5.0 POPULATION AND HUMAN HEALTH

5.1 Introduction

The Chapter considers any likely impacts that the proposed development may have on population and human health. As fully detailed in Chapter 2.0 and 3.0 of this EIAR, the subject developable lands are located at the corner of Sandford Road and Milltown Road, Dublin 6. Any impacts on population and human health which may potentially arise as a result of a proposed development must be comprehensively addressed. The potential impacts can arise from many factors such as:

- Air Quality and Climate
- Noise and Vibration
- Water-Hydrology
- Transportation
- Waste Management
- Visual Impact
- Biodiversity
- Wind

These factors are dealt with in specific Chapters in this EIAR and have been prepared by the relevant specialist consultant. Therefore, this Chapter entitled 'Population and Human Health' will predominately cover any potential impacts not specifically covered in the other Chapters of this EIAR. We note that some potential impacts can be interrelated with impacts contained in the other Chapters and this will be set out where relevant. The specific potential impacts which are not specifically discussed elsewhere in this EIAR will relate to the following:

- Population Profile and Trends
- Housing
- Employment/Economy
- Local Services and Amenities
- Traffic
- Health and Safety

The 2014 EIA Directive updated the list of topics to be addressed in an EIAR and has replaced '*Human Beings*' with '*Population and Human Health'*. The term '*human health'* is not defined in the 2014 EIA Directive; however, the European Commission (EC) *Guidance on the Preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU)* (2017) states that:

> *"Human health is a very broad factor that would be highly Project dependent. The notion of human health should be considered in the context of other factors in Article 3(1) of the EIA Directive and thus environmentally related health issues (such as health effects caused by the release of toxic substances to the environment, health risks arising from major hazards associated with the Project, effects caused by changes in disease vectors caused by the Project, changes in living conditions, effects on vulnerable groups, exposure to traffic noise or air pollutants) are obvious aspects to study. In addition, these would concern the commissioning, operation, and decommissioning of a Project in relation to workers on the Project and surrounding population"* (p. 37).

The EPA *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (EPA, 2022) state that:

> *"In an EIAR, the assessment of impacts on population and human health should refer to the assessments of those factors under which human health effects might occur, as addressed elsewhere in the EIAR e.g. under the environmental factors of air, water, soil etc.." (p.28)*

This Chapter also meets the requirement for assessment of human health as per Schedule 6 of the *Planning and Development Regulations 2001* (as amended).

5.1.1 Qualifications and Experience

This Chapter of the EIAR was prepared by Patricia Thornton (BSc. Surv) (MRUP), Director of Thornton O'Connor Town Planning. Patricia is a Corporate member of the Irish Planning Institute and has 20 No. years post-qualification experience. Patricia has experience in preparing and coordinating EIARs for a variety of projects and has also been involved in the coordination of a wide range of developments including residential and commercial developments.

5.1.2 Study Methodology

In preparing a previous SHD and LRD application on the subject site, an initial site visit was undertaken on 4th November 2019 in order to ascertain an understanding of the subject site and its surrounding environs which has benefited the preparation of this Chapter. A further site visit was held on 18th February 2020 and was attended by Dublin City Council officials. At this site visit, the Dublin City Council officials were given an extensive tour of the interior of all the vacant former institutional buildings. Multiple further site visits took place during the preparation of the subject planning application including a site visit with the Planning Authority and Conservation Department on 15th May 2025.

A desk study has also been carried out to prepare this Chapter and has had regard to the following Guideline documents:

- *Guidelines on the Information to be Contained in Environmental Impact Statements (Environmental Protection Agency (EPA), 2022);*
- *Advice Notes for Preparing Environmental Impact Statements (EPA, draft September 2015);*
- *Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (EPA, 2003);*
- *Guidelines on the Information to be Contained in Environmental Impact Statements (EPA, 2002);*
- *IEMA's Health in Environmental Impact Assessment - https://www.researchgate.net/publication/316968065_Health_in_Environmental_Impact_Assessment_a_primer_for_a_proportionate_approach/link/591aced6aca2722d7cffb2b0/download;*

- *IEMA's Launch of the EIA guidance for considering impacts on human health https://www.iema.net/resources/blog/2022/11/17/launch-of-the-eia-guidance-for-considering-impacts-on-human-health; and*

- *Environmental Impact Assessment of Projects – Guidance on the preparation of the Environmental Impact Assessment (Directive 2011/92/EU as amended by 2014/52/EU) (European Union, 2017).*

In addition to these Guideline documents, the policy documents and data sources consulted in the preparation of this EIAR Chapter included the following:

- *Dublin City Development Plan 2022 – 2028* (https://www.dublincity.ie/residential/planning/strategic-planning/dublin-city-development-plan/development-plan-2022-2028);

- Central Statistics Office (CSO) Census Data 2022 & 2016 (www.cso.ie/en/);

- CSO Live Register (www.cso.ie/en/statistics/labourmarket/liveregister/);

- Dublin Housing Observatory (https://ps.geohive.ie/dho/);

- *Rebuilding Ireland - Action Plan for Housing and Homelessness, 2016* (www.rebuildingireland.ie);

- *Design Manual for Urban Roads and Streets*–2019 (https://www.gov.ie/en/publication/c8o8c-design-manual-for-urban-roads-and-streets-2019-low-res/)

- Met Eireann (https://www.met.ie/climate/available-data/historical-data)

- Dublin Bus (www.dublinbus.ie);

- Bus Connects (www.busconnects.ie);

- Go Ahead Ireland (www.goaheadreland.ie); and

- Google Maps (www.google.com/maps/).

5.2 Description of the Proposed Development

"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."

5.3 Baseline Scenario: Population Profile and Trends

5.3.1 Rathmines East B Electoral Division

The subject site is located within the Electoral Division of Rathmines East B according to the Census 2022 information[1]. 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[2]. 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.

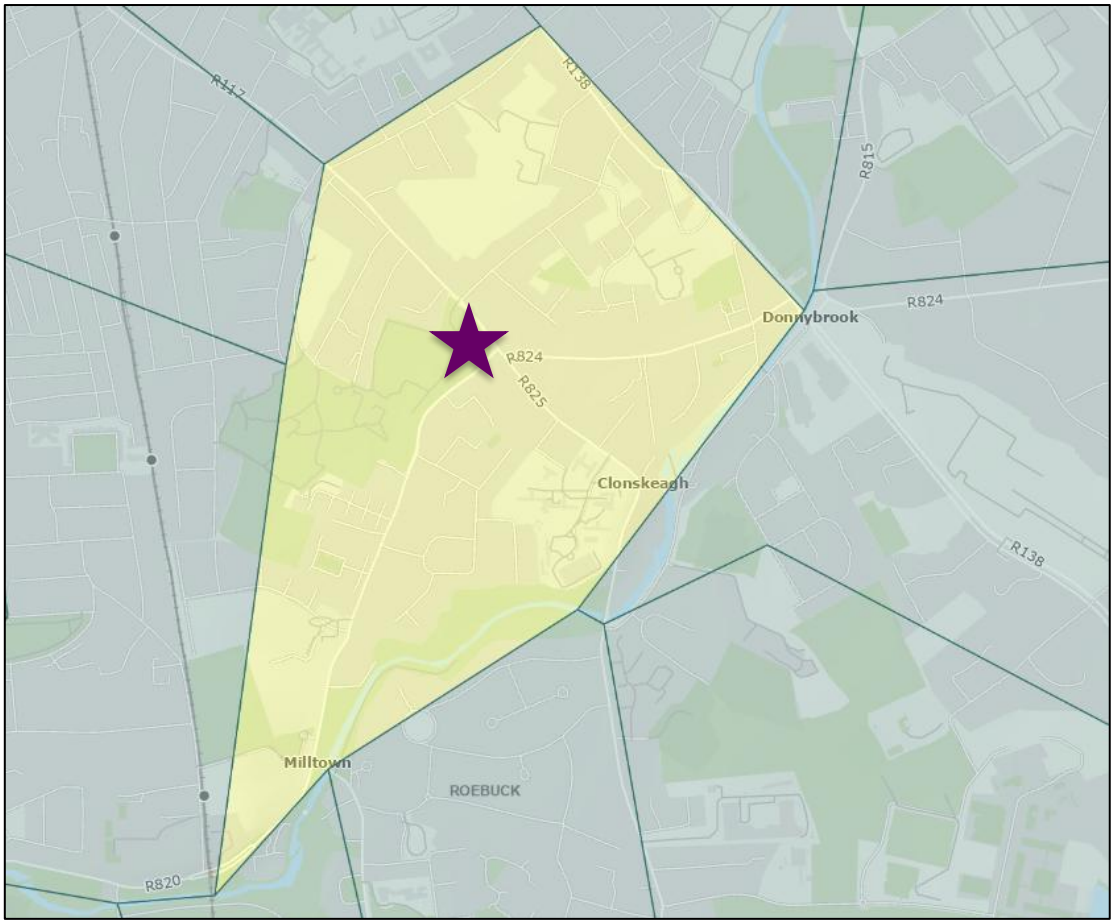

Figure 5.1: Map Demonstrating the Electoral Division of Rathmines East B with the Subject Site Annotated Indicatively by the Purple Star

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

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

[2] 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 5,605 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. This will be discussed further in Section 5.4 below.

The Census data demonstrates that Dublin City Council experienced an increase in population from 554,554 No. persons in 2016 to 592,713 No. persons in 2022 (6.9% increase- 38,159 No. persons), and the population of the Republic of Ireland also experienced an increase in population from 4,761,865 No. persons in 2016 to 5,149,139 No. persons in 2022 (8.1% increase).

Please see a summary of the breakdown of population trends in the Rathmines East B ED in 2016 and 2022:

Population Profile and Trends			
	Census 2016[3]	Census 2022[4]	Change
Population	**6,058**	**5,705**	**– 353 (5.83 %)**
Person Accommodated in Households	**5,605**	**5,571**	**– 34 (0.6%)**
No. of Households	**2,410**	**2,413**	**+3 (0.1%)**

Table 5.1: Population Profile and Trends in the Rathmines East B ED

(Source: Census 2022/CSO)

5.3.2 Description of the Existing Population as per the 2022 Census

There are a range of age groups living in the Rathmines East B ED according to the 2022 Census. As demonstrated in Table 5.2 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+).

[3] https://visual.cso.ie/?body=entity/ima/cop/2016&boundary=C03786V04535&guid=2AE196291DD413A3E055000000000001

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

Population by Age						
Age Group (years)	**Republic of Ireland[5] 5,149,139 No. persons**		**Dublin City[6] 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 5.2: 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.

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

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

Therefore, it is clear that the proposed development caters to the housing needs of a wide range of persons as the development will provide a mix of studio apartments, 1-bed apartments, 2-bed apartments and 3-bed apartments and houses. To summarise the following age groups will be principally catered for:

- Persons within the working age group seeking a dwelling;
- Persons older than the working age group seeking to trade down;
- Families who may wish to purchase a home and which contains a crèche within the development; and
- Persons in need of a dwelling as per the social housing list.

5.4 Baseline Scenario: Housing

5.4.1 Households by Type

As noted previously, the Rathmines East B ED recorded 5,571 No. persons accommodated in the 2,413 No. households in the Census 2022. As presented in Table 5.3 below, of the 2,413 No. households recorded in the 2022 Census, 1,304 No. were noted as a 'house/bungalow' (54%), some 1,096 No. as a 'flat/apartment' (45.5%), 13 No. as a 'bed-sit' (0.5%) and none were noted as a 'caravan/mobile home' (0%). The high quantum of flats/apartments recorded in the 2022 Census thus demonstrates the Rathmines East B ED is already accustomed to providing such higher-density housing types.

