

5 ASPECTS OF THE ENVIRONMENT CONSIDERED

5.1 POPULATION

5.1.1 Introduction

This Chapter of the EIAR assesses the potential significant adverse impacts (and resulting effects) on the catchment population, likely to occur as a result of the proposed new library and external public realm enhancements at Nos. 20-21 and Nos. 23-28 Parnell Square (North), Frederick Lane North and Bethesda Place, Dublin 1.

This assessment has been undertaken having regard to the guidance outlined in the Environmental Protection Agency documents Guidelines on the information to be contained in Environmental Impact Assessment Reports (Draft, August 2017) and Advice Notes for Preparing Environmental Impact Statements (Draft, September 2015).

It is acknowledged that as a civic city library project, the proposed development is likely to have some impacts on the population beyond the immediate catchment area. However, the physical or social impacts on population are likely to be experienced less acutely and to become less tangible beyond the immediate catchment population. As such, it is considered reasonable to focus our examination on the likely significant effects of the proposed development primarily on the local catchment population.

For the purposes of this population assessment, the catchment population can be identified as comprising: the resident population, the working population (employment) and the visitor population (attractions in the area), who reside and/or work in, or who may visit, the defined catchment area within which the proposed development is located.

There are numerous inter-related environmental topics described throughout this EIAR, which are also of relevance to determining direct, indirect and cumulative environmental impacts on 'Population' (or Human Health). Chapter 5.2: Human Health examines the interactions of environmental topics arising from the proposed development on 'Human Health'.

Assessments of the environmental factors addressed elsewhere in this EIAR are cross referenced in this Chapter where relevant, to avoid unnecessary duplication and in accordance with the Draft EPA Guidelines (2017). In addition to the 'Human Health' section, the likely environmental impacts and effects of the proposed

development on the health and well-being of the population (human beings) are also addressed in the following Chapters:

- Chapter 5.3: Cultural Heritage - Architectural Heritage
- Chapter 5.4: Cultural Heritage - Archaeology
- Chapter 5.5: Material Assets - Transportation
- Chapter 5.6: Landscape & Visual Impact
- Chapter 5.8: Soils and Geology (including Land)
- Chapter 5.9: Water (Drainage, Supply & Flood Risk, and Groundwater) Chapter 5.10: Air - Noise and Vibration Chapter 5.11: Climate and Climate Change – Air Quality
- Chapter 5.12: Climate – Sunlight Analysis
- Chapter 5.13: Climate – Daylight Analysis

Furthermore, interactions between these environmental topics, including for human beings, are considered under Chapter 8: Interactions & Cumulative Impacts of Environmental Topics, of this EIAR.

5.1.2 Methodology

This Population Chapter has been completed in line with the summary explanation provided in Chapter 1: Introduction. It has regard to the Guidelines on Information to be Contained in Environmental Impact Assessment Reports (EPA, Draft August 2017) and the Draft Advice Notes for preparing Environmental Impact Statements (EPA, Draft September 2015).

5.1.2.1 Population

The intention of this Chapter is to describe (i) the general characteristics of human activity in the study area, (ii) any likely significant effects of the project on population without mitigation, (iii) any necessary or appropriate mitigation measures to address this, and (iv) the residual predicted impacts after mitigation.

The methodology for this Chapter relies on a desktop study of the demographic characteristics of the study area and potential impacts of the proposed development on population. It primarily relies on the following published reference documents, and other sources of local information that may be noted through the chapter:

- CSO information relating to the demographic profile and general activities of the population of the 'study area' for Census 2002, 2006, 2011 and 2016. Comparative information for the wider, region and state is also examined to provide a contextual backdrop for the local area demographics. 2002 to

2016 is considered to be a suitable overall period as it covers an era of economic growth, decline and recovery. It is therefore considered representative of the impact on population brought about by changing fortunes.

- For the purpose of this EIAR the characteristics of the local resident population are examined and compared to the characteristics of the wider City area, and then also at regional and state levels. This is in order to identify similarities or significant deviations in demographic patterns. It is then considered reasonable to look at the likely environmental impacts of the proposed development on the local resident population itself and as a component of a wider population.
- The Regional Planning Guidelines for the Greater Dublin Area 2010-2022, and projected future population growth in the Greater Dublin Area.
- The Dublin City Development Plan 2016-2022 and the land use zoning characteristics for this area.
- ESRI Quarterly Economic Commentary on employment trends.
- Online business directories and maps, and site visit, to identify existing employment providers, community facilities and visitor attractions in the study area.

Having identified the relevant population statistics for the study area, an analysis of the potential direct and indirect impacts, at both the construction stage and operational stage, of the proposed city library and associated public realm works is then undertaken for the identified population groups.

The effects of the proposed project is assessed in terms of Quality, Significance, Magnitude, Probability, Duration, and Type as explained in Chapter 1: Introduction.

5.1.2.2 Study Area

Given the nature of the proposed development of a Dublin city library and associated public realm, contributing towards the enhancement of a cultural quarter at Parnell Square North, the key population catchments (study areas) to consider are the 'City Area' and the 'Local Area'.

5.1.2.2.1 City Area

The subject site is located centrally within the Dublin City area, in the north inner city, as shown in Figure 5.1.1. The City boundary is largely contained within the M50 and the outer southern suburbs of Dublin.

It is generally bounded by the adjoining local authority jurisdictions of South Dublin County Council to the West; Dun-Laoghaire Rathdown County Council to the South and Fingal County Council to the North. Dublin Bay forms the Eastern boundary of Dublin City.

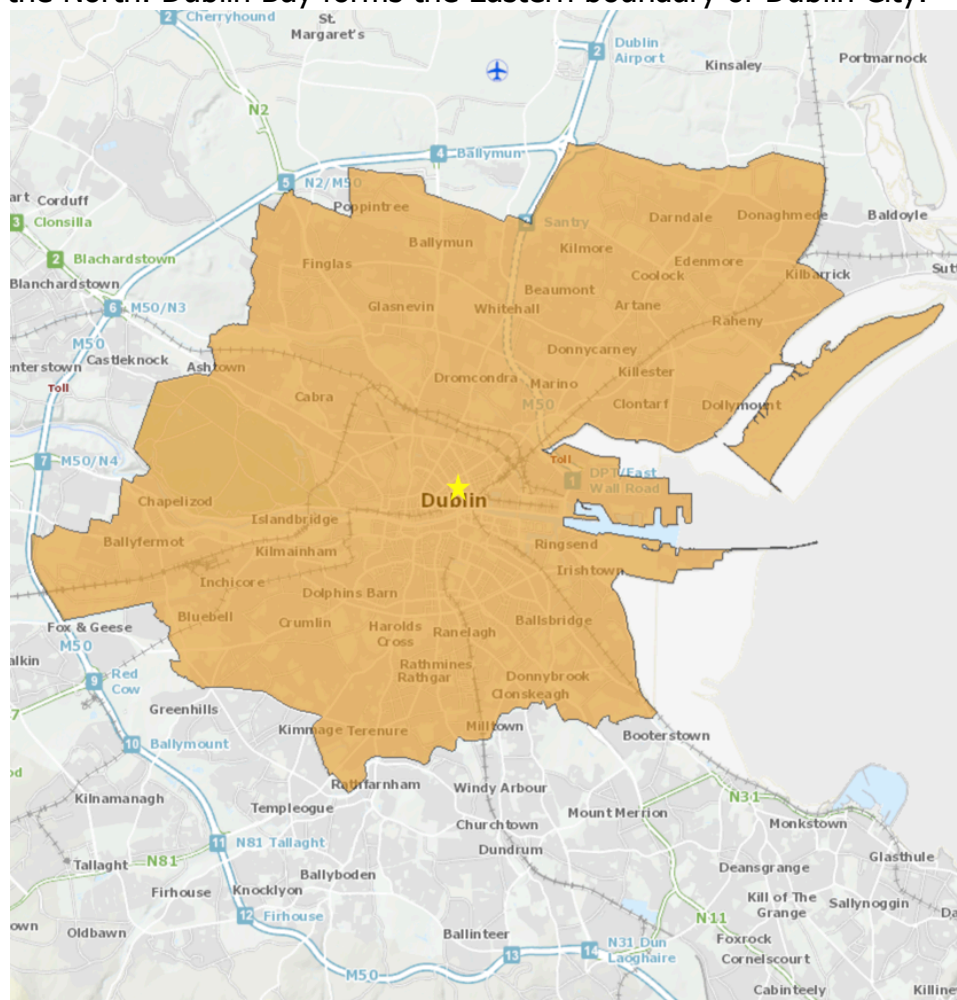


Figure 5.1.1: Extent of Dublin City Boundary according to Census (Source: CSO 2016)

5.1.2.2.2 Local Area

The proposed project is located on the north side of Parnell Square, Dublin 1.

The site of the proposed development is located approximately 650m (8 min walking distance) from the Ilac Centre, sited between Parnell Street and Henry Street, where the existing Dublin City Council Central Library is currently located.

The application site includes the former Colaiste Mhuire building (No.23-28) and annexed 1960's Amharclann (theatre) building and its open yard to the rear (north) of the original Georgian houses, and the Georgian houses at Nos. 20 & 21 Parnell Square (or Palace Row). The Hugh Lane Municipal Art Gallery sits between and

separates the Colaiste Mhuire houses and grounds from the two houses at Nos. 20-21. The application site also extends to the public realm area fronting all of these buildings, generally to the north side of Parnell Square. The total area of the site is approximately 0.99 hectares.

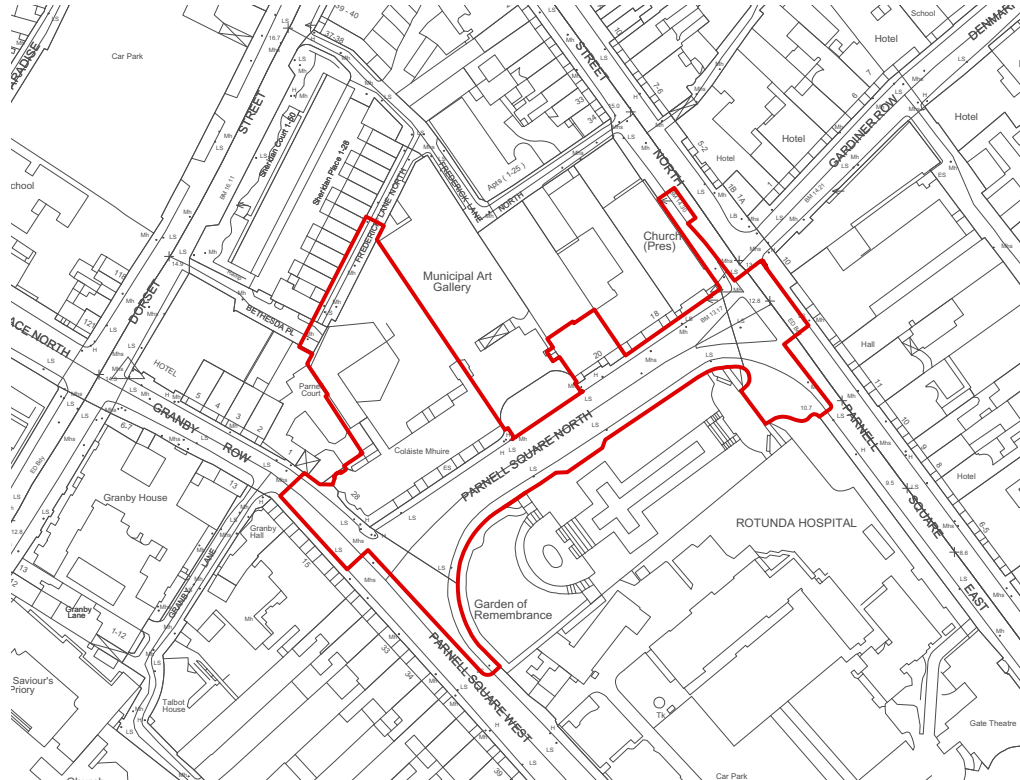


Figure 5.1.2: Site Location of the proposed City Library and Public Realm Works

The public realm area within the site extends generally along Parnell Square North (towards Parnell Square East and West), between the front facades at 'Place Row' to the north and the Garden of Remembrance to the south. The Garden of Remembrance lies within the northern end of Parnell Square, formerly part of the 18th Century Pleasure Gardens created to fund the construction of the Rotunda lying in hospital.

The Rotunda Hospital lies immediately south of the Garden of Remembrance.

The site is then bounded to the rear (north) and takes in part of Bethesda Place and Frederick Lane North. There is a level change between Bethesda Place and Frederick Lane North and they are separated by an existing wall, creating a cul-de-sac at Bethesda Place linked to Dorset Street.

Frederick Lane North is private and gated at its eastern end. It is accessible via Dorset Street and Parnell Square East. It does not

provide access to basement parking under the Sheridan Court housing complex. The Sheridan Court housing is generally oriented towards its central courtyard, and there are no entrance doors or outdoor amenity spaces opening onto Frederick Lane North.

The Maldron Hotel sits between Bethesda Place, Dorset Street and Granby Row. There are further properties (residential and office) at Granby Row, lying immediately north west of the application site. The rear yard of Colaiste Mhuire is bounded to the east by the modern rear extension to the Hugh Lane Gallery. To the east of Nos. 20 & 21 lies Chapter One restaurant and the Dublin Writers Museum, also housed in Georgian houses fronting Parnell Square North. The Abbey Presbyterian Church, also to the east, occupies the corner of Parnell Square North and North Frederick Street.

The Local Area, as illustrated under Figure 5.1.3 can be broadly described by the River Liffey to the South, to the east by Gardiner Street Lower up as far as the Royal Canal to the North at Phibsborough and continues down Constitution Hill back down to the River Liffey.

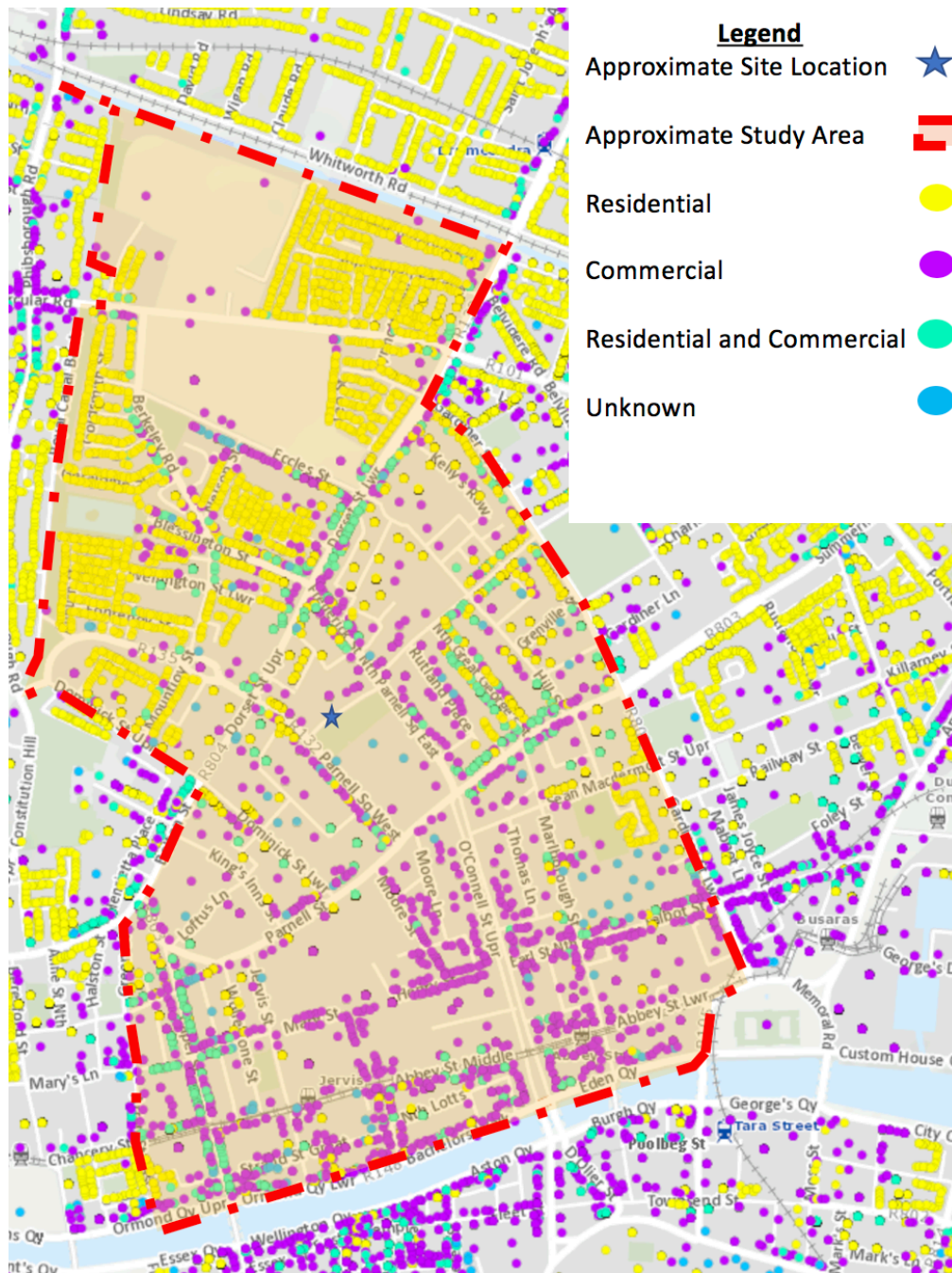


Figure 5.1.3: Location of residential and commercial address points within the study area (Source: myplan.ie Forward Planning Map Viewer).

An examination of Figure 5.1.3 indicates that the majority of the residential properties within the local study area are located to the north and east of the subject site. The majority of properties to the south, within the local study area between Parnell Square and the River Liffey, appear to be of a commercial nature.

A review of the Electoral Districts (EDs) within the Dublin City area, as contained in the Central Statistic Office Census 2016 Small Area Population Statistics Map, shows that the application site is located relatively centrally within the following 5no. adjoining Electoral Districts (EDs):

- Inns Quay A
- Inns Quay B
- Rotunda A
- Rotunda B
- North City

It was determined that these 5no. Electoral Districts (EDs) would form the extent of a manageable Local Study Area for the purposes of the population impact assessment for the proposed development. The EDs are illustrated in Figure 5.1.4 below.

The existing Central Library at the Ilac Centre is located within the 'North City' Electoral District, and as such is contained within the selected Local Area.

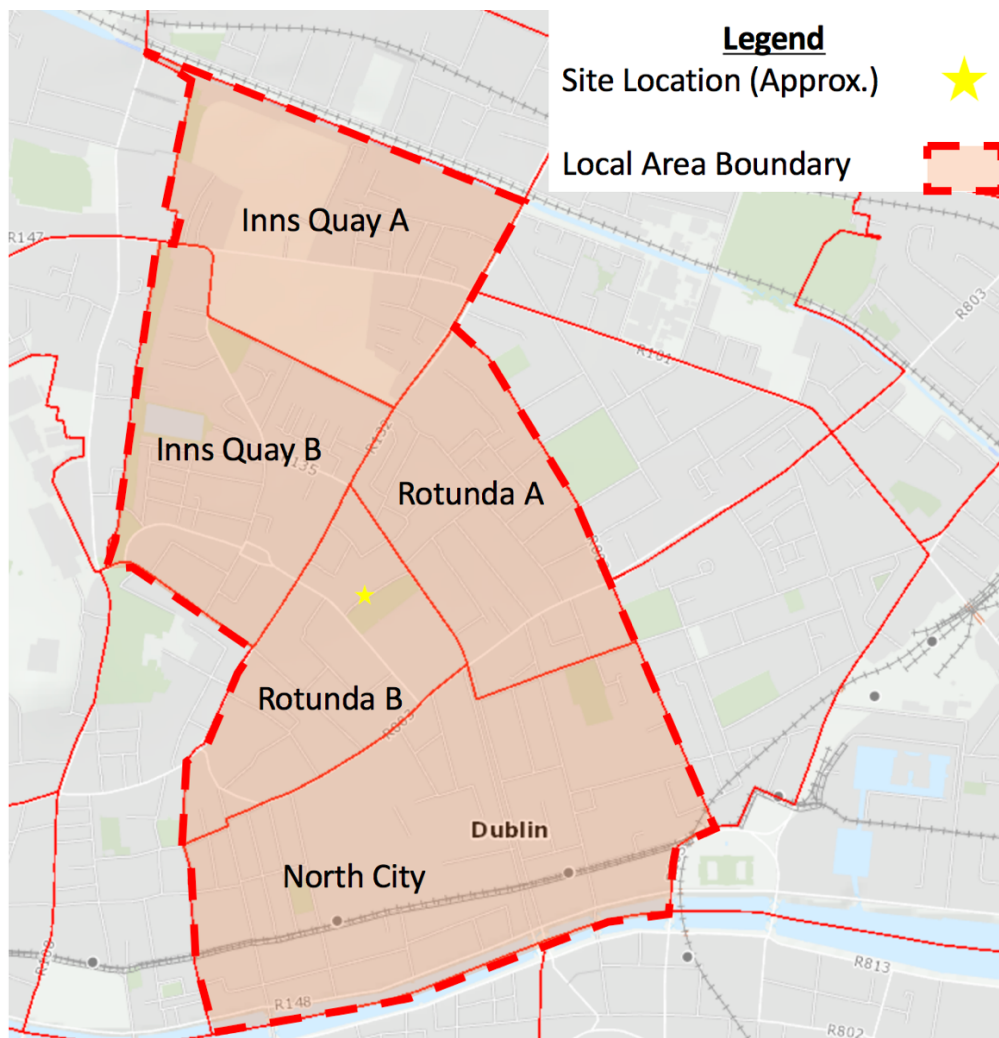


Figure 5.1.4: Location of the Proposed Development within the Local Area, Source: CSO Census 2016 Small Area Population Statistics

5.1.3 Receiving Environment (Baseline Situation)

In assessing the receiving environment in terms of population and human health, we have identified the following broad communities likely to be affected within the study area:

- The resident population
- The working population (employment)
- The visiting population (attractions / culture / amenities)

Each of these communities will experience changes in the environment in different ways.

5.1.3.1 Resident Population

The residential population is described as the population who would live in a given area. While the proposed facility and associated public realm, works will be accessible to the general public, the local population is likely to be most acutely affected by the proposed development. The likely effects on population beyond the local study area are likely to be less acute or tangible.

5.1.3.1.1 City Area - Resident Population

Dublin City is the Capital of the Republic of Ireland and has been the focus of economic expansion and consequential growth in residential population for the past two decades.

Table 5.1.1 identifies the projected population targets for the City in the context of Dublin County and the State. These figures are outlined in the Greater Dublin Area Regional Planning Guidelines 2010 – 2022. The total population target for Dublin City was projected by the Guidelines as reaching 563,512 persons by 2016.

Table 5.1.1: Regional Population Targets 2016 and 2022 (pg. 82 of the Regional Planning Guidelines Office 2010)

	2016	2022
State	4,997,000	5,375,200
GDA	1,955,800	2,103,900
Dublin	1,361,200	1,464,200
Dublin City	563,512	606,110

Since then, the 2016 Census figures have confirmed the actual population growth in the State, Dublin City, and the Local Area EDs (see Table 5.1.2). The Guidelines' projected growth to 2016 for the State and Dublin City is similar to the actual growth recorded in Census 2016, the latter being c.4.76M and c.0.55M respectively.

We note the further population projection provided by the Guidelines to 2022 for the State and the Dublin Region, as an indication of

expected continued population growth pending the next Census 2021.

Table 5.1.2: Population changes at State, City and Study Area 2002 - 2016

	2002	2006	% Change 02 - 06	2011	% Change 06 - 11	2016	% Change 11 - 16
State	3,917,203	4,239,848	8.20%	4,588,252	8.20%	4,761,865	3.80%
Dublin City	495,781	506,211	2.10%	527,612	4.20%	553,165	4.80%
Local Area	16,219	17,504	7.9%	19,801	11.6%	21,662	9.39%

The overall period between 2002 and 2016 covers an era of national economic growth, decline and recovery.

Table 5.1.2 above shows how the Dublin City population grew by approximately 11.6% overall between 2002 and 2016, compared to the higher rates of growth experienced in State at c.21.6% and the local area at c.33.6% for the same period.

Similar to the State, the rate of population growth in the local study area has declined since 2011. Whereas in the wider City area it has marginally increased since 2011.

Current national planning policy seeks to locate new development to within existing urban settlements. It seeks to increase residential density in settlements, through a range of measures (National Policy Objective 35 of the National Planning Framework) including reducing vacancy, re-use of existing buildings, infill development schemes, area or site-based regeneration and increased building heights.

5.1.3.1.2 Local Area - Resident Population

The resident population figures within the EDs comprising the 'Local Area' is identified in Table 5.1.3 below. The table shows how the population has changed within the local area over previous census periods.

The overall local area population has seen a higher rate of growth compared to the City Area and the State, between 2002 and 2006. The rate of population growth in the Local Area would appear to be more reflective of the State than Dublin City in general.

Table 5.1.3: Population of the Local Area

Electoral Division	2002	2006	% Change 02 – 06	2011	% Change 06 - 11	2016	% Change 11 - 16
Rotunda A	4,199	4,672	473 (+11.3%)	4,698	26 (+0.6%)	5,965	1,267 (+ 27.0%)
Rotunda B	1,752	2,137	+385 (+22.0%)	2,439	302 (+14.1%)	2,458	19 (+0.8%)
Inns Quay A	3,373	3,715	342 (+10.1%)	3,951	236 (+6.4%)	3,919	-32 (-0.8%)
Inns Quay B	2,953	3,113	160 (+5.41%)	3,368	255 (+8.2%)	3,666	298 (+8.8%)
North City	3,942	3,867	-75 (-1.9%)	5,345	1,478 (+38.2%)	5,654	309 (+5.8%)
Total	16,219	17,504	1,285 (+7.9%)	19,801	2,297 (+13.1%)	21,662	1,861 (+9.4%)

In the Local Area, there has been a population increase of 1,861 persons since the 2011 Census (+9.4%), amounting to a total population of 21,662 persons in 2016. The figures indicate a generally growing local population, but with a rate of growth that has declined somewhat since 2011, similar to the State population.

The Proposed Development site is situated within Rotunda B. The population figures for this area have increased above the national and regional figure between 2002 – 2011. However, from the period, 2011 – 2016 the rate of population increases reduced to a stagnant rate of 0.8%.

The Local Area resident population, particularly the residents adjoining the proposed development are more likely to become acutely aware of the proposed development within their neighbourhood at construction and operational stages, than the general City or State population. The general residential land use within the immediate vicinity of the development is illustrated in Figure 5.1.5.

to the rear of existing Georgian units facing onto Frederick Street North (R132) and Dorset Street Upper.

5.1.3.2 Working Population

The working population is described as the population who work in the area and can also be referred to as the employment. According to the CSO, the seasonally adjusted standardised unemployment rate (SUR) is slowly falling at a national level. The current national figure stands at 6.4% (July 2017).

This trend in decreasing unemployment rate has been generally experienced on a monthly basis since January 2014, when the SUR stood at 12.2%. While there have been slight irregular increases to the SUR in a given month since 2014, the general cumulative pattern is showing a decrease in the rate of unemployment nationwide.

The Quarterly Economic Commentary Winter 2017 (McQuinn, et al., 2017) identified that the national unemployment rate is expected to fall to 5.4% in 2018.

5.1.3.2.1 City Area - Working Population

Table 5.1.4, sourced from the CSO, shows the total percentage of the population that are unemployed as per Census 2011 and 2016. (This refers to the number of people seeking their 1st job in addition to the number of people unemployed, expressed as a percentage of the total population).

Table 5.1.4: Number of people seeking 1st job in addition to no. of people unemployed

	2011 – 1 st Job	2011 No. Unemployed	2011 % Unemployed	2016 – 1 st job	2016 No. Unemployed	2016 - % Unemployed	2011 – 2016 change (%)
State	34,166	390,677	424,843 (9.25%)	31,434	265,962	297,396 (6.24%)	-3.01%
Dublin City	5,086	46,613	51,699 (9.79%)	4,686	34,514	39,200 (7.08%)	-2.71%
Local level	342	2,306	2,648 (13.37%)	300	1,851	2,151 (9.92%)	-3.45%

The table indicates a general reduction in unemployment experienced across the State, Dublin City and at Local Level for the 2011 to 2016 period at a generally similar rate.

Chapter 6 of the Dublin City Development Plan, titled: City Economy and Enterprise, recognises the challenges Dublin City faces as the national and regional economic engine, and the competition from

other cities internationally. It sets out a list of strategic approaches to address this, namely:

- Developing enterprise, particularly the services sector, which is the critical sector for the city.
- Developing Dublin as an 'Innovation City', a world-leading city in promoting creativity, productivity, competition, density, entrepreneurial activity and clustering.
- Developing economic, cultural and institutional clusters within the city centre to optimise its economic potential.
- Improving the general attractiveness of the city for people and investors as a key part of maintaining competitiveness.
Creating a vibrant place that attracts and retains creative people within the city

Development is promoted and concentrated within the Inner City of Dublin.

Table 5.1.5: Persons at work or unemployed by Occupation (CSO, 2016 – Theme 13 – Occupations)

Employment type	State	% of State	City	% of City	Local Level	% of Local Area
Managers, Directors and Senior Officials	169,032	7%	20,132	7%	601	4%
Professional Occupations	393,608	17%	63,092	21%	2041	15%
Associate Professional and Technical Occupations	248,413	11%	39,506	13%	1234	9%
Administrative and Secretarial Occupations	228,032	10%	32,088	11%	929	7%
Skilled Trades Occupations	316,313	14%	21,063	7%	1006	7%
Caring, Leisure and Other Service Occupations	166,163	7%	18,278	6%	647	5%
Sales and Customer	155,030	7%	19,521	7%	905	7%

Service Occupations						
Process, Plant and Machine Operatives	162,641	7%	12,892	4%	343	3%
Elementary Occupations	200,287	9%	29,077	10%	1840	14%
Not stated	233,084	10%	44,535	15%	4015	30%
Total	2,272,603		300,184		13,562	

Table 5.1.6: Age Cohort data, State, City and Local Area, 2011 - 2016

	0-14	15 – 64	65+
State - 2016	1,006,552 (21%)	3,117,746 (65%)	636,567 (13%)
City Area - 2016	83,213 (15%)	398,986 (72%)	72,355 (13%)
Local level - 2016	2,009 (9%)	17,864 (82%)	1,789 (8%)
State - 2011	979,590 (21%)	3,073,269 (67%)	535,393 (12%)
City Area - 2011	80,029 (15%)	381,091 (72%)	66,490 (13%)
Local level - 2011	1,622 (8%)	16,812 (85%)	1,367 (7%)

5.1.3.2.2 Local Area - Working Population

The census data for the working population refers only to the resident population within the Local Area. Accordingly, they could potentially work outside of the Local Area. This includes the statistical information on the types of employment that local residents are engaged in.

As shown in Table 5.1.5 identifies the types of the socio-economic groups at State, City and Local level is engaged in according to Census 2016 data:

In terms of the Local Area (EDs), Table 5.1.4 indicates that the unemployment rate in 2016 stood at c. 9.92%. This represents a

decrease in the rate of unemployment by 3.45% since the 2011 Census, and is generally reflective of similar patterns at City and State levels.

As illustrated under Table 5.1.6, the Local Area has a lower percentage of 0 – 14 & 65+ (i.e the dependent age cohort) compared with State and City Level. It has a greater percentage of 15 – 64 (working cohort) than the State and City Level.

The types of employment of the Local Area population is illustrated under Table 5.1.5. Compared with City Level, the Local Area has a smaller percentage of Administrative and Secretarial Occupations by 4%. Skilled Trades Occupations are at the same rate of percentage as the city level, but both levels are beneath the state level of 14%.

The following locations within the immediate vicinity of the subject site are likely to provide employment opportunities matching the labour skills identified in the local study population in Table 5.1.5 above:

1. Ilac Centre (including the existing Central Library)
2. Jurys Inn Hotel
3. Maldron Hotel
4. Rotunda Hospital
5. The Ambassador Theatre
6. The Gate Theatre
7. Hugh Lane Gallery
8. Dublin Writers Museum

We note in addition that the local area and immediate surrounds accommodates a high level of commercial uses (potential employment opportunities) as indicated in Figure 5.1.6.

- Application forms
- Conversation exchange
- Sci-Fi book club
- Writers' group
- World cinema DVD club
- Exhibitions / lectures / workshops / demonstrations / music recitals
- Library tours
- Audio books, DVDs and CD-ROMs
- Block loans to groups by arrangement
- Children's activities / Toddler Group / Storytime / class visits

The library is open from Monday to Thursday 10.00 am – 8.00pm, Friday, Saturday 10.00 am – 5.00pm and is closed on Sundays.

5.1.3.3 Visiting Community

It is not possible to accurately quantify the visiting population within the study area as this varies. We can however look at the types of businesses, community facilities and visitor attractions and amenities in the area that might draw visitors, and consider how the proposed development (during construction and/or operation) could impact on such visiting communities.

Visitor attractors may be characterised as formal and informal. Formal attractors would include businesses, community facilities, recreational clubs, concert venues, etc. that require formalised or regular attendance. Informal areas might include civic spaces, parks, buildings of interest etc, where visiting is more casual and the purpose less defined.

5.1.3.3.1 City Area – Visiting Community

At a city level there are numerous recreational activities and/or attractions.

Failte Ireland prepared a list of both the top 'free' and 'fee paying' attractions in Ireland for 2017, as per the lists below.

The following top free attractions in Ireland are all contained within the Dublin City Council Boundary (2017 visitor numbers in brackets):

- National Gallery of Ireland (1,065,929)
- National Botanic Gardens (569,652)

- Irish Museum of Modern Art (489,295)
- National Museum of Ireland - Archaeology, Kildare Street (474,564)
- Science Gallery at Trinity College Dublin (407,529)
- National Museum of Ireland - Natural History, Merrion Street (336,315)
- Chester Beatty Library (335,875)
- National Museum of Ireland - Decorative Arts & History, Collins Barracks (234,336)
- The National Library of Ireland (197,245)
- Dublin City Gallery The Hugh Lane (167,410)

9no. of the top fee paying attractions are contained within the Dublin City Council Boundary (2017 visitor numbers included in brackets), include:

- Guinness Storehouse (1,711,281)
- Dublin Zoo (1,264,300)
- Book of Kells (983,410)
- St. Patrick's Cathedral (603,000)
- Kilmainham Gaol (425,000)
- Dublin Castle (371,000)
- Old Jameson Distillery (286,000)
- Christ Church Cathedral (238,285)
- Dublinia (200,698)

The current list of Library facilities in Dublin City Council Administration Boundary are illustrated under Figure 5.1.7 and are listed as follows:

- Ballyfermot Library
- Ballymun Library
- Cabra Library
- **Central Library (Ilac Shopping Centre) is within Local Area**
- Charleville Mall Library
- Coolock Library
- Dolphin's Barn Library
- Donaghmede
- Drumcondra

- Dublin City Library and Archive
- Finglas Library
- Inchicore Library
- Kevin Street library
- Marino Library
- Pembroke library
- Raheny Library
- Rathmines Library
- Ringsend Library
- Terenure Library
- Walkinstown Library.



Figure 5.1.7: Location of Library Facilities in Dublin City Council Administration boundary, source: <http://www.dublincity.ie/main-menu-services-recreation-culture-dublin-city-public-libraries-and-archive/locations-hours>

5.1.3.3.2 Local Area – Visiting Community

Having regard to the list of visitor attractions at city level contained in Section 5.1.3.3.1, the most notable attractions within or in the immediate vicinity of the local study area include the following:

1. Garden of Remembrance
2. Dublin City Gallery Hugh Lane
3. Dublin Writers Museum

4. Gate Theatre
5. Ambassador Theatre
6. The Spire
7. General Post Office
8. Parnell Monument

Of these the Dublin City Gallery Hugh Lane has also been identified as a top 'free' attraction within Dublin City, with 167,410 visitors recorded in 2017. It is located immediately adjoining the application site.

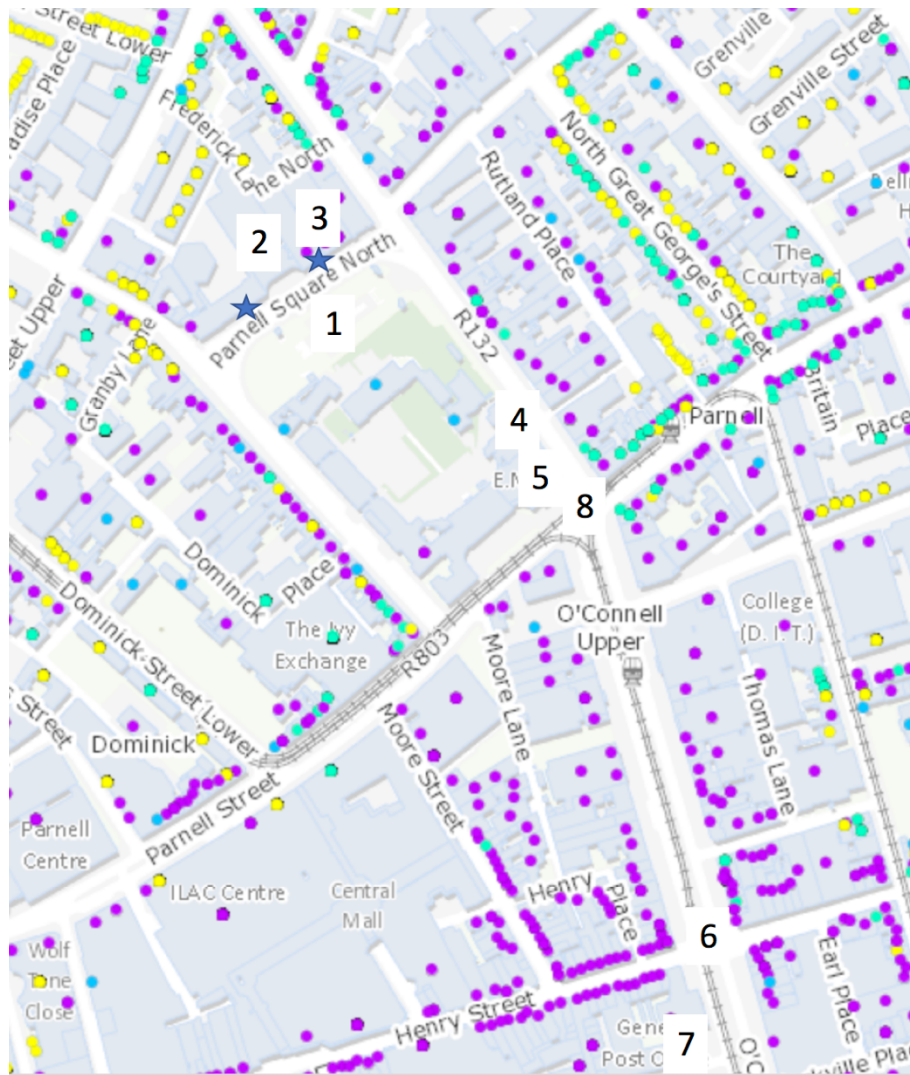


Figure 5.1.8: Location of tourist attractions within the immediate vicinity of the subject site. Source: Myplan.ie with SLA Overlay.

Apart from the Hugh Lane Gallery, there are no definitive visitor figures for these other local visitor attractions. They are however reasonably well known and contribute to the cultural and civic amenity of the local area, attracting visitors in their own right.

The existing Central Library is located within the local area, in the Ilac Centre.

The library currently has an estimated 1,000 visitors per day (c.360,000 per annum).

5.1.4 Characteristics of the Proposed Development

A detailed description of the proposed city library and associated public realm works, as a component of the Parnell Square Cultural Quarter, is set out under Chapter 3: Description of Proposed Development, of this EIAR.

Section 5.1.4.1 and 5.1.4.2 sets out the characteristics of the proposed development likely to affect the resident, working and visiting populations, as described above in Section 5.1.3: Receiving Environment.

5.1.4.1 Demolition and Construction Phase

The demolition and construction of the proposed development is envisaged to extend over a 2 – 3 year period. Full details of the Construction Stage and Sequence are set out under Chapter 3: Description of Proposed Development, of this EIAR and the accompanying Outline Construction Management & Waste Management Plan located under Volume 2, Appendix 3.1.

As part of the demolition and construction phase of the development, 2no. site compounds will be set up to facilitate construction activity on site associated with the buildings and rear extension. These compounds are located adjacent to the development site, as shown in Figure 5.1.9.

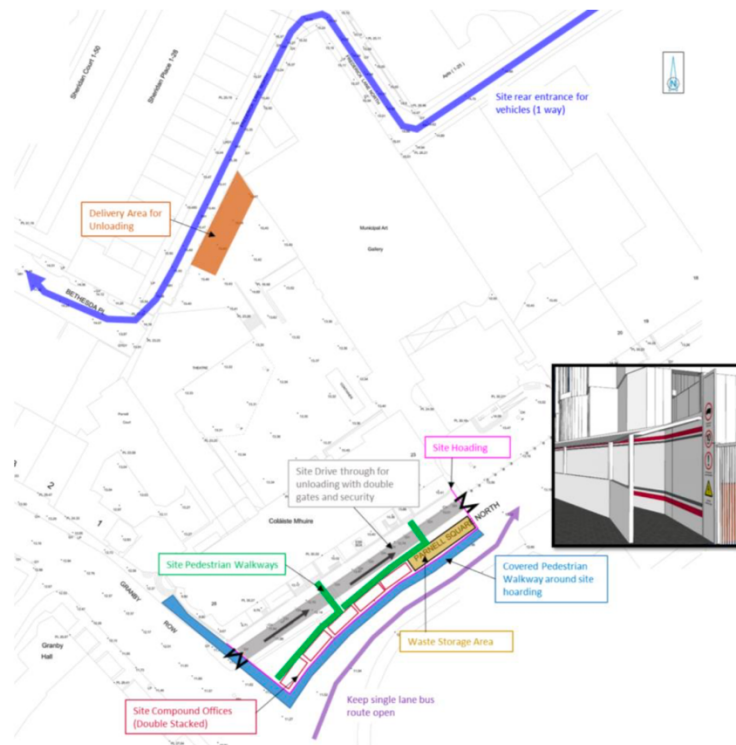


Figure 5.1.9: Location of Construction Compounds and Site Deliveries. (Source: Figure 12 of Construction Transport Management Plan, prepared by Arup.)

It is envisaged that on average there is expected to be 100 construction workers will be engaged on-site, with a maximum of 275 during the construction phase. The initial peak construction periods cover the most significant stage of works to and extension of the buildings within the overall project, in terms of employee numbers and duration of works.

The Construction Phase of the public realm will be carried out at the later stage of the construction programme. This will utilise the primary site compound at Parnell Square North.

5.1.4.2 Operational Phase

At operational phase, the New City Library and Public Realm Works will deliver an architecturally designed library facility capable of meeting the library requirements of a modern international city.

The library services provided will comprise:

- Reference Lending, Library
- Children & Young Adults
- Reader Support

- Conference Centre
- Story House
- Learning Suite
- Music Hub
- Staff Workspaces
- Building Support
- Education Centre
- Intercultural Centre
- Cultural Quarter Retail and Catering Hub
- Design Centre
- Innovation Hub

The proposed city library is expected to employ c.70no. persons on a full-time basis for the library and ancillary/associated retail and catering services.

The operations of the building will require maintenance and servicing of plant and installed equipment.

The proposed new Library is expected to operate 9am - 9pm Monday to Friday and 9am to 5pm Saturday and Sunday. The proposed (ancillary / associated) restaurants / cafes will operate within these times.

5.1.5 Potential Impacts of the Proposed Development

5.1.5.1 Demolition and Construction Phase Impacts

5.1.5.1.1 Resident Population

City Area – Resident Population

There is no likely potential adverse direct or indirect impact on the overall resident population demographic of the City Area or its population growth arising from this development during its demolition and construction phase.

Local Area – Resident Population

There is no likely potential adverse direct impact on the resident population demographic of the Local Area or on population growth arising from this development during its demolition and construction phase.

There may be indirect impacts as construction workers seek temporary accommodation during the building contract stage, