifies which mitigation measures are applicable to the various phases.

Construction Phase		Mitigation Measure			
		Selection of quiet plant	Noise control at source	Piling	Screening
Site Preparation		X	X		X
Demolition		X	X		X
Foundations	Option A	X	X		X
	Option B	X	X	X	X
	Option C	X	X		X
General Construction		X	X		X
Landscaping		X	X		X
		Liaison with Public	Project Programme	Monitoring	General Measures
Site Preparation		X	X	X	X
Demolition		X	X	X	X
Foundations	Option A	X	X	X	X
	Option B	X	X	X	X
	Option C	X	X	X	X
General Construction		X	X	X	X
Landscaping		X	X		X

Selection of Quiet Plant

The potential for any item of plant to generate noise should be assessed prior to the item being brought onto the site. The least noisy item will be selected wherever possible. Should a particular item of plant already on the site be found to generate high noise levels, the first action should be to identify whether or not said item can be replaced with a quieter alternative.

Noise Control at Source

If replacing a noisy item of plant is not a viable or practical option, consideration will be given to noise control "at source". This refers to the modification of an item of plant or the application of improved sound reduction methods in consultation with the supplier. For example, resonance effects in panel work or cover plates will be reduced through stiffening or application of damping compounds; rattling and grinding noises can often be controlled by fixing resilient materials in between the surfaces in contact.

Referring to the potential noise generating sources for the works under consideration, the following best practice migration measures will be considered:

- The lifting of bulky items, dropping and loading of materials will be restricted to normal working hours.
- Mobile plant should be switched off when not in use and not left idling.
- For piling plant, noise reduction can be achieved by enclosing the driving system in an acoustic shroud.

- For concrete mixers, control measures will be employed during cleaning to ensure no impulsive hammering is undertaken at the mixer drum.
- For all materials handling ensure that materials are not dropped from excessive heights, lining drops chutes and dump trucks with resilient materials.
- Demountable enclosures can also be used to screen operatives using hand tools and will be moved around site as necessary.
- All items of plant will be subject to regular maintenance. Such maintenance can prevent unnecessary increases in plant noise and can serve to prolong the effectiveness of noise control measures.

Piling

Piling is the construction activity which is most likely to cause disturbance. General guidance in relation to piling is outlined in the following paragraphs.

Piling programmes will be arranged so as to control the amount of disturbance in noise and vibration sensitive areas at times that are considered of greatest sensitivity. If piling works are in progress on a site at the same time as other works of construction or demolition that themselves may generate significant noise and vibration, the working programme will be phased so as to prevent unacceptable disturbance at any time.

Prior to construction the planner, developer, architect and engineer, as well as the local authority, will be made aware of the proposed method of working of the piling contractor. The piling contractor will in turn have evaluated any practicable and more acceptable alternatives that would economically achieve, in the given ground conditions, equivalent structural results.

On typical piling sites the major sources of noise are essentially mobile and the noise received at any control points will therefore vary from day to day as work proceeds. The duration of piling works is typically relatively short in relation to the length of construction work as a whole, and the amount of time spent working near to noise sensitive areas can represent only a part of the piling period.

Noise reduction can be achieved by enclosing the driving system in an acoustic shroud. For steady continuous noise, such as that generated by diesel engines, it may be possible to reduce the noise emitted by fitting a more effective exhaust silencer system or utilising an acoustic canopy to replace the normal engine cover. Impact noise when piling is being driven can be reduced by introducing a non-metallic dolly between the hammer and the driving helmet.

Screening by barriers and hoardings is less effective than total enclosure but can be a useful adjunct to other noise control measures. For maximum benefit, screens should be close either to the source of noise (as with stationary plant) or to the listener. Removal of a direct line of sight between source and listener can be advantageous both physically and psychologically. In certain types of piling works there will be ancillary mechanical plant and equipment that may be stationary, in which case, care should be taken in location, having due regard also for access routes. When appropriate, screens or enclosures should be provided for such equipment.

Screening

Screening is an effective method of reducing the noise level at a receiver location and can be used successfully as an additional measure to all other forms of noise control. It is understood that the existing concrete perimeter wall will remain during the construction process and provide a degree of screening.

In addition, careful planning of the site layout will also be considered. The placement of site buildings such as offices and stores will be used, where feasible, to provide noise screening when placed between the source and the receiver.

Liaison with the Public

A designated environmental liaison officer will be appointed to site during construction works. Any noise complaints will be logged and followed up in a prompt fashion by the liaison officer. In addition, where a particularly noisy construction activity is planned or other works with the potential to generate high levels of noise, or where noisy works are expected to operate outside of normal working hours etc., the liaison officer will inform the nearest noise sensitive locations of the time and expected duration of the noisy works.

Project Programme

The phasing programme will be arranged so as to control the amount of disturbance in noise and vibration sensitive areas at times that are considered of greatest sensitivity. During excavation/ piling or other high noise generating works are in progress on a site at the same time as other works of construction that themselves may generate significant noise and vibration, the working programme will be phased so as to prevent unacceptable disturbance at any time.

Operational Phase

Mechanical Plant Noise

As part of the detailed design of the development, plant items with appropriate noise ratings and, where necessary, appropriately selected remedial measures (e.g. enclosures, silencers etc.) will be specified in order that the adopted plant noise criteria is achieved at the façades of noise sensitive properties, including those within the development itself.

Chapter 13 has specified cumulative plant noise limits at the nearest noise sensitive properties that must be achieved in order to ensure the impact is acceptable. To achieve these noise limits consideration will be given, at the detailed design stage, to a variety of mitigation measures and forms of noise control techniques. Some examples of these measures are as follows:

- Reduced/quiet modes;
- Duct mounted attenuators on the atmosphere side of air moving plant;
- Splitter attenuators or acoustic louvres providing free ventilation to internal plant areas;

- Solid barriers screening any external plant; and
- Anti-vibration mounts on reciprocating plant.

In addition to the above, it is proposed that the following practices are adopted to minimise potential noise disturbance for neighbours.

- All mechanical plant items e.g. motors, pumps etc. shall be regularly maintained to ensure that excessive noise generated any worn or rattling components is minimised.
- Any new or replacement mechanical plant items, including plant located inside new or existing buildings, shall be designed so that all noise emissions from site do not exceed the noise limits outlined in Chapter 13.

Entertainment Noise

The community and cultural spaces that have potential for entertainment noise will be designed at a later stage however to ensure no negative impact associated with these spaces, the following acoustic measures may be incorporated.

Measure	Description
Appropriate Linings	Building constructions (e.g. external walls) should be reviewed in order to determine whether additional measures are required in order to control noise emissions from the highlighted areas. These measures would typically consist of independent wall linings where appropriate.
Glazing	Glazing will be required to offer an appropriate sound insulation performance in order to minimise noise break-out from refurbished and new buildings.
Doors	Access to noisy internal areas from external locations may require acoustic lobbies with double doors separated by an appropriate distance.
Ventilation	Ventilation should be supplied by suitably attenuated mechanical means. Once details of the proposed building services installation are known, consideration should be given to the potential for entertainment noise breakout to atmosphere via ductwork; the potential for services noise transfer to both external and internal areas.
Audio System	The audio systems should feature a distributed array of loudspeakers arranged such that the coverage zones are tightly controlled and all patrons are within the "near field" of one or more loudspeakers. This will limit the amount of sound energy incident upon the external walls and in turn help to control the amount of noise transfer and break-out. This design is critical also for external area (e.g. secret garden area) with potential for amplified music. Before the operation of any such external system, music noise levels will be calibrated to control noise levels within the design criteria in Section 13.3.2.1.

Noise Level	Once the measures outlined above are implemented it would be recommended that a maximum permissible noise level be set for each venue / location (i.e. a noise level that should not be exceeded in order to ensure that noise emissions are kept to an acceptable level).

Inward Noise Impact – Acoustic Design Statement Part 2

Chapter 13 identified some facades that will be provided with glazing and ventilation that achieves minimum sound insultation performances (such as Block A and east of Block F). Other facades in the development have no minimum requirement for sound insulation.

The assessment has demonstrated that the recommended internal noise criteria will be achieved through consideration of the proposed façade elements at the design stage. The calculated glazing and ventilation specifications are preliminary and are intended to form the basis for noise mitigation at the detailed design stage. Consequently, these may be subject to change as the project progresses. There is no acoustic requirement relating to the creche façade. Appropriate internal noise levels are predicted to be achieved with standard double glazing and ventilators.

Monitoring

Construction Phase

The contractor will be required to ensure construction activities operate within the noise and vibration limits set out within this assessment. The contractor will be required to undertake regular noise and vibration monitoring at locations representative of the closest sensitive locations to ensure the relevant criteria are not exceeded.

Noise monitoring should be conducted in accordance with the International Standard ISO 1996: 2017: *Acoustics – Description, measurement and assessment of environmental noise.*

Vibration monitoring should be conducted in accordance with BS 6472:2008 *Guide to evaluation of human exposure to vibration in buildings. Vibration sources other than blasting* (human disturbance) and BS ISO 4866:2010 *Mechanical vibration and shock. Vibration of fixed structures. Guidelines for the measurement of vibrations and evaluation of their effects on structures* (building damage).

Operational Phase

Noise or vibration monitoring is not required once the development is operational.

Chapter 14: Material Assets - Waste Management

Mitigation Measures

Construction Stage

A project specific Resource & Waste Management Plan (RWMP) has been prepared in line with the requirements of the requirements of the *EPA, Best Practice Guidelines for the*

Preparation of Resource and Waste Management Plans for Construction & Demolition Projects' (2021) a) and is included as Appendix 14.1. The mitigation measures outlined in the RWMP will be implemented in full and form part of mitigation strategy for the site. The mitigation measures presented in this RWMP will ensure effective waste management and minimisation, reuse, recycling, recovery and disposal of waste material generated during the excavation and construction phases of the proposed development.

- Prior to commencement, the appointed Contractor(s) will be required to refine / update the RWMP (Appendix 14.1) in agreement with Dublin City Council and in compliance with any planning conditions, or submit an addendum to the RWMP to Dublin City Council, detailing specific measures to minimise waste generation and resource consumption, and provide details of the proposed waste contractors and destinations of each waste stream.

- The Contractor will implement the RWMP throughout the duration of the proposed excavation and construction phases.

A quantity of topsoil and sub soil will need to be excavated to facilitate the proposed development. The Project engineers have estimated that 10,000m^3 of excavated material will need to be removed off-site. Correct classification and segregation of the excavated material is required to ensure that any potentially contaminated materials are identified and handled in a way that will not impact negatively on workers as well as on water and soil environments, both on and off-site.

In addition, the following mitigation measures will be implemented:

- Building materials will be chosen to 'design out waste';

- On-site segregation of waste materials will be carried out to increase opportunities for off-site reuse, recycling and recovery. The following waste types, at a minimum, will be segregated:

    - Concrete rubble (including ceramics, tiles and bricks);
    - Plasterboard;
    - Metals;
    - Glass; and
    - Timber.

- Left over materials (e.g. timber off-cuts, broken concrete blocks / bricks) and any suitable construction materials shall be re-used on-site, where possible; (alternatively, the waste will be sorted for recycling, recovery or disposal);

- All waste materials will be stored in skips or other suitable receptacles in designated areas of the site;

- Any hazardous wastes generated (such as chemicals, solvents, glues, fuels, oils) will also be segregated and will be stored in appropriate receptacles (in suitably bunded areas, where required);

- A Resource Manager will be appointed by the main Contractor(s) to ensure effective management of waste during the excavation and construction works;
- All construction staff will be provided with training regarding the waste management procedures;
- All waste leaving site will be reused, recycled or recovered, where possible, to avoid material designated for disposal;
- All waste leaving the site will be transported by suitably permitted contractors and taken to suitably registered, permitted or licenced facilities; and
- All waste leaving the site will be recorded and copies of relevant documentation maintained.

Nearby sites requiring clean fill material will be contacted to investigate reuse opportunities for clean and inert material, if required. If any of the material is to be reused on another site as by-product (and not as a waste), this will be done in accordance with Regulation 27 of the EC (Waste Directive) Regulations (2011-2020). EPA approval will be obtained prior to moving material as a by-product.

These mitigation measures will ensure that the waste arising from the construction phase of the proposed development is dealt with in compliance with the provisions of the Waste Management Act 1996, as amended, associated Regulations and the Litter Pollution Act 1997, and the EMR Waste Management Plan 2015 – 2021. It will also ensure optimum levels of waste reduction, reuse, recycling and recovery are achieved and will promote more sustainable consumption of resources.

Operational Stage

A project specific Operational Waste Management Plan (OWMP) has been prepared and is included as Appendix 14.2. The mitigation measures outlined in the OWMP will be implemented in full and form part of mitigation strategy for the site. Implementation of this OWMP will ensure a high level of recycling, reuse and recovery at the development. All recyclable materials will be segregated at source to reduce waste contractor costs and ensure maximum diversion of materials from landfill, thus achieving the targets set out in the EMR Waste Management Plan 2015 – 2021 and abiding by the DCC waste bye-laws.

- The tenants / operators / facilities management company(s) of the development during the operational phase will be responsible for ensuring and allocating personnel and resources, as needed – the ongoing implementation of this OWMP, ensuring a high level of recycling, reuse and recovery at the Site of the proposed Development.
- The tenants / operators / facilities management company(s) will regularly audit the onsite waste storage facilities and infrastructure, and maintain a full paper trail of waste documentation for all waste movements from the site.

In addition, the following mitigation measures will be implemented:

- The Operator will ensure on-Site segregation of all waste materials into appropriate categories, including (but not limited to):
    - Organic waste;
    - Dry Mixed Recyclables;
    - Mixed Non-Recyclable Waste;
    - Glass;
    - Cardboard;
    - Plastic;
    - Waste Electrical and Electronic Equipment (WEEE)
    - Cooking oil;
    - Cleaning chemicals (paints, adhesives, resins, detergents, etc.);
    - Furniture (and from time-to-time other bulky waste); and
    - Abandoned bicycles.

- The residents / tenants / facilities management company will ensure that all waste materials will be stored in colour coded bins or other suitable receptacles in designated, easily accessible locations. Bins will be clearly identified with the approved waste type to ensure there is no cross contamination of waste materials;

- The residents / tenants / facilities management company will ensure that all waste collected from the site of the Proposed Development will be reused, recycled, or recovered, where possible, with the exception of those waste streams where appropriate facilities are currently not available; and

- The residents / tenants / facilities management company will ensure that all waste leaving the site will be transported by suitable permitted contractors and taken to suitably registered, permitted, or licensed facilities.

These mitigation measures will ensure the waste arising from the development is dealt with in compliance with the provisions of the Waste Management Act 1996, as amended, associated Regulations, the Litter Pollution Act 1997, the EMR Waste Management Plan (2015 - 2021) and the DCC waste bye-laws. It will also ensure optimum levels of waste reduction, reuse, recycling and recovery are achieved.

Monitoring

Construction Stage

The management of waste during the construction phase will be monitored by the Contactor's appointed Resource Manager to ensure compliance with the above-listed mitigation measures, and relevant waste management legislation and local authority requirements, including maintenance of waste documentation.

The management of waste during the operational phase will be monitored by the Operator / Facilities Manager to ensure effective implementation of the mitigation measures outlined in Section 14.6, Appendix 14.1 and 14.2 internally and by the nominated waste contractor(s).

Operation Stage

During the operational phase, waste generation volumes should be monitored by the Operator / Buildings Management. There may be opportunities to reduce the number of bins and equipment required in the WSA, where estimates have been too conservative. Reductions in bin and equipment requirements will improve efficiency and reduce waste contactor costs.

Waste legislation should also be consulted on a regular basis in case of any changes which may impact on waste management procedures.

Chapter 15: Material Assets - Traffic and Transportation

Mitigation Measures

Construction Stage

An *Outline Construction and Environmental Management Plan* (CEMP) has been prepared as part of the planning application with an associated *Preliminary Construction Management Plan* (PCMP). The *PCMP* includes an Outline Traffic Management Plan as well as incorporating a range of integrated control measures and associated management activities with the objective of minimising the potential impacts of construction activities associated with the development. The following initiatives will be implemented to avoid, minimise and/or mitigate against the anticipated construction period impacts:

- During the pre-construction phase, the site will be securely fenced off/hoarded off from adjacent properties, public footpaths and roads;
- Appropriate on-site parking (temporary parking for the duration of construction works) and compound area will be provided to prevent overflow onto the local network;
- A large proportion of construction workers are anticipated to arrive in shared transport. It is likely that some numbers of the construction team will be brought to/from the site in vans/minibuses, which will serve to reduce the trip generation potential;
- Delivery vehicles to and from the site will be spread across the course of the working day, therefore, the number of HGVs travelling during the peak hours will be relatively low;
- Truck wheel washes will be installed at construction entrances;
- Any specific recommendations with regard to construction traffic management made by Dublin City Council will be adhered to;
- Potential localised traffic disruptions during the construction phase will be mitigated through the implementation of industry standard traffic management measures such as the use of traffic signage. These traffic management measures shall be designed and implemented in accordance with the Department of Transport's Traffic Signs Manual *"Chapter 8 Temporary Traffic Measures and Signs for Roadworks"* and

"*Guidance for the Control and Management of Traffic at Roads Works – 2nd Edition*" (2010);

- Site entrance point/s from the public road will be constructed with a bound, durable surface capable of withstanding heavy loads and with a sealed joint between the access and public highway. This durable bound surface will be constructed for a distance of 10m from the public road.

- Material storage zones will be established in the compound area and will include material recycling areas and facilities;

- 'Way finding' signage will be provided to route staff / deliveries into the site and to designated compound / construction areas;

- Dedicated construction haul routes will be identified and agreed with Dublin City Council prior to commencement of activities on-site; and

- On completion of the works, all construction materials, debris, temporary hardstands etc. from the site compound will be removed off-site and the site compound area reinstated in full on completion of the works.

Operational Stage

A package of integrated mitigation measures has been identified to off-set the additional local demand that the proposed residential development at the subject site could potentially generate as a result of the forecast increase in vehicle movements by residents of the scheme. The identified measures and associated timescale for their implementation are summarised below.

- **Parking Management Strategy** - A management regime has been set out (and accompanies this planning application) which will be implemented by the development's management company to control access to the on-site car parking spaces thereby actively managing the availability of on-site car parking for residents and visitors to the development. This provision equates to a car parking ratio of approximately 0.51 car parking spaces per residential unit. The purchase of one of the proposed residential apartments will NOT include access to a designated on-site parking space. All potential residents will be notified that the proposed scheme is a 'low car allocation' development with no access (or guarantee thereof) to the limited on-site residents car parking provision. Nevertheless, all residents of the proposed residential apartment scheme will have the opportunity to apply to the on-site management company for a resident's car parking permit (updated weekly, fortnightly, monthly, quarterly or annually) and subsequently access to a dedicated (assigned) on-site basement car parking space. A charge will be applied to obtain a permit with the objective of covering the associated management costs and discouraging long term usage of the car parking space.
- **Management** – A preliminary Mobility Management (MMP) has been compiled (Appendix 15.2) with the aim of guiding the delivery and management of co-ordinated initiatives by the scheme promotor to be implemented upon occupation of

the site. The MMP will ultimately seek to encourage sustainable travel practices for all journeys to and from the proposed development.

- **Infrastructure** – Infrastructure measures identified to reduce reliance of private vehicles include the provision of ample secure cycle parking on site, exceeding minimum guidance (DHPLG), and ensuring a design which promotes permeability for pedestrians and cyclists to, through and from the development (DMURS). The lower level of car parking provision for the development will also act as a powerful mobility management measure, ensuring against an overprovision of parking and a resultant over reliance on the private vehicle.

- **Infrastructure** – Junction enhancements have been identified and proposed at the R117 Sandford Road site access junction, including an upgrade to the existing controlled pedestrian crossing to a toucan crossing, with the objective of creating a highly permeable environment for pedestrians and cyclists and the tightening of corner radii on the Belmont Avenue arm, with dropped kerbs and tactile paving providing a safer informal crossing than the existing scenario. A signalised toucan crossing is also proposed at the R117 Milltown Road, adjacent to the site access location, facilitating safe connections for pedestrians and cyclists.

- **Car Sharing** – The provision of 10 No. dedicated car share (GoCar and development-owned) spaces at surface and basement level for the use of the scheme's residents and staff. The availability of these on-site provide a viable alternative to residents needing to own a private vehicle whilst still having access to a car as and when required.

Monitoring

Construction Phase

During the construction stage, the following monitoring exercises are proposed:

- Compliance with construction vehicle routing practices;
- Compliance with construction vehicle parking practices;
- Internal and external road conditions; and
- Timing of construction activities.

Operational Phase

As part of the Mobility Management Plan (MMP) process, bi-annual post occupancy surveys are to be carried out in order to determine the success of the measures and initiatives as set out in the proposed MMP document. The information obtained from the monitoring surveys will be used to identify ways in which the MMP measures and initiatives should be taken forward in order to maintain and further encourage sustainable travel characteristics.

Chapter 16: Material Assets - Site Services

Mitigation Measures

Construction Phase

- Contractor to prepare Method Statement detailing proposals for works in the vicinity of existing utilities including detail of process to minimise potential for interruption to power, gas and telecoms infrastructure. Contractor's method statement to be agreed with PSDP (Project Supervisor for the Design Process).

- Contractor to locate and record all services on site prior to commencement of excavations.

- A GPR utility survey has been carried out along Sandford Road, Milltown Road and Eglinton Road to confirm the location of power, gas and telecommunications infrastructure. This survey is to be supplemented with slit trench investigation as required by the contractor in advance of commencing works along Sandford Road, Milltown Road and Eglinton Road.

- Contractor to obtain utility company network plans and arrange observation as required.

- Connections to the existing power, gas and telecommunications networks will be coordinated with the relevant utility provider and carried out by approved contractors.

- Contractor to comply with HSA Code of Practice for Avoiding Danger from Underground Services (refer to Appendix 16.3).

- Contractor to prepare and implement a Construction Traffic Management Plan that will be agreed with the Design Team and Local Authority and which will ensure the safety of the public during construction (note, an outline Traffic Management Plan is included in the *Preliminary Construction Management Plan*).

- All personnel using machinery/plant to have undergone training on the use of said machinery/plant. Ongoing site supervision to be undertaken to ensure all use of machinery/plant is in accordance with the training undertaken.

Operational Phase

On completion of the construction phase there will be no further impact on electrical, gas or telecommunications supplies. No mitigation measures are proposed in relation to the site services described in this chapter.

Monitoring

No specific monitoring is proposed in relation to electrical, gas and telecommunications infrastructure.

Chapter 17: Microclimate – Wind

Mitigation Measures

Construction Phase

The assessment of the wind microclimate during the construction phase has been based on professional judgement by reviewing the existing site conditions and the expected conditions once the development is in place via the Computational Fluid Dynamics (CFD) modelling.

It is expected the wind microclimate will gradually adjust from the existing conditions to the final modelled scenario as construction progress develops. However, the mitigation measures outlined in the following sections will need to be implemented before completion to ensure comfortable conditions once the proposed development becomes operational.

Operational Phase

Chapter 17 outlines specific mitigation measures that have been incorporated into the proposed design to prevent excessive wind speeds during the operational phase of the development. The proposed development has been designed to have acceptable pedestrian wind comfort conditions during the operational phase.

The trees and planting associated with the landscape design will continue to grow and develop after the proposed mitigation measures have been implemented, thus providing increased protection from the wind resulting in increased pedestrian comfort conditions in these areas which will be a positive impact.

The following specific mitigation measures have been incorporated for the operational phase of the development:

Apartment Block Arrangement

The arrangement of the apartment blocks has been carefully chosen to help mitigate increased wind speeds throughout the site. The central areas within the development are well protected from the predominant south-west wind direction via the buildings located to the south-west. Furthermore, an internal courtyard space has been incorporated within Block B and C which provides a sheltered area for pedestrians to utilise throughout the year.

Inset Balconies

The Block A1 building, which is most exposed to the wind due to its height, predominantly incorporates inset balconies. Inset balconies offer increased wind protection for people utilising the balcony spaces as they provide a natural shelter from the elements.

Solid Balustrades

All private balconies on the tower element of Block A1 (floors 5 to 9) and the shared rooftop amenity areas will incorporate solid glazed balustrades. Full length solid balustrades block wind directly entering the balcony space, dissipating the wind speed within the balcony area which creates a much more comfortable experience for occupants.

Landscaping

The landscaping has been strategically designed to mitigate increased wind speeds and to provide shelter for pedestrians at ground level, within the central courtyard spaces and on the rooftop amenity areas. The landscaping design incorporates trees, hedges and raised planters and sheltered seating pockets which all act as wind mitigation measures.

Trees are to be planted close to primary entrance ways and along the streetscape, mitigating excessive wind speeds and providing shelter for pedestrians at street level. The use of trees and low-level shrubs all assist in the localised reduction of wind speed.

Chapter 17 sets out that the modelling has included the proposed design, the proposed landscaping strategy and the existing landscape which will remain in conjunction with the existing buildings surrounding the development. The combination of all interactions has resulted in a comfortable environment for pedestrians within the proposed development.

Monitoring

Construction Phase

During the construction phase the wind conditions will gradually change from the conditions experienced in the existing environment to the conditions experienced during the operational phase. As wind comfort conditions are comfortable at both phases and no issues have been identified, no monitoring is required.

Operational Phase

The proposed development has been designed to have acceptable pedestrian wind comfort conditions during the operational phase; therefore, no monitoring is required.

Chapter 18: Risk Management

Mitigation Measures

Chapter 18 of this EIAR sets out that control measures observed for health and safety and environmental management as per relevant code of practices (Code of Practice for Inspecting and Certifying Buildings and Works) and relevant legislation including Building Control Act 1990 (No. 3 of 1990), as amended and Building Control Regulations 1997, as amended. It is considered that the vulnerability of the proposed development to the risk of major accidents or disasters will not be significant.

Monitoring

There is no monitoring required with regards to the risk of major disasters and accidents beyond standard mitigation and management measures. All monitoring proposals for the interacting chapters have been detailed in the relevant technical chapters and are included in this Chapter 20 Mitigation Measures and Monitoring.

Cumulative Impacts

Any potential cumulative impacts have been considered in the preparation of this EIAR and are detailed where relevant in the various EIAR Chapters e.g. construction stage impacts, surface water drainage infrastructure, foul drainage, water supply, landscape and visual impact and traffic for example. Therefore, it is clear that the potential for any cumulative impacts to occur have been comprehensively considered in the preparation of this EIAR, as detailed throughout the various chapters. A full list of proposed and pending applications was considered by the EIAR Team as set out in Chapter 3.0 and where relevant were included in the cumulative impacts assessment of the relevant chapter. As a result, it is not proposed to include any specific measures for monitoring or mitigation to be undertaken in relation to cumulative impacts.

21.0 DIFFICULTIES ENCOUNTERED

There have been no significant difficulties encountered during the preparation and compilation of the majority of this Environmental Impact Assessment Report.

Chapter 14, 'Material Assets-Waste Management' prepared by AWN Consulting notes the following difficulty:

> *"Until final materials and detailed construction methodologies have been confirmed, it is difficult to predict with a high level of accuracy the construction waste that will be generated from the proposed works as the exact materials and quantities may be subject to some degree of change and variation during the construction process.*
>
> *There is a number of licensed, permitted and registered waste facilities in the Dublin and EMR regions and across Ireland and Northern Ireland. However, these sites may not be available for use when required or may be limited by the waste contractor selected to service the development in the appropriate phase. In addition, there is potential for more suitably placed waste facilities or recovery facilities to become operational in the future which may be more beneficial from an environmental perspective.*
>
> *The ultimate selection of waste contractors and waste facilities would be subject to appropriate selection criteria such as proximity, competency, capacity and serviceability. The waste facilities selected will ultimately be selected to minimise the environmental impacts on the surrounding environment.*

Appendix 5.1 'Review of BRE Sunlight & Daylight Assessment' prepared by 3D Design Bureau notes the following difficulty:

> *"It was neither possible nor practical for the Design Team to gain unfettered access to every parcel of private property within the study area surrounding the application site in order to carry out measured building survey. Therefore, while 3DDB has confidence that the three dimensional model used in the assessment of the impact of the proposed development on sunlight & daylight access achieves a high degree of accuracy, it should be noted that some level of assumption was necessary in completing the model."*

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