Household Type in Rathmines East B ED[7]		
	No. of Households	**%**
Houses / Bungalow	1,304	54%
Flats / Apartments	1,096	45.5%
Bed Sit	13	0.5%
Caravan / Mobile Home	0	0%
Total	**2,413**	**100%**

Table 5.3: Type of Households in the Rathmines East B ED

(Source: Census 2022/CSO)

5.4.2 Average Household Size

As noted previously, the Rathmines East B ED recorded a population of 5,705 No. persons in the 2022 Census with 5,571 No. persons accommodated in the 2,413 No. households. 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 (see Table 5.4 below).

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

Average Household Size			
Area/ED	**No. of Households**	**No. of Persons Accommodated**	**Average Household Size**
Rathmines East B ED[8]	**2,413**	**5,571**	**2.3**
Dublin City[9]	**225,685**	**560,493**	**2.5**
Republic of Ireland[10]	**1,841,152**	**5,046,681**	**2.7**

Table 5.4: Average Household Size of the Rathmines East B ED, Dublin City and the State

(Source: Census 2022/CSO)

Therefore, the ED is predominated by smaller households and it is important to provide choice for such household formations.

5.4.3 Households by Number of Rooms

As shown below in Table 5.5, 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) compared to the low number of permanent private households which comprise 1, 2 or 3 No. rooms (720 No. households or 29.8% 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."*

[8] https://visual.cso.ie/?body=entity/ima/cop/2022&boundary=C04167V04938&guid=2ae19629-1dd4-13a3-e055-000000000001&theme=4

[9] https://visual.cso.ie/?body=entity/ima/cop/2022&boundary=C03789V04537&guid=2ae19629-1433-13a3-e055-000000000001&theme=4

[10] https://data.cso.ie/ - SAP2022T5T2ED

Permanent Private Households by Number of Rooms[11]		
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 5.5: 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.

5.4.4 Housing Completions

Due to the undersupply of housing completions during the recession, recent planning policy has emphasised the need to provide more homes annually to meet the housing needs of the State. This can be achieved through compact growth and densification of brownfield sites within the built-up area, such as the subject site.

For example, Sections 2.1 of the *Sustainable Urban Housing: Design Standards for New Apartments, 2025* (*Apartment Guidelines*) sets out the following:

> "*…. meeting our targets in relation to compact growth will require a continued focus on the regeneration and redevelopment of brownfield and infill sites, as well realising opportunities for adaptation, reuse and intensification of existing buildings. It will also be necessary to increase the scale of new buildings in all parts of our cities and towns, with highest densities at the most central and accessible urban locations, particularly in city and town centres and close to public transport nodes and interchanges……This will require a sustained increase in housing output, including apartment type development, in particular at central and accessible locations.*
>
> *This is a key pillar of the Government's housing plans, along with the NPF, projecting a need to plan for approximately 50,000 additional homes to 2040.*"

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

Further to the above, we note that the overarching aim of the *Rebuilding Ireland An Action Plan for Housing and Homelessness, 2016* is:

> *"to ramp up delivery of housing from its current under-supply across all tenures to help individuals and families meet their housing needs, and to help those who are currently housed to remain in their homes or be provided with appropriate options of alternative accommodation, especially those families in emergency accommodation."*

According to the CSO[12], the number of households completed in the Dublin 6 area from Q1 2012 to Q2 2025 was 1,094 No. which is lower than some other areas located further from Dublin City Centre, e.g. Dublin 12 – 2,369 No. completions, Dublin 14 – 1,805 No. completions, Dublin 16 – 2,113 No. completions and Dublin 18 – 8,803 No. completions. Within the same time period, there were 24,366 No. household completions in the area covered by Dublin City Council[13], with only 4.5% of this being delivered in Dublin 6.

We consider that the subject site has significant potential to provide a large number of dwelling units on scarce underutilised land in a core urban location.

5.5 Baseline Scenario: Employment and Commuter Patterns

5.5.1 Employment in the Local Area

The subject site is well located given the range of employment locations that can be easily accessed by walking, cycling and public transport from the site such as Belfield Office Park, Beech Hill Office Campus, Richview Office Park, Ballsbridge, Ranelagh, Donnybrook, Rathmines, Clonskeagh Hospital, The Royal Hospital Donnybrook, St Vincent's Hospital, St Luke's Hospital, University College Dublin, The Canal, The Docklands, Harcourt Street and Sandyford Business District for example. The site is also within 1 km/c. 13 minutes walking distance of the Beechwood Green Line Luas stop which provides excellent access to a significant quantum of employment locations.

There are 3,238 No. employed persons in the Rathmines East B ED[14] according to the Census 2022, which represents 67% of the population aged 15 years and over in the ED (4,866 No). This percentage is higher than the number of persons employed in Dublin City[15] (300,209 No.), which represents 60% of the population aged 15 years and over (504,110 No.). The sustainable location of the subject site within the Rathmines East B ED is emphasised through the examination of commuting patterns below in Section 5.5.2.

5.5.2 Commuter Patterns

The data relating to the commuter patterns in the Rathmines East B Electoral Division have been extracted from the Census 2022 results, in addition to the data relating to Dublin City and the State. Please see Table 5.6 below for full details:

[12] https://data.cso.ie/ - NDQ07
[13] https://data.cso.ie/ - NDQ05
[14] https://visual.cso.ie/?body=entity/ima/cop/2022&boundary=C04167V04938&guid=2ae19629-1dd4-13a3-e055-000000000001&theme=7
[15] https://visual.cso.ie/?body=entity/ima/cop/2022&boundary=C03789V04537&guid=2ae19629-1433-13a3-e055-000000000001&theme=7

Population aged 5 years and over by means of travel to work, school or college												
	Rathmines East B ED[16]				Dublin City[17]				State[18]			
Means of Travel	Work	School or College	Total	% Split	Work	School or College	Total	% Split	Work	School or College	Total	% Split
On foot	543	516	1,059	24.1%	46,034	41,394	87,428	21%	178,111	278,189	456,291	12.6%
Bicycle	393	176	569	13%	26,458	10,605	37,063	9%	60,671	36,541	97,212	2.7%
Bus, minibus or coach	199	124	323	7.3%	39,394	18,079	57,473	14%	119,095	204,828	323,923	9%
Train, DART or Luas	313	48	361	8.2%	17,846	4,784	22,630	5.4%	60,885	24,431	85,316	2.4%
Motorcycle or Scooter	24	0	24	0.5%	2,124	164	2,288	0.48%	8,481	669	9,150	0.3%
Car Driver	851	32	883	20.1%	77,472	2,278	79,750	23.8%	1,199,481	54,938	1,254,419	34.7%
Car Passenger	33	220	253	5.8%	5,485	25,840	31,325	7.75%	84,666	606,378	691,044	19.1%
Van	18	1	19	0.4%	6,180	83	6,263	1.57%	146,265	2,558	148,823	4.1%
Other (incl. lorry)	3	2	5	0.1%	523	169	692	0.1%	12,744	1,348	14,092	0.4%
Work mainly at home or from home	557	18	575	13.1%	34,460	806	35,266	1.45%	259,467	7,259	266,726	7.4%
Not stated	243	81	324	7.4%	38,351	19,345	57,696	7.59%	163,872	102,540	266,412	7.4%
Total	**3,177**	**1,218**	**4,395**	**100%**	**294,327**	**123,547**	**417,874**	**100%**	**2,293,738**	**1,319,670**	**3,613408**	**100%**

Table 5.6: Population aged 5 years and over by means of travel to work, school or college in the Rathmines B East Electoral Division (% in purple denotes those who travel on foot, bicycle or public transport)

(Source: Census 2022/CSO)

[16] https://visual.cso.ie/?body=entity/ima/cop/2022&boundary=C04167V04938&guid=2ae19629-1dd4-13a3-e055-000000000001&theme=10
[17] https://visual.cso.ie/?body=entity/ima/cop/2022&boundary=C03789V04537&guid=2ae19629-1433-13a3-e055-000000000001&theme=10
[18] https://www.cso.ie/en/releasesandpublications/ep/p-cpp7/censusofpopulation2022profile7-employmentoccupationsandcommuting/commutingtowork/

We note that of the 4,395 No. persons travelling to either work, school or college in the ED at the time of the Census 2022, some 2,312 No. (or 53%) utilise the bus, train, DART, Luas or either walk or cycle. In comparison, we note that 49% of persons in Dublin City and 26.6% of persons in the State travel to work, school or college utilising the bus, train, DART, Luas or either walk or cycle. Therefore, the sustainable location of the subject site is reflected in the statistics for commuter patterns in the ED when compared to Dublin City and the State.

Some 575 No. persons (13.1%) mainly worked from home and 324 No. persons (7.4%) did not state how they travel to work. Of the remaining working persons, some 24 No. persons (0.5%) use a motorbike or scooter, 19 No. persons (0.4%) travel by van, 883 (20.1%) travel by car and an additional 253 No. persons (5.8%) travel to work as a car passenger. The number of persons that drive a car to work, school or college is significantly lower than both Dublin City (23.8%) and the State (34.7%), demonstrating the sustainable location of the subject lands.

We also note that the number of people traveling to either work, school or college by car has decreased since the Census 2016 by 333 No. persons (1,216 No. persons recorded in 2016). This correlates to national, regional and local policy which has sought to increase more sustainable travel patterns by moving away from private car usage and towards more active travel.

The journey times of commuters travelling to work, school or college in 2022 are set out in the table below:

Population aged 5 years and over by journey time to work, school or college[19]	
Journey time	**No. of Persons**
Under 15 mins	619
¼ hour – under ½ hour	1,337
½ hour – under ¾ hour	956
¾ hour – under 1 hour	251
1 hour – 1 ½ hours	109
1 ½ hours and over	33
Not stated	365
Total	3,670

Table 5.7: Population aged 5 years and over by journey time to work, school or college

(Source: Census 2022/CSO)

As demonstrated in Table 5.6 above, 53% of persons (1,956 No. persons) travelling to work, school or college commute for less than 30 No. minutes, which demonstrates the sustainable and core urban location of the Rathmines East B ED. Although many people will now be working from home, it is clear that the provision of the proposed 562 No. new homes for the area will allow residents to have a choice to work at home or to travel a reasonable distance via sustainable modes of transport to work. In addition, a co-working space, gym and management suite is also proposed as part of the resident amenity space proposed in the development.

[19] https://visual.cso.ie/?body=entity/ima/cop/2022&boundary=C04167V04938&guid=2ae19629-1dd4-13a3-e055-000000000001&theme=10

5.5.3 Unemployment Figures

As demonstrated in Section 5.5.1 and Section 5.5.2, the subject site, located within the Rathmines East B ED, is clearly a highly sustainable core urban location. This is clear when the Census 2022 results are analysed in terms of unemployment rates.

Population aged 15 years and over by principal economic status[20]	
Principal Economic Status	**No. of Persons**
At work	3,238
Looking for first regular job	28
Short term unemployed	67
Long term unemployed	65
Student	538
Looking after home/family	213
Retired	639
Unable to work due to permanent sickness or disability	65
Other	13
Total	4,866

Table 5.8: Population aged 15 years and over by principal economic status

(Source: Census 2022/CSO)

The Census 2022 states that the persons stated as a 'students, 'looking after home/family', 'retired' and those 'unable to work due to permanent sickness or disability' are not counted in the labour force[21] as they are not "*economically active (ie working, looking for their first regular job or unemployed)*"[22].

Population aged 15 years and over available or unavailable for work[23]	
Principal Economic Status	**No. of Persons**
At work	3,238
Looking for first regular job	28
Short term unemployed	67
Long term unemployed	65
Total Available Labour Force	3,398

Table 5.9: Population aged 15 years and over available or unavailable for work

(Source: Census 2022/CSO)

Therefore, the 28 No. persons stated that they were 'looking for their first regular job', the 67 No. persons stated as being 'short term unemployed', and 65 No. persons as 'long term unemployed' equates to the total number of available work force not working at the time of

[20] https://visual.cso.ie/?body=entity/ima/cop/2022&boundary=C04167V04938&guid=2ae19629-1dd4-13a3-e055-000000000001&theme=7

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

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

[23] https://visual.cso.ie/?body=entity/ima/cop/2022&boundary=C04167V04938&guid=2ae19629-1dd4-13a3-e055-000000000001&theme=7

the 2022 Census[24] (160 No. persons 'unemployed'). The total number of persons 'at work' was 3,238 No. persons in 2022.

Therefore, the unemployment rate of the Rathmines East B ED is 4.7% at the time of the 2022 Census, which is lower than the national unemployment figure of 8%[25]. 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.

We note that the unemployment rate differs in the Census 2022 to the Labour Force Survey (LFS) as set out in the Census 2022 'Background Notes'[26] as follows:

> *"Users should be aware that information derived from identical questions in the census and LFS for the same year may show appreciable differences. The main categories affected are the constituents of the question on principal economic status and the employment estimates classified by industry and occupation.*
>
> *The census is a complete enumeration while the LFS is a sample survey. The chief difference resulting from this is that the census records an unemployment rate (based on Principal Economic Status) of 8 per cent, compared with the official rate (based on ILO criteria) of 4.6 per cent for Quarter 1 of 2022. Notwithstanding these differences, the main strength of the census-based data on employment and unemployment is the provision of data for small geographic areas, analysis on the comparisons between areas, the provision of data on unemployment blackspots, and other analysis across multiple variables such as marital status, detailed country of citizenship, etc."*

Therefore, the unemployment figures for 2022 for the Rathmines East B ED are considered very low when compared to the national figure of 8% as derived from the Census 2022, reflecting the multitude of employment nodes that are easily accessible to the area.

The LFS for Q2 2025[27] recorded the following employment rates:

> *"The number of people aged 15-89 years in employment rose by 63,900 or 2.3% to 2,818,100 people in the 12 months to Q2 2025."*

However, the LFS further noted:

> *"The number of people aged 15-74 years who were unemployed in Q2 2025 stood at 140,800, with an associated Unemployment Rate of 4.8%."*

The unemployment rate has rose by 0.2% since Q1 2022, from 4.6% to 4.8% as of Q2 2025.

[24] Persons stated as 'other' has been discounted in this calculation.
[25] https://www.cso.ie/en/releasesandpublications/ep/p-cpsr/censusofpopulation2022-summaryresults/employmentoccupationindustryandcommuting/
[26] https://www.cso.ie/en/releasesandpublications/ep/p-cpsr/censusofpopulation2022-summaryresults/backgroundnotes/
[27] https://www.cso.ie/en/releasesandpublications/ep/p-lfs/labourforcesurveyquarter22025/keyfindings/

5.5.4 Economic Environment

The Economic and Social Research Institute (ESRI) provides updates on the Irish economy on a quarterly basis. The *Quarterly Economic Commentary Autumn 2025*[28] is the most recent report published by the ESRI at the time of writing which asserts that the Irish "*economy continues to perform robustly*" and provides the following forecast overview of the Irish economy:

> *"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."*

However, the ESRI further notes the projected outlook of housing supply based on the number of units granted planning permission:

> *"In terms of the outlook going forward, the level of planning permissions would indicate that, in the medium term, no sustained increase in the trajectory is evident.....It is very clear that the number of units given planning has not been rising overall. However, looking across the types of housing, the general weakness has been driven by a rapid fall off in apartment units. Scheme housing had increased through 2022 to 2024 but appears to have stalled in 2025."*

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.

5.5.5 Live Register

The CSO describes the Live Register as follows:

> *"The Live Register is used to provide a monthly series of the numbers of people (with some exceptions) registering for Jobseekers Benefit (JB) or Jobseekers Allowance (JA) or for various other statutory entitlements at local offices of the Department of Social Protection. Information is published in the form of a monthly release titled the Live*

[28] https://www.esri.ie/publications/quarterly-economic-commentary-autumn-2025

Register. Data is also held on the CSO StatBank and also published in the CSO's Statistical Yearbook.

*The Live Register is **not** designed to measure unemployment. It includes part-time workers (those who work up to three days per week), seasonal and casual workers entitled to JB and JA."* **[Author's Emphasis]**

Therefore, while not giving specific unemployment figures, the Live Register figures can give a good indication of economic and employment activity in the area.

The most recent figures for County Dublin in September 2025[29] indicate that there were 46,443 No. persons on the Live Register compared to 42,370 No. persons in September 2024. This represents a decrease of 4,073 No. persons (-8.8%) from September 2024 to September 2025 in County Dublin.

The most recent figures for County Dublin in September 2025[30] indicate that there were 169,300 No. persons on the seasonally adjusted Live Register compared to 166,800 No. persons in September 2024. This represents a decrease of 2,500 No. persons (-1.48%) from September 2024 to September 2025 in County Dublin. We note that the Covid-19 pandemic would have had an impact on unemployment, and it is positive to see such a reduction in unemployment levels on the Live Register for County Dublin.

In the State, the number of persons on the Live Register also decreased between September 2024 and September 2025 by 2,500 No. persons, from 169,300 No. persons on the seasonally adjusted Live Register in September 2025 compared to 166,800 No. persons in September 2024 (-1.48%).

Live Register September 2024 – September 2025			
Live Register Figures	**September 2024**	**September 2025**	**% Change**
County Dublin	46,443	42,370	-8.8%
State	166,800	169,300	-1.48%

Table 5.10: Live Register Figures September 2024 – September 2025

(Source: Central Statistics Office)

5.6 Baseline Scenario: Local Services and Amenities

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. Please see Figure 5.2 below and the corresponding table which provides an example of the wide range of services and facilities in these neighbourhood centres which will serve the subject site.

[29] https://data.cso.ie/
[30] https://www.cso.ie/en/releasesandpublications/ep/p-lr/liveregisterseptember2025/

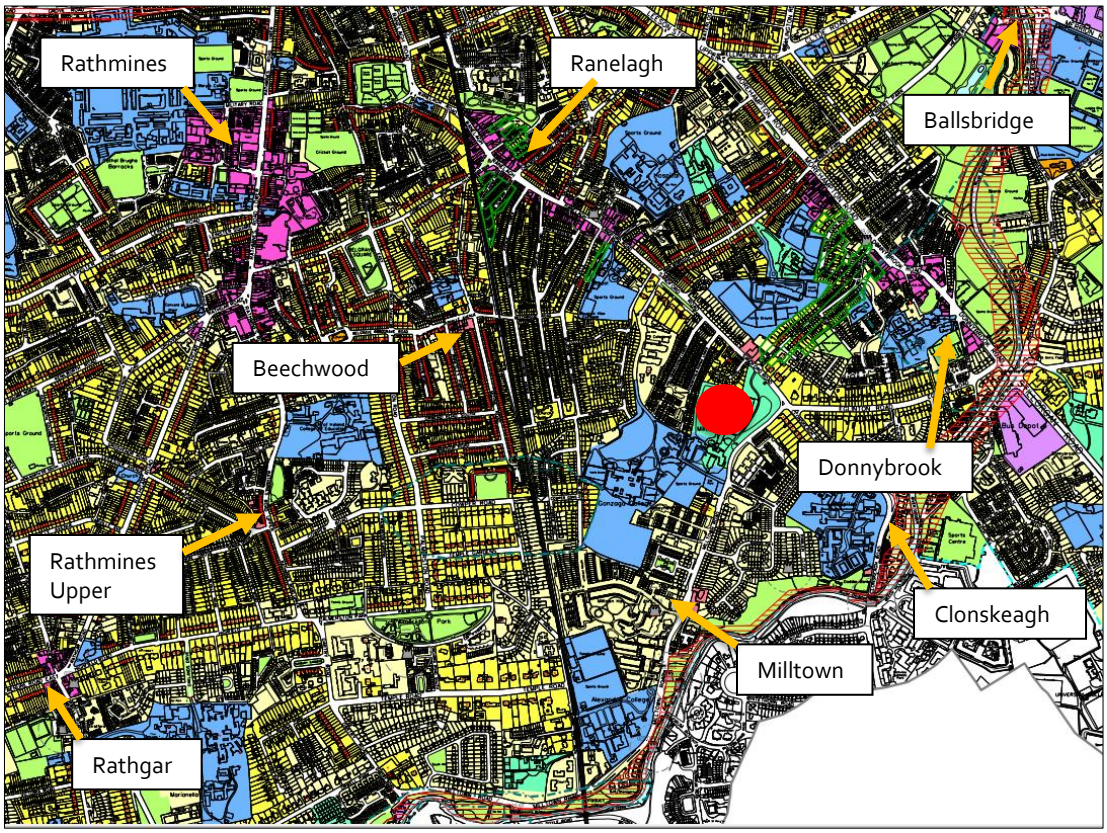

Figure 5.2: Neighbourhood and District Centres in the Surrounding Area (Subject Site Denoted by Red Dot)

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

- **Milltown-c.450 metres/c.6 minutes walking distance/c.1 minute cycling distance:**

Services/Facilities include: Eurospar, Wilde and Green Café, New Element Fitness Gym, Poise Hair Salon, Daisy Chain Montessori and Childcare, Milltown Dry-Cleaning and Laundry Service, Milltown Total Health Pharmacy, Phelans Pharmacy and the Parish of Columbanus, Saint Gall and Assumption of the Blessed Virgin Mary Church for example;

- **Donnybrook-c.500 metres-c.900 metres/c.6-10 minutes walking distance/c.2-3 minutes cycling distance:**

Services/Facilities include: Donnybrook Fair, Donnybrook Lawn Tennis Club, Tesco Express, McCabes Pharmacy, Boots Pharmacy, Spar Donnybrook, Energia Park (Donnybrook Stadium), Bective Rangers Football Club, Lyk Nu Cleaners, D4 Medical Centre, The Grafton Barber, Donnybrook Dental Practice, Donnybrook Foot Mechanics, Skin by Olga, Di Milo Hair Design, Mink Hand & Foot Spa, Donnybrook Bikes, O'Brien's Off Licence, Fast Fit (Car Repair and Maintenance), First Stop Garage, Donnybrook Parish-Church of the Sacred Heart, Insomnia Café, Happy Out Café, Green Beards Café, Nourish Donnybrook Health Food Store, Marco Pierre White Courtyard Bar and Grill, The Morehampton (pub), Romayo's Donnybrook Fish and Chips, Abrakebabra, Eddie Rockets, Arthur Mayne's Bar and Café Nero for example;

- **Clonskeagh – c.350 metres – 1.3 km /c.6-16 minutes walking distance/c.1-6 minutes cycling distance:**

Services/Facilities include: Cafe 105, Ashtons Gastro Pub, Clonskeagh Hospital, Platinum Pilates and Physiotherapy, David Lloyd Gym, Applegreen, Farmer Browns Pub, Kuma Bikes and Clonskeagh Vets for example;

- **Ranelagh-c.500 metres-1.4 km/c.6-18 minutes walking distance/c.1-5 minutes cycling distance:**

Services/Facilities include: Meagher's Pharmacy Sandford Road, Meagher's Pharmacy Ranelagh Village, Scoop Dessert Parlour Ranelagh, Selena's Beauty Spa, The Village Butcher Shop, The Devlin Cinema, The Devlin Hotel, Tesco Express, Oslo Beauty Ranelagh, Joys Flowers Florist, Anastasia Boutique, Laundry Online Ranelagh, Expert Hardware, Bank of Ireland, Ranelagh Thai Centre Massage Therapist, i-Service Mobile Repairs, BoyleSports Bookmakers, GMALE Barbers, The Company of Books, Headcases Hair Studio, The Zip Yard Sewing Shop, Ranelagh Village Dental, Seagreen Boutique, Leech Pharmacy, Origin Hair Salon, Brown Sugar Hairdresser, Advanced Electrolysis Clinic, Rouge Beauty Salon, Lidl, Health Services Staffs Credit Union, Ranelagh Post Office, Spar, AIB Bank, Burke's Pharmacy, Flyefit Ranelagh, SuperValu, Wildflower Hair Salon, Ranelagh Park Playground, Ranelagh Seventh-day Adventist Church, Archview Physiotherapy, White Crane Kung Fu and Tai Chi, Mountpleasant Square Park and Mountpleasant Lawn Tennis Club for example;

A large number of café/restaurants/bars are located within Ranelagh including the following:

R McSorleys Bar, Birchalls Bar, Americana Bar, Layla's Rooftop Restaurant, Nightmarket Thai Restaurant, Bunsen Restaurant, Four Star Pizza, La Bodega Restaurant, Cinnamon Restaurant, Humphrey's Pub, Smyths of Ranelagh Bar, Er Buchetto Café, Butcher Grill Steak House, Antica Venezia Restaurant, Tribeca Restaurant, Butlers Chocolate Café, Gigi Restaurant, Mario's Italian Restaurant, Zaytoon Restaurant, The Taphouse Bar, Wowburger Restaurant, Kinara Kitchen Restaurant, Rita's Restaurant, Mak Chinese Restaurant, Nick's Coffee and Firebyrd Restaurant for example;

- **Beechwood-c.1 Kilometre/c. 13 minutes walking distance/c.4 minutes cycling distance:**

(Services/Facilities include: Mima Coffee Company, Mortons Store, The Best of Italy Store, Excuse my French Restaurant, Keegans Laundrette and Dunville Pharmacy for example).

- **Rathmines-c.1.8-2.2 km/c.22-c.28 minutes walking distance/c.6-c.8 minutes cycling distance:**

Services/Facilities include: The Swan Shopping Centre [which includes Omniplex Cinema Rathmines, McDonald's Restaurant, Dunnes Stores, Starbucks, Butlers Chocolate Café and Elephant & Castle Restaurant for example] in addition to The Stella Cinema, Eddie Rockets, Kodiak Bar, Lottie's Restaurant, Rody Bolands Bar, Blackbird Pub, Tesco Metro, Tesco Express, Lidl, Aldi, Saba to Go, Zambrero Rathmines, Umi Falafel, Farmer Browns Restaurant, Camille Thai Restaurant, Uno Pizza, Dominos Pizza, Apache Pizza, Subway, The Orange Tree Bakery, The Laundry and Dry Cleaning Shop, The Cartridge Shop, Doctors Clinic Rathmines, Rafter's Medical Centre, Rathmines Dental, Peter Marks Hairdressers,

Heaven Beauty Salon, Daniel and Andrew Hair Salon, Rathmines Library, EBS Bank, Rathmines Life Pharmacy, Boots Pharmacy and Rathmines Post Office for example.

In addition, the local area is also well served by educational facilities within 2 km of the site. This is demonstrated in the *Community and Social Infrastructure Audit (incl. Schools and Childcare)* prepared by Thornton O'Connor Town Planning which is enclosed as a separate document. Please see Figure 5.3 below which demonstrates the wide range of educational facilities located within 2 km of the site.

Figure 5.3: Extract of Maps of Childcare (Left) and Education Facilities (Right) Within 750 Metres / 1 Km of the Subject Site

(Source: *Community and Social Infrastructure Audit (incl. Schools and Childcare)* Prepared by Thornton O'Connor Town Planning, 2025)

The *Community and Social Infrastructure Audit (incl. Schools and Childcare)* prepared by Thornton O'Connor Town Planning concludes that *"the analysis of existing capacity indicates a robust demand for additional childcare places. Given the childcare demand generated by the proposed development, its unit typology, alongside the shifting age and demand profile, it is considered that an additional childcare facility would be a favourable addition to the area".* Accordingly, the Applicant has incorporated a crèche into the scheme, which will benefit the future residents of the development but will also cater for the immediate existing residents of the area.

The *Community and Social Infrastructure Audit (incl. Schools and Childcare)* prepared by Thornton O'Connor Town Planning 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."*

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.

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."*

We note that there is 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, gym and a management suite 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.

5.7 Potential Impacts Associated with the Development and Mitigation Measures Proposed

5.7.1 Introduction

This section considers any potential impacts that may occur on population and human health as a result of the proposed development during construction stage, operational stage and also any potential impacts that may arise if the development were not to proceed. We have considered unplanned events throughout this Chapter with particular reference to population and human health.

5.7.2 Potential Impacts on Population Profile and Trends

Do Nothing Scenario

If the proposed development were not to proceed, this underutilised core urban site would remain in its existing form and could fall into a state of decline. Up until 2019, the existing buildings and lands at the application site were formally utilised by the Jesuit Community for institutional purposes. The site sold to the Applicant comprises a range of institutional buildings and large unutilised green spaces which became surplus to the Jesuit Community's requirements due to a decline in vocations and were thus no longer required for the purposes of their function and mission.

These vacant buildings became impossible to maintain by the Jesuit Community which left the site redundant and ultimately lead to its sale to the Applicant in 2019, in order to provide a sustainable use of the lands.

If the site is not developed, this would represent a waste of scarce brownfield land in a sustainable location at a time of an acute housing need, located in close proximity to many services and facilities. We note that, as discussed in Section 5.4.2, the Rathmines East B ED had an average household size of 2.3 No. persons at the time of the Census 2022, however a large number of households comprise 4 No. or more rooms. Therefore, it is important to provide a mix of unit types, particularly catering for smaller household formations by providing a mix of studio, 1, 2 and 3 No. bedroom units at the subject site.

Ultimately if the proposed development does not proceed there would still be a dearth in the provision of smaller dwelling types for persons seeking a dwelling of this size, whether it is a family home, a trade down unit or a young couple seeking to purchase their first home, which is considered a negative impact on the population.

The proposed mix of dwelling types and sizes (70 No. studios, 176 No. one-bed units, 267 No. two-bed units and 49 No. three-bed units) will result in a positive impact for the population and as such the scheme will cater for a wide cohort of persons.

Construction Phase

The proposed development is planned to be constructed on a phased basis over 35 No. months. It is estimated that there will be c. 4 No. phases during the construction stage as follows:

Phase	Works	Estimated Time	Outline Works
Phase 1	Site Set Up, Enabling Works and Demolitions	Months 1-5	*Site Set Up for all Blocks.* • Site cabin delivery and placement; • Completion of all outstanding required surveys; • Contractor temporary service installations etc.; • Construction of appropriate hoarding to neighbouring properties; • Installation of CCTV coverage or other agreed security means; • Set up of required noise, dust, vibration monitoring stations, receptors in predetermined areas closest to sensitive locations as defined by the grant of planning; • Review environmental controls defined within the EIAR; • Tree protection installed; • Connection to new main temporary power board to feed the following: o site security load | requirements; and

			○ all storage area requirements. *Demolition and Enabling Phase* • Remove all debris and rubbish from the site area to licensed tips; • Disposal or re-use of demolition materials will be carried out in accordance with the Development Resource & Waste Management Plan as prepared by AWN Consulting; • Ensure, following the demolition of the buildings (or part thereof), the site shall be left in a tidy and safe condition in agreement with the client project manager; • Ensure measures shall be taken to ensure that the existing services in the vicinity of each structure are not affected by the demolition works; • Protection measures for all retained Buildings to be agreed and installed in advance of any works commencing onsite; • Review of temporary work to site boundaries with adjoining houses and liaison protocol with owners;
Phase 2	Basement Box	Months 2-10	*Basement Works Phase* • The development will include a single level basement under Blocks A, B & C to accommodate car parking spaces, bicycle parking, storage, services and plant areas. • Substructure works i.e., groundworks, formwork, basement creation (up to ground floor podium), rising concrete elements attenuation and drainage etc. will be completed during this phase.
Phase 3	Block D & F Apartment Blocks, Tabor House and The Chapel	Months 5-24	*Tabor House & The Chapel Refurbishment* • Isolation of all power and services to the existing building; • Soft strip areas deemed to be safe and not contaminated within each structure; • Ensuring primary elements of building structures not to be disturbed during soft strip works; • Appropriate temporary works as required will be installed to stabilise external walls prior to any internal remodelling taking place, beyond those needed during the initial demolition phase;

			• Construction materials will be loaded out by crane and will follow in accordance with the construction programme; • Replacement windows and roof elements (as required) will be fixed as the phase progresses to maintain water tightness; • Internal Works; • Landscaping; and • Handover *Residential Block Construction* • Blocks D & F Substructure; • Blocks D & F Construction of superstructure and vertical elements; • Blocks D & F Construction of façade elements. This phase will be erected as soon as possible to commence waterproofing to the floors so fit out works can commence; • Block D & F Fit Out; • Snagging / Commissioning / BCAR / Handover; • Landscaping and External Works;
Phase 4	Block A1, A2, B, C and E (Courtyard Houses)	Months 7-35	*Residential Block Construction* • Mobilisation; • Block A, B, C & E substructure (outside of basement footprint); • Block A, B, C & E Construction of superstructure and vertical elements; • Block A, B, C & E Construction of façade elements. This phase will be erected as soon as possible to commence waterproofing to the floors so fit out works can commence; • Block A, B, C & E Fit Out; • Snagging / Commissioning / BCAR / Handover; • Basement Fit Out; • Landscaping and External Works

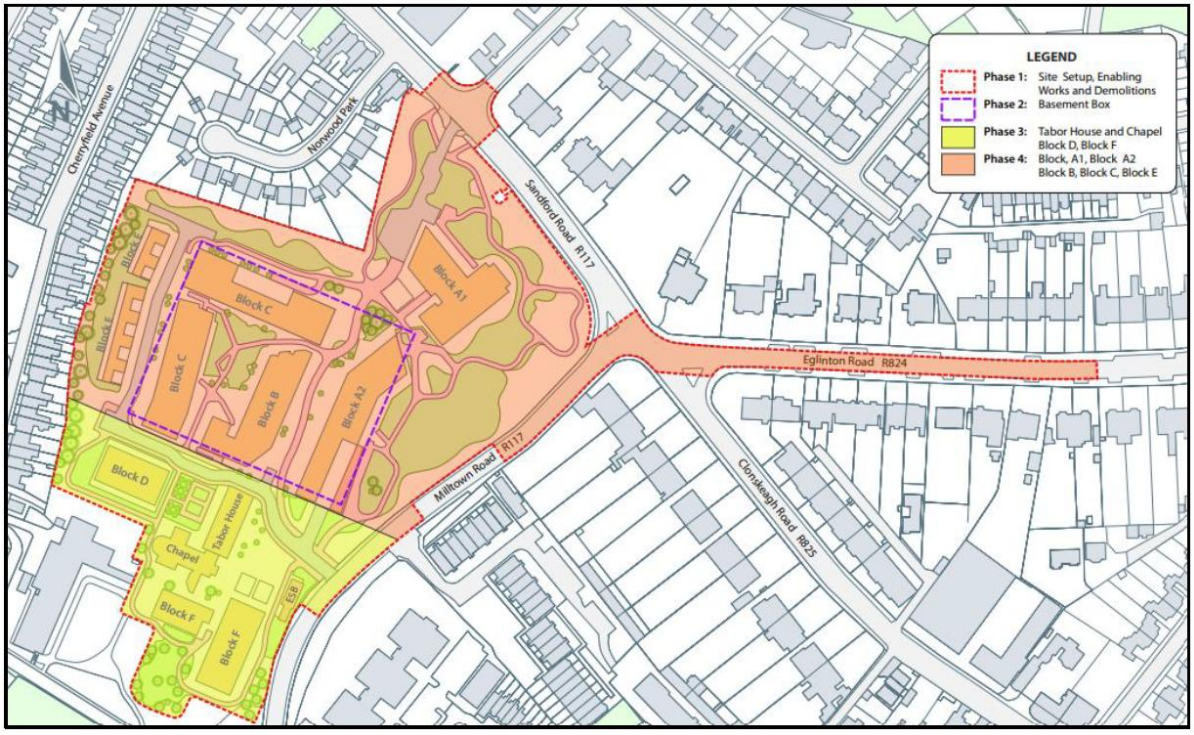

Figure 5.4: Proposed Phasing Plan Layout

(Source: Verdé Environmental Consultants Ltd, 2025)

The typical working hours are proposed to be 07:00 to 18:00 Monday to Friday (excluding bank holidays) and 08:00 to 15:00 on Saturdays, subject to any condition attached in a grant of permission. No work will take place on Sundays and Public Holidays. Subject to the agreement of the Local Authority, out-of-hours working may be required for water main connections, foul drainage connections etc.

In the short term the local population may be impacted during the construction period due to the influx of construction workers, traffic, noise and dust. However, we note that mitigation measures will be put in place to minimise such impacts which are discussed in other sections of the EIAR such as the Noise and Vibration Chapter (Chapter 13) and the Traffic and Transportation Chapter (Chapter 15) in addition to the *Preliminary Construction Management Plan* submitted separate to the EIAR and prepared by DBFL Consulting Engineers.

There will be a neutral impact on population trends and profile for the area as no additional persons will be accommodated at the subject lands during construction.

Operational Phase

As noted previously, the provision of 562 No. units comprising 70 No. studios, 176 No. one bed units, 267 No. two bed units and 49 No. three bed units will provide a range of unit sizes for people seeking to live in the proposed development. In addition to providing a choice of dwelling sizes, the provision of the proposed 562 No. units at the subject lands will significantly contribute towards alleviating the housing crisis being experienced in Ireland, which is a positive impact associated with the proposed development.

The scheme will provide permeable links through the site through the provision of a public park, pedestrian boulevard, new pedestrian entrances and the facilitation of future potential links to the institutional lands to the south-west (if required for redevelopment in the future). The scheme also provides a significant quantum of public open space (15,023 sq m/35.3% of site area) which will be 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)

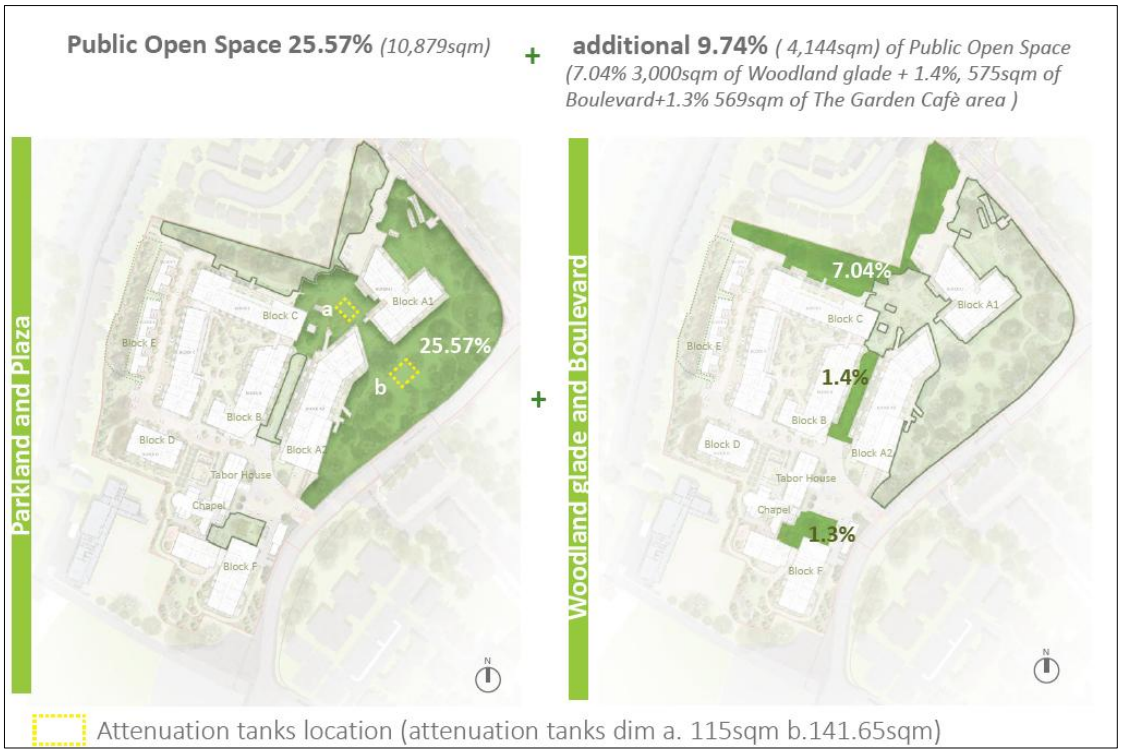

Figure 5.5: Public Open Space Provision at the Application Site

(Source: Cameo and Partners Design Studio, 2025)

Figure 5.6: Public Open Space Provision at the Subject Lands

(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 provision of extensive public open space will be a positive improvement for the area, particularly as the site will be opened up for the first time to the public (as the lands have always been in private use by the Jesuit Community). The public have never enjoyed any right of access to these privately owned lands as confirmed by the Jesuits in their letter included as part of Chapter 3.0. The scheme has incorporated a number of measures in the proposed public open spaces such as the provision of exercise and play equipment to encourage physical activity which will have a positive impact on the health and wellbeing of residents and visitors. In addition, a creche is provided in the development, which as well as benefiting the future residents, will also cater for the immediate existing residents of the area, and thus will enhance the amenity of the area. The community/cultural space will also enhance the accessibility of such uses in the local community.

Proposed Mitigation Measures

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

population may be temporarily impacted due to the influx of construction traffic, noise and dust.

However, we note that these impacts are temporary, and mitigation measures will be put in place to minimise such impacts which are discussed in other sections of this EIAR including the implementation of a Dust Management Plan, a Mobility Management Plan and Parking Strategy. Please see further details in Chapter 12 (Air Quality and Climate) and Chapter 15 (Transportation).

5.7.3 Potential Impacts on Housing

Do Nothing

The subject developable lands comprise an area of c. 4.26 hectares and currently comprises a building range which consists of the original Milltown Park House building with 5 No. extensions attached to the original structure.

The existing plot ratio of the development site (c. 4.26 Ha) is 0.11 which is completely unsustainable at this strategically located large plot of underutilised land in close proximity to a wide range of services, facilities and public transport. If this prime urban site is left undeveloped, this would not represent the sustainable development of Dublin City which would be a negative impact as suitable housing would not be provided on this large and well-located urban site.

Construction Phase

As noted in Section 5.7.2, in the short term the local area will be impacted during the construction period due the influx of construction workers, traffic, noise and dust. However, this unavoidable impact is associated with any new development and is not considered long-term/permanent. The existing building range, which is no longer required by the Jesuit Community has been vacant since 2019, which has left the site redundant and ultimately led to its sale to the Applicant in 2019, and thus there will be no loss of housing units during the construction phase.

Operational Phase

As discussed in Section 5.4, the proposed development will predominately provide apartment units and smaller dwelling sizes in an area that requires such dwelling types, having regard to the clear demand for such units and the average household size of the Electoral Division at the time of the Census 2022, which is 2.3 persons per unit. The addition of 562 No. units to an existing residential area will be a positive addition to the availability of housing in the Rathmines East B Electoral Division and in Dublin City and will cater for a wide cohort of persons.

Proposed Mitigation Measures

It is considered that the proposed development of 562 No. units will be a positive addition to the availability of housing in the area by providing a wide choice of unit sizes for a range of persons. The short-term impacts associated with the construction stage that are associated with any new development will be lessened once mitigation measures have been implemented, which have been outlined extensively in other sections of this EIAR such as

the Noise and Vibration Chapter (Chapter 13) and the Transportation Chapter (Chapter 15) of the EIAR in addition to the implementation of the Preliminary Construction Management Plan and Outline Construction and Environmental Management Plan submitted as separate documents have been implemented. Additional mitigation measures include the implementation of a Dust Management Plan, Mobility Management Plan and Parking Strategy.

5.7.4 Potential Impacts on Employment/Economy

Do Nothing

The subject site in its current form does not provide any employment for the area, except for the occasional maintenance jobs required at the site such as security. If undeveloped, there would be no benefit for local employment as there is very limited employment potential associated with the current undeveloped lands. The buildings could fall into a state of disrepair as the Jesuit Community no longer require the buildings or lands and there is no existing use for the former Institutional buildings.

Construction Phase

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.

Operational Phase

The proposed development will provide 562 No. dwelling units, a café, a creche and community/cultural spaces and will cater for a range of persons including families, older persons and young couples who will utilise existing services and amenities in the local area which will ultimately be a positive impact on the local economy. The subject development will also create jobs such as within the newly proposed café, creche and community/cultural spaces and with the provision of a concierge for example, which would all result in additional employment opportunities being facilitated during the operation phase of the development. The additional residents on the site will also spend income in the local area which will benefit the local economy and will ultimately provide further employment opportunities for the area in the long term.

Proposed Mitigation Measures

The proposed development will have a significant positive impact on the economy and employment of the area due to the influx of jobs that will be created at construction and operation stages. We also note that during construction, local businesses will benefit from workers utilising their services and during the operational stage there will be an increased population at the subject lands which will support the local economy. New jobs will also be created at the subject lands during the construction and operational stages. It is considered

that the impact that will occur on employment and the local economy will be positive and long-term therefore no specific mitigation measures are proposed.

5.7.5 Potential Impacts on Local Services and Amenities

Do Nothing

If the development does not proceed 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.

Construction Phase

There are no existing services or amenities at the subject lands at present. Therefore, there would be no potential for impacts associated with the site during the construction stage in this regard.

As noted previously, workers during the construction phase would utilise local shops for example, and as such, will result in a positive short-term effect on the local services and amenities.

Operational Phase

The application site will be opened up to the public, allowing access to previously inaccessible private 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 5.7: CGI of the Proposed Transformed Public Park

(Source: 3D Design Bureau, 2025)

Figure 5.8: Illustrations of the Proposed Transformed Public Park

(Source: Cameo and Partners Design Studio, 2025)

Figure 5.9: Illustrations of the Archway Linking the Public Park and the Plaza Area (see Top Left Image Showing Bollards to Prevent Access to Plaza)

(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 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. The development promotes permeable links through the provision of the following:

1. A new public park along the east of the site from Sandford Road to Milltown Road;

2. A pedestrian boulevard from Sandford Road through the plaza area, connecting through the pedestrian boulevard to the forecourt at the front of Tabor House and the Chapel (with access to Milltown Road also possible at this location). The ground and first floor levels of Block B have been set back (designed as a colonnade) to allow a visual connection through to Tabor House;

3. Some 2 No. new pedestrian gates will be provided at each vehicular access point from Sandford Road and Milltown Road; and

4. In addition to the pedestrian gates provided at the vehicular entrances, a pedestrian access point will be provided at the junction of Milltown Road and Sandford Road which demonstrates that ample permeable opportunities are provided in the proposed development.

Therefore, it is clear that the subject development will positively contribute to the amenity provision of the local area, particularly as there has never been such provision at the lands.

As noted above, existing amenities in the area such as shops and restaurants will also benefit from the increase in population at the site, as they will bring significantly increased spending power into the local economy. The provision of a café and creche within the development, in addition to community/cultural spaces, will also benefit the wider community.

Proposed Mitigation Measures

As discussed previously, the proposed development will benefit the local economy as local shops and other amenities will benefit economically from the construction stage and operational stage. In addition, the significant quantum of public open space and permeable connections proposed will be an attractive addition to the area and represents a key planning gain for the wider neighbourhood.

The *Community and Social Infrastructure Audit (incl. Schools and Childcare)* prepared by Thornton O'Connor Town Planning concludes that *"the analysis of existing capacity indicates a robust demand for additional childcare places. Given the childcare demand generated by the proposed development, its unit typology, alongside the shifting age and demand profile, it is considered that an additional childcare facility would be a favourable addition to the area".* Accordingly, the Applicant has incorporated a crèche into the scheme, which will benefit the future residents of the development but will also cater for the immediate existing residents of the area, thus enhancing the amenity of the area.

The *Community and Social Infrastructure Audit (incl. Schools and Childcare)* prepared by Thornton O'Connor Town Planning 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."*

Therefore, the existing schools in the area are considered sufficient to serve the proposed development. In addition, the provision of a crèche will ultimately increase the capacity of childcare facilities for the area and the significant quantum of public open space and permeable connections proposed will be an attractive and positive addition to the area, particularly as there has never been such provision for public open space or permeable connections at the lands as the public have never enjoyed any right of access to these privately owned lands. The new café will also attract people to the site to enjoy the large public open spaces proposed. In the event that permission is granted, access will be opened up to the public, to the 15,023 sq m of public open space to be provided as part of the development.

5.7.6 Potential Impacts on Health and Safety

Do Nothing

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.

Construction Phase

All new developments will consist of associated short-term impacts and disturbances to the surrounding areas e.g. construction traffic and demolition of buildings. However, we note that the health and safety of surrounding persons and properties etc., has been a key consideration in the preparation of the *Preliminary Construction Management Plan* (enclosed separately) and various EIAR Chapters such as the Air Quality and Climate Chapter (Chapter 12) (including potential impacts arising from dust and traffic emissions), Noise and Vibration Chapter (Chapter 13) (including potential impacts arising from construction noise, plant selections) and Transportation Chapter (Chapter 15) (including potential impacts arising from construction traffic). The construction of the proposed development will have a neutral and imperceptible impact on health and safety, provided all mitigation measures outlined in the EIAR are adhered to as well as the *Preliminary Construction Management Plan* and *Construction Environmental Management Plan*.

Operational Phase

During the operational stage of the development, traffic safety is the most significant concern when considering health and safety. However, having regard to the high-quality nature of the scheme which includes a large quantum of public open space, the provision of permeable links through the site, and the fact that the design accords with DMURS, it is envisaged that no significant impacts will occur on health and safety as a result of the project.

Mitigation Measures

Mitigation measures will be put in place to minimise any potential impacts on health and safety. 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 of this EIAR 'Transportation' notes that:

> *"A Construction and Environmental Management Plan (CEMP) has been prepared as part of the planning application with an associated Preliminary Construction Management Plan (PCMP) which incorporates a range of integrated control measures and associated management activities with the objective of minimising the 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; and*
> - *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."*

The mitigation measures proposed during the operational stage include the implementation of the *Parking Strategy* and the *Mobility Management Plan*, provision of ample cycle parking, junction enhancements and promotion of car sharing, which will encourage the use of sustainable transport modes which will ultimately negate any potential impacts on the health and safety of the population in relation to traffic safety. The scheme is fully in accordance with the *Design Manual for Urban Roads and Streets*.

Furthermore, a Daylight and Sunlight Assessment has been prepared by 3D Design Bureau, which concludes that, notwithstanding some localised adverse effects identified in the assessment, the design approach taken has sought to minimise impacts on daylight and sunlight to neighbouring properties and that, when considered overall, the assessment results are favourable, with the levels of daylight and sunlight within the proposed scheme providing a high-quality level of amenity for the vast majority of future residents. Please see Appendix 5.1 for the Review of the *BRE Sunlight and Daylight Assessment* prepared by 3D Design Bureau, which accompanies this EIAR. A full *Daylight and Sunlight Assessment Report* prepared by 3D Design Bureau is also enclosed separately.

A Risk Management Chapter has been competed by DNV and is included as Chapter 18 which notes that the design has considered the potential for flooding, road accidents or fire within the design methodology. The vulnerability of the proposed development to major accidents and/or disasters is not considered significant. Control measures will be put in place for health and safety and environmental management in accordance with relevant code of practices and relevant legislation. It is considered that the vulnerability of the proposed development to the risk of major accidents or disasters will not be significant.

5.7.7 Potential Impacts on Traffic/Commuter Patterns

Do Nothing

If the proposed development did not proceed, the existing traffic situation would remain as it currently stands, therefore this would result in a neutral impact. However, if the development were not provided 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 cycle permeability through the site would not be provided to shorten journeys to public transport, services and facilities which is considered negative for the local community. In addition, if the site is not developed, people will be required to commute further to surrounding employment which is considered a negative impact.

Construction Phase

During the construction phase, the construction access points will be off Milltown Road at the location of the newly proposed primary vehicular access for the development. An additional construction access is proposed at the existing entrance from Sandford Road. Works are also proposed on Milltown Road and Sandford Road including new toucan crossings. The use of both / either entrances will be coordinated with the phasing of the development. A *Preliminary Construction Management Plan* prepared by DBFL Consulting Engineers is enclosed as a separate document with this application. We also note that a Transportation EIAR Chapter (Chapter 15) has also been prepared by DBFL Consulting Engineers.

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 *Preliminary Construction Management Plan* enclosed separately with this application also notes that a Traffic Management Plan (TMP) will be prepared for the site works by the Contractor.

Operational Phase

The subject site is well located on a prominent site fronting the junction of Sandford Road and Milltown Road, which is a key arterial crossroads between Milltown, Clonskeagh, Donnybrook and Ranelagh, within easy walking distance of the Green Line Luas (Beechwood is located 1 km / 13 No. minute walk) in addition to various bus stops. The Green Line Luas allows easy access to a significant quantum of employment locations throughout the City Centre, North and South Dublin City, North and South of Dublin County in addition to the opportunity for users to change onto the Red Line Luas at O'Connell Street/Abbey Street which would provide access to employment locations to the east and west of the City Centre.

A large variety of business districts and employment locations can be easily accessed by public transport and many are also within easy cycling and walking distance of the subject site such as Belfield Office Park, Beech Hill Office Campus, Richview Office Park, Ballsbridge, Ranelagh, Donnybrook, Rathmines, Clonskeagh Hospital, The Royal Hospital Donnybrook, St Vincent's Hospital, St Luke's Hospital, University College Dublin, The Canal, The Docklands, Harcourt Street and Sandyford Business District for example.

The site will also be provided with high quality walking and cycling facilities and is in proximity to a wide range of services and facilities (in addition to employment locations as discussed above), therefore sustainable modes of transport will be promoted.

The accessible urban location of the subject site will ultimately promote sustainable commuter patterns.

The proposed development provides a reduced car parking ratio of 0.546 No. spaces per unit for the residential units which will encourage sustainable modes of transport from the subject site. Please see Chapter 15 (Transportation) for further details on traffic and transport associated with the proposed development at operational stage. As will be noted below in the mitigation measures section, sustainable modes of transport are encouraged as part of the proposed development.

Proposed Mitigation Measures

The scheme will be developed in line with the Transportation Chapter (Chapter 15 of this EIAR), the separately enclosed *Preliminary Construction Management Plan* (PCMP) and *Construction 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 construction workers are anticipated to arrive in shared transport therefore reducing the quantum of vehicles arriving at the site during construction, which will therefore minimise potential impacts on the surrounding road network during construction.

As discussed, 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*.

5.7.8 Potential Impacts on Human Health (Environmental)

5.7.8.1 Water and Hydrology

Do Nothing

If the site remained in its current form, there would be no change to human health in terms of the water environment.

Construction Phase

The potential impacts of the proposed development on water and hydrology in the area during the construction stage (such as accidental leaks and spills, concrete run off, discharge of vehicle wash water from concrete trucks, dewatering excavations, compound discharge and cross contamination of potable water supply to construction compound) are fully assessed in the Water & Hydrology Chapter (Chapter 11). This Chapter sets out that the implementation of the measures outlined within the Chapter (summarised in mitigation measures section below) will ensure that the potential impacts do not occur on water and hydrology and ultimately there is anticipated to be no impact on population and human health in this regard.

Operational Phase

The potential impacts of the proposed development on water and hydrology in the area during the operation stage (such as increased impermeable surface area potentially reducing ground water recharge and potentially increasing surface water runoff, accidental hydrocarbon leaks and subsequent discharge into piped surface water drainage network, increased discharge to foul drainage network and increased potable water consumption) are fully assessed under Chapter 11 (Water & Hydrology) of this EIAR. 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.

Proposed Mitigation Measures

A number of mitigation measures are set out in Chapter 11 which include the following:

<u>Construction Stage</u>

- A *Preliminary Construction Management Plan* and *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 *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 authorized 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.

Operation Stage

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 (BIA)* 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:

- Roof Areas Draining Via SuDS – Courtyard houses (located along the site's western boundary) drain via soakaway pits in the back garden with overflows discharging into the main drainage network.

- Surface water runoff from the site's internal street network will be directed to the proposed pipe network via tree pits or other SUDS features like bioretention areas with overflows to main drainage network.

- Surface water runoff from on-street and curtilage parking will be captured by permeable paving.

- Soft Landscaped/Grassed Areas – Slows runoff at source.

- Attenuation of the 30 and 100-year return period storms by way of attenuation basin / Stormtech chambers at ground level (refer to the *Infrastructure Design Report* prepared by DBFL).

- Installation of a vortex flow control device (Hydrobrake or equivalent), limiting surface water discharge from the site to 6.0 l/sec.

- Surface water discharge will also pass via a Class 1 full retention 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, green roof installations, Hydrobrake and full retention fuel / oil separator noted above.

Irish Water have confirmed that based on the capacity currently available in the foul drainage and water supply networks and subject to a valid connection agreement being put in place the proposed connections can be facilitated (refer to Irish Water correspondence in Appendix 11.3 of this EIAR).

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 due to climate change - attenuation storage design allows for a 20% increase in rainfall intensities.

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

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

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

"Even disregarding the operation of design measures including an attenuation system and petrol interceptors on site, it is concluded that there will be imperceptible impacts from the Proposed Development to the water bodies due to emissions from the site stormwater drainage infrastructure to the wider drainage network."

5.7.8.2 Air Quality and Climate

Do Nothing

If the site remains in its current form, there would be no change to human health in terms of air quality and climate.

Construction Phase

Throughout the construction phase 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.

Operational Phase

The Air Quality and Climate Chapter notes that the impact of the proposed development on air quality and climate is predicted to be neutral and imperceptible with respect to the operational phase in the long term. Therefore, no site-specific mitigation measures are required.

Proposed Mitigation Measures

The Air Quality and Climate Chapter of the EIAR has set out detailed mitigation measures for the proposed development, noting the following:

"the following dust mitigation measures shall be implemented during the construction phase of the proposed development. These measures are appropriate for sites with a high risk of dust impacts and aim to ensure that no significant nuisance occurs at nearby sensitive receptors. These measures will be incorporated into the Construction Environmental Management Plan (CEMP) prepared for the site."

The mitigation measures are extensive, however, they note, *inter alia*, the following:

- Ensure effective water suppression is used during demolition operations, preferably with handheld sprays.
- Avoid explosive blasting, using appropriate manual or mechanical alternatives.
- Keep site fencing, barriers and scaffolding clean using wet methods.
- Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.
- Only remove the cover in small areas during work and not all at once.

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

In relation to mitigation measures specific to climate, the prevention of on-site or delivery vehicles from leaving engines idling, even over short periods, the maintenance and regular inspection of plant and machinery, and minimising the waste of materials due to poor timing or over ordering on site, and sourcing materials locally, will aid to minimise the embodied carbon footprint of the site.

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.

The proposed development has been designed to minimise the impact to climate where possible during operation. Details of the measures to be considered for incorporation into the design of the development are outlined below and within the *Energy and Sustainability Report* prepared in support of this planning application:

- The proposed residential development will comply with residential Part L 2022 (Dwellings), as well as targeting an A2/A3 BER.
- The proposed non-residential development will comply with non-residential Part L 2022 (Buildings other Than Dwellings), as well as targeting an A3 BER.
- The façade performance specification has been optimised to limit heat loss, improve air tightness and thermal transmittance and to maximise natural daylight.
- High efficiency plant will be specified to take advantage of the optimised façade design measures that have been introduced.
- A low energy lighting design will be utilised to further reduce energy consumption and increase occupant thermal comfort.
- Renewable energy technologies such as Air Source Heat Pumps (ASHP), Solar PV and VRF Heat Pumps will be considered for implementation.

5.7.8.3 Noise and Vibration

Do Nothing

If the site remains in its current form, there would be no change to human health in terms of noise and vibration.

Construction Phase

In the short term the local area may be impacted during the construction period due 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.

Chapter 13 (Noise & Vibration) notes that:

> *"Demolition and piling activities are predicted to exceed the noise threshold of 70dB(A) … which a significant noise impact can occur. However, this significant impact is only predicted to occur when works occur at the closest proximity to the dwellings located on the boundary of the site. In addition, it should be noted that the assessment considers all site equipment to be occurring simultaneously, however, it is unlikely that all items of plant will be in operational simultaneously. Additionally, the predictions only indicate a potential significant noise effect (based on a worst-case scenario) when working at the closest location to the dwellings, with lesser impacts predicted at all*

other locations across site… It is possible that vibration from construction activities will be perceptible at receptor locations, but not of the magnitude that would cause disturbance"

Please see proposed mitigation measures in the section below.

Operational Phase

The primary sources of outward noise that are deemed long term are mechanical plant items that will serve the development and traffic travelling to and from the development. Inward noise from road sources will also be incident on the development buildings. Chapter 13 concludes that the residual impacts at operational stage will be imperceptible (once cumulative plant noise emissions from the development are designed to achieve the appropriate noise criteria in relation to mechanical plant and services noise and once measures with respect to entertainment noise are implemented). This assessment has also considered the additional traffic flows on local roads associated with the operation of the proposed development. The residual impacts at operational stage associated with noise from the creche play area will be not significant.

Proposed Mitigation Measures

As set out in the Noise and Vibration Chapter, 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

The following general good practice measures include:

- The contractor will appoint a site representative responsible for matters relating to noise.
- A noise and vibration monitoring specialist will be appointed to periodically carry out independent monitoring of noise and vibration during random intervals and at sensitive locations for comparison with limits and background levels.
- All ancillary pneumatic percussive tools shall be fitted with mufflers or silences of the type recommended by the manufacturers, and where commercially available, dampened tools and accessories shall be used.

In addition, the *Preliminary Construction Management Plan* submitted separately recommends the following mitigation measures in relation to noise and vibration:

- Erection of a barrier (e.g. Standard 2.4m high construction hoarding) to remove direct line of sight between noise source and receiver when construction works are being carried out in proximity to noise sensitive receivers.
- Establishing channels of communication between the contractor, local authority and residents.
- Appointing a site representative responsible for matters relating to noise.

- A noise and vibration monitoring specialist will be appointed to periodically carry out independent monitoring of noise and vibration during random intervals and at sensitive locations for comparison with limits and background levels.

- Selection of plant with low inherent potential for generation of noise.

- Siting of noisy plant as far away from sensitive properties as permitted by site constraints and implementation of noise reduction measures such as acoustic enclosures.

- Avoid unnecessary revving of engines and switch off plant when idle.

- All vehicles and mechanical plant used for the purpose of the works shall be fitted with effective exhaust silencers and shall be maintained in good and efficient working order. In addition, all diesel engine powered plant shall be fitted with effective air intake silencers.

- All ancillary pneumatic percussive tools shall be fitted with mufflers or silences of the type recommended by the manufacturers, and where commercially available, dampened tools and accessories shall be used.

During the operation stage, Chapter 13 notes that 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. Mitigation measures and forms of noise control techniques proposed at operation stage 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; and

- 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 this document.

Chapter 13 sets out that:

> *"In general, all wall constructions (i.e. block work or concrete and spandrel elements) offer a high degree of sound insulation, much greater than that offered by the glazing systems. Therefore, noise intrusion via the wall construction will be minimal."*

The Chapter recommends that certain facades are to be provided with glazing and ventilation that achieves the minimum sound insultation performance (i.e. Block A1, A2 and Block F), which are facades facing either Milltown Road or Sandford Road.

The Chapter further concludes that:

> *"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."*

Therefore, it is clear that the project has comprehensively considered population and human health in relation to noise and vibration. 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. Implementation of the mitigation measures set out and adherence to good practice noise reducing measures will ensure that the impact will be short-term, slight to significant and negative in nature.

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.

5.7.8.4 Landscape and Visual Impact

Do Nothing

The site would remain as a large area of formerly institutional land of parkland character within an urban area of mixed character with no access to the general public. In the current situation, as a component of the local green infrastructure network it provides some visual amenity and ecosystem services. However, in the context of compact growth, the site is considered an unsustainable use of land resources and the public have never enjoyed any right of access to these privately owned lands.

Construction Phase

Chapter 9 of this EIAR prepared by Modelworks (Landscape and Visual Impact Assessment) assesses the potential effects of the proposed development on the landscape character and views/visual amenity of the receiving environment. 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.

Operational Phase

As noted above, a Landscape and Visual Impact Assessment is included as Chapter 9 of this EIAR. This assessment notes:

> *"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."*

Furthermore, the Chapter states that:

> ***"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."***

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.

Proposed Mitigation Measures

During construction stage, Chapter 9 notes that apart from measures such as tree and biodiversity protection and standard best practice construction site management (i.e. erection and maintenance of site hoarding, orderly storage of materials and vehicles, etc.), no additional mitigation measures are proposed for townscape and visual effects.

In relation to the operational stage, the Chapter notes the following mitigation measures that have been built into the proposal from the outset:

- 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 would be retained, but most of the better quality trees – a sufficient volume to retain the tree belt as a feature of the landscape – would be retained) and the retention of tree lines inside the northern boundary (shared with Norwood Park), and the west boundary (Cherryfield Avenue). These measures 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 positioning of Block A1 well back from Sandford Road and Milltown Road. This allowed for the tree/woodland belt to the retained, and limited the visual impact of the building on these roads and the houses across the roads.

- The positioning of Block C well back from the boundary shared with Norwood Park. This allowed for the retention of the tree line inside the boundary. This provided a visual buffer/ screen for the neighbouring estate. The height of the northern volume of Block C was limited to 4/5 storeys, as an additional measure to avoid excessive visual impact on the houses.

- The positioning of a row of two storey, flat-roofed houses (Block E) and a small apartment building of 3-5 storeys (Block D) inside the west boundary to the rear of the neighbouring houses on Cherryfield Avenue. These buildings provide a buffer/ transition in scale between Cherryfield Avenue and the taller buildings within the site. Both Blocks D and E are set back from the shared boundary with Cherryfield Avenue behind a 12m+ 'biodiversity corridor', which includes a row of retained trees and a large number of new trees for additional visual screening.

- 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.

- High quality design and materials. The proposed scheme is conceived as a high 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 unavoidably would be from some vantage points), the buildings and landscape would be attractive. The townscape character and views would change, but their quality would be maintained.

In addition, the Chapter notes the following in relation to Block A1:

> *"Block A1 ranges from five to eight storeys in height. The intention is to take advantage of the building's separation distance from neighbouring properties/sensitivities (due to the set-back behind the woodland belt) and the screening provided by the trees/woodland, to achieve density and also mark the junction of Sandford Road and Milltown Road the eight storey accent volume."*

Please see Chapter 9 for full details of these mitigation measures. In relation to population and human health, the Chapters notes that the proposed development would introduce a new, high-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.

5.7.8.5 Waste Management

Do Nothing

If the site remains in its current form, there would be no demolition, excavation, construction, or operational waste generated at this site and there would thus be a neutral effect on the environment and human health in terms of waste management.

Construction Phase

Throughout the construction phase there may be potential for impacts to occur on human health such as incorrect management of waste which could result in littering and could cause a nuisance to the public and attract vermin. 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.

Operational Phase

Throughout the operational phase there may be potential for impacts to occur on human health such as incorrect management of waste which could result in littering and could cause a nuisance to the public and attract vermin. Chapter 14 of this EIAR (Material Assets – Waste Management) sets out that a carefully planned approach to waste management and adherence to the *Operational Waste Management Plan* (OWMP – Appendix 14.2) will ensure appropriate management of waste and avoid any negative impacts on the local population.

Proposed Mitigation Measures

As noted above, the Material Assets – Waste Management Chapter of the EIAR has set out mitigation measures for the proposed development such as the implementation of the RWMP and the OWMP which will ensure that the effects on population and human health are short-term (construction) / long-term (operational), imperceptible and neutral.

Correct classification and segregation of the excavated material during construction is required to ensure that any potentially contaminated materialsare 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 during construction:

- 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 (By-products), as amended, European Union (Waste Directive) Regulations 2011-2020 and the NWMPCE 2024. 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 NWMPCE 2024. It will also ensure optimum levels of waste reduction, reuse, recycling and recovery are achieved and will promote more sustainable consumption of resources.

During operation, 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 proposed development during the operational phase is dealt with in compliance with the provisions of the *Waste Management Act 1996*, as amended, associated Regulations, the *Litter Pollution Act 1997*, the NWMPCE 2024 and the DCC waste bye-laws. It will also ensure optimum levels of waste reduction, reuse, recycling and recovery are achieved.

5.7.8.6 Biodiversity

Do Nothing

If the proposed works were not to proceed, it is likely that the park area with grassland, treelines and woodland would be retained and possibly left as is with minimal management. The habitats extant on the site currently indicate that the grassland habitat is not intensively maintained and is cut infrequently. The naturalisation of this grassland has the potential to increase floral species diversity, with eventual succession to scrub/woodland. While there would be no direct loss of habitat, the invasive non-native species in the woodland have the potential to outcompete the native flora in the groundcover of the woodland and alter the habitat composition within the site if appropriate management is not incorporated.

Construction Phase

The development will require removal of vegetation within the site. This will reduce the extent of a range of habitats, including mixed broadleaved, conifer woodland, treelines, scrub and grassland. The removal of vegetation could also affect wildlife, such as terrestrial mammals, bats and birds by direct mortality, loss of potential roosting, nesting, commuting and foraging habitat.

There will be a loss of potential bat roost habitats due to removal of some low roost potential trees and the re-purposing/demolition of existing buildings. Artificial lighting during construction has the potential to cause disturbance to bats and reduce quality of foraging and commuting habitat.

Stormwater generated at the Site during the Construction phase will discharge to the existing surface water system which in turn discharges to the River Dodder, and eventually Dublin Bay via the Liffey. A *Hydrological and Hydrogeological Qualitative Risk Assessment* (HRA) has been prepared for the proposed development by AWN. According to this assessment, "*there are no pollutant linkages as a result of the construction or operation (without the use of mitigation) of the proposed development which could result in a water quality impact which could alter the habitat requirements of the Natura sites within Dublin Bay*".

The HRA also states:

> *"Should any silt-laden stormwater from construction or hydrocarbon-contaminated water from a construction vehicle leak/tank leak manage to enter into the surface/combined water sewer, the suspended solids will naturally settle within the sewer; however, in the event of a worst case hydrocarbon leak of 1,000 litres this would be diluted to background levels (established as surface water quality objectives as outlined in S.I. No. 272 of 2009, S.I. No. 386 of 2015 and S.I. No. 77 of 2019) by the time the stormwater reaches the nearest Natura 2000 Sites (South Dublin Bay and River Tolka Estuary SPA, South Dublin Bay SAC, North Dublin Bay SAC, North Bull Island SPA, c. 2.5 km)."*

Wintering birds have not been identified to use the site and the site is assessed as having negligible habitat for wintering birds. Any impact is likely to be imperceptible.

Mitigation and compensation/enhancement for the above is summarised below and detailed in Chapter 8 (Biodiversity) of this EIAR. The residual impacts during the construction phase are assessed to be not significant.

Operational Phase

Lighting of vegetation and reduction of vegetation within the site could impact on the quality of habitats, such as mixed broadleaved, conifer woodland, treelines, scrub and grassland, making the site less suitable for bats and terrestrial mammals.

The site was not identified as providing habitat for wintering birds and it is not within any know flight line of sensitive bird species. Therefore, the buildings are not likely to cause collision. The impact on wintering birds is likely to be neutral.

Emission from traffic during operation will not have a significant impact on air quality and will not impact on habitats within the site.

Mitigation and compensation/enhancement for the above is summarised below and detailed in Chapter 8 Biodiversity of this EIAR. The residual impact during the operation phase is assessed to be not significant.

Proposed Mitigation Measures

Chapter 8 of this EIAR sets out mitigation measures to be implemented as part of the proposed development in relation to bats, terrestrial mammals, habitats and birds. The proposed mitigation measures for the construction stage have been summarised below:

- To mitigate noise-related impacts, 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.

- 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.

- Should renovation work 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 acting as Ecological Clerk of Works (ECoW).

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

- 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.

- 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.

- All areas of invasive species 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.

- A precautionary approach will be adopted during the demolition of Milltown Park House, the renovation of Tabor House and the Chapel, and the removal of trees with bat roosting potential. A suitably qualified Ecologist will act as an Ecological Clerk of Works (ECoW) for the duration of these works.

- Pre-commencement roost surveys/inspections will be conducted by the ECoW of the buildings set for demolition and renovation prior to these works taking place. This will ensure that the baseline bat roosting / breeding bird status of buildings in question is reconfirmed ahead of the works, thus ensuring no impacts to roosting bats / nesting birds should they take up residence in the meantime and no offences being committed under the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011) or the Wildlife Acts 1976 (as amended).

- The demolition & renovation methodologies will be developed in consultation with the ECoW, and detailed Method Statements, including any bird and bat-specific mitigation measures, will be agreed with the Local Authority. This will ensure that no bats are present or impacted by the works.

- A pre-felling check will be conducted by a suitably qualified Ecologist of all trees to be felled at the Site prior to felling taking place. This may entail an endoscope check from ground level/ or mobile elevated work platform (MEWP).

- Trees will be felled during the start or end of the hibernation period (so either in September/October or February/March) following a thorough check for bats and nesting birds. The felling of trees during this period will ensure that bats are likely to have entered hibernation or will soon be coming out of it and will reduce the likelihood of them either not having enough energy or a food source if they happen to be disturbed and take flight. It is also outside of the breeding bird season and so unlikely to come across active nests. Felling in this period will further reduce the likelihood of bats having transitioned between roosts overnight, should felling not be carried out immediately following the bat survey.
- Should a nesting bird be found at the Site, no felling of the tree or demolition of the building in question or works on the building in question will take place and the nest will be protected until the young birds have fledged, as confirmed by a suitable qualified ecologist. The area around the nest will be protected with an appropriate buffer to prevent disturbance of the bird(s).

- To minimise ecological disturbance during the construction phase, lighting will be managed with a strong emphasis on environmental sensitivity. Where possible, all construction lighting will be switched off during non-working hours to reduce unnecessary illumination of the surrounding environment.

- LED luminaires with a warm white spectrum (2700K–3000K) will be utilised. This spectrum reduces the blue light component, which is known to be more disruptive to wildlife. LED lighting is also advantageous due to its sharp cut-off angles, lower intensity, and dimming capabilities, all of which contribute to minimising light pollution and ecological disturbance.

- Prior to the commencement of any construction activities, protective fencing will be installed around all retained trees in strict accordance with BS 5837:2012 - Trees in Relation to Design, Demolition and Construction: Recommendations. The installation must be inspected and formally signed off by a qualified arborist before construction begins to ensure compliance with the standard. Once erected, these exclusion zones will remain in place for the duration of the works. No ground clearance, excavation, earthworks, stockpiling of materials, or movement of machinery will be permitted within the fenced areas. This approach ensures the long-term health and stability of retained trees and prevents soil compaction or root disturbance.

- 10 No. bat boxes will be erected on suitably sized trees at the Site under the guidance of a suitably qualified Ecologist. These bat boxes will be of the durable woodcrete variety and capable of supporting multiple crevice- dwelling bat species e.g., the Shwegler 2F bat box.

- The following mitigation measures are proposed to ensure that the proposed development will not result in a significant adverse effect 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.

The proposed mitigation measures for the operation stage have been summarised below, which is particularly relevant in terms of population and human health:

- A bat friendly lighting plan has been developed in collaboration with DNV and the lighting Consultants, Thelmis Pritchard, to ensure that significant impact on bat species which may be using the Site will not occur.

- The Landscape Plan includes areas of wildflower meadow. A prominent section will be present in the north of the Site, referred to as a 'woodland glade' area in the *Landscape and Access Design Statement* and will run along the woodland section at this location. Smaller islands and linear strips of meadow are proposed throughout

the Site, particularly in the east and north-east. Spread among areas of woodland understorey planting and amenity grassland, these areas will be managed using a low-intervention approach with a reduced mowing regime.

- Green roofs are proposed across the majority of buildings within the development to deliver significant biodiversity gains and integrate nature-based solutions into the urban fabric. In line with the Landscape Plan, these roofs will be planted exclusively with native wildflower species of Irish origin, ensuring seasonal nectar and pollen availability for pollinators such as bees and butterflies. This approach supports invertebrate diversity and provides additional foraging opportunities for birds and bats, particularly in an otherwise built environment where such resources are limited.

- 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.

- 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.

- 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 installation of two insect hotels within the Site during the operational phase, providing valuable microhabitats for pollinators and other beneficial invertebrates.

- 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)*.

- Piles of logs and woody vegetation arising from tree felling will be retained in secluded, undisturbed margins of the Site. These features will provide essential refuges and foraging opportunities for a range of species, including Common Frog and small mammals such as Hedgehog and Pygmy Shrew.

- 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.

The residual impact during the construction and operation phase of the development is assessed to be not significant overall once mitigation and design features are incorporated.

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.

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

5.7.8.7 Microclimate - Wind

Do Nothing

If the proposed development does not go ahead, based on the assessment carried out on the existing site and the statistical analysis of 30 years of climate data from the nearby Dublin airport (Met Eireann), the existing site will remain well sheltered from the prevailing wind directions and will continue to be considered a comfortable environment for pedestrians.

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 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.

Proposed Mitigation Measures

The following mitigation measures have been incorporated for the operational stage:

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.

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.

Chapter 18 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.

5.8 Potential Cumulative Impacts

The potential impacts that may arise from the proposed development on population and human health have been considered cumulatively across this EIAR with other developments in the area, in terms of noise, traffic, air quality, landscape and visual impact etc. A full list of permitted and pending developments reviewed by all EIAR Consultants is included in Chapter 3.0. As a result of the proposed development, some 562 No. units will be provided, along with associated ancillary residents' amenity, a café, creche and community/cultural space.

The cumulative impact of the proposed development at the subject lands will be positive in the long term in relation to population and human health as the introduction of a new neighbourhood provides opportunities for people to purchase their first home in the area or to trade down from large houses to smaller units in a high-quality parkland and historic building setting for a wide cohort of persons. The provision of a café, creche and

community/cultural space will benefit the wider community, in addition to the significant quantum of public open space provided.

In addition, we note that the public have never enjoyed any right of access to these privately owned lands. The proposed development will open up the site and a significant quantum of public open space will be provided, and permeable links have been incorporated through the site through the new public park, the pedestrian boulevard, new pedestrian entrances and the facilitation of future potential links to the remaining institutional lands to the south-west (if required in future).

The extensive public open space and permeable links will enhance the accessibility and permeability of the area for the existing population and promote cycle and walking, ultimately resulting a positive impact on population and human health.

5.9 Interactions

The potential impacts on human health have been comprehensively considered throughout the preparation of this EIAR. Interactions occur with air quality and climate, water-hydrology, noise and vibration, biodiversity, landscape and visual impact, material assets-waste management, material assets-transportation and microclimate-wind.

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

The main interactions are predicated to arise during construction stage as there will be dust emissions associated with the construction of the proposed development. Mitigation measures as outlined in Chapter 12 of this EIAR will minimise dust emissions during construction stage. An adverse impact due to air quality in either the demolition, construction or operational phase has the potential to cause health and dust nuisance issues. The mitigation measures that will be put in place at the proposed development will ensure that the impact of the proposed development complies with all ambient air quality legislative limits and therefore the predicted impact is short-term, imperceptible and neutral with respect to population and human health during construction and long-term, imperceptible and neutral during operation phase.

5.9.2 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*) 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 arrive in shared transport therefore reducing the potential for associated temporary negative impacts on the surrounding road network. Appropriate on-site parking and compounding will be provided on this large 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, 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.

5.9.3 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 direct, short-term, neutral, localised and not significant during the construction phase and long-term, direct, negative and not significant during the operational phase. The interaction between air quality/climate and transportation with population and human health is not expected to generate any significant impacts.

5.9.4 Interactions between Population/Human Health and Noise/Vibration

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.

5.9.5 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 Chapter 17 (Wind) of this EIAR. 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.

5.9.6 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.

5.9.7 Interactions between Population/Human Health and Biodiversity

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.

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.

5.9.8 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.

5.10 Difficulties Encountered

There were no significant difficulties encountered in the preparation of this Chapter.

5.11 Conclusion

The Chapter has considered any likely impacts that the proposed development may have on population and human health. The baseline scenario is set out which provides details on the current situation in the Rathmines East B Electoral Division. The Chapter discussed potential impacts on population profile and trends, housing, employment/economy, local services and amenities, health and safety, traffic/commuter patterns, in addition to potential impacts on human health (environmental) with reference to other relevant EIAR Chapters including water and hydrology, air quality and climate, noise and vibration, landscape and visual impact, waste management, biodiversity and microclimate – wind.

The Chapter also discusses relevant interactions with the other EIAR Chapters, in addition to a range of mitigation measures to ensure any potential impacts on population and human health are lessened during construction and operation stages. The most significant benefit of the proposed development for the surrounding population is the provision of a large quantum of public open space which is significant planning gain for the area

5.12 References

- *Guidelines on the Information to be Contained in Environmental Impact Statements (Environmental Protection Agency (EPA), 2022);*
- *Advice Notes for Preparing Environmental Impact Statements (EPA, draft September 2015);*
- *Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (EPA, 2003);*
- *Guidelines on the Information to be Contained in Environmental Impact Statements (EPA, 2002);*
- *IEMA's Health in Environmental Impact Assessment - https://www.researchgate.net/publication/316968065_Health_in_Environmental_Impact_Assessment_a_primer_for_a_proportionate_approach/link/591aced6aca2722d7cffb2b0/download;*

- *IEMA's Launch of the EIA guidance for considering impacts on human health https://www.iema.net/resources/blog/2022/11/17/launch-of-the-eia-guidance-for-considering-impacts-on-human-health; and*

- *Environmental Impact Assessment of Projects – Guidance on the preparation of the Environmental Impact Assessment (Directive 2011/92/EU as amended by 2014/52/EU) (European Union, 2017).*

- *Dublin City Development Plan 2022 – 2028* (https://www.dublincity.ie/residential/planning/strategic-planning/dublin-city-development-plan/development-plan-2022-2028);

- Central Statistics Office (CSO) Census Data 2016 & 2011 (www.cso.ie/en/);

- CSO Census of Population 2022 – Summary Results (https://www.cso.ie/en/releasesandpublications/ep/p-cpsr/censusofpopulation2022-summaryresults/)

- CSO Live Register (www.cso.ie/en/statistics/labourmarket/liveregister/);

- Dublin Housing Observatory (https://airomaps.geohive.ie/dho/);

- *Rebuilding Ireland - Action Plan for Housing and Homelessness, 2016* (www.rebuildingireland.ie);

- *Design Manual for Urban Roads and Streets*–2019 (https://www.gov.ie/en/publication/c8o8c-design-manual-for-urban-roads-and-streets-2019-low-res/)

- Met Eireann (https://www.met.ie/climate/available-data/historical-data)

- Dublin Bus (www.dublinbus.ie);

- Bus Connects (www.busconnects.ie);

- Go Ahead Ireland (www.goaheadreland.ie); and

- Google Maps (www.google.com/maps/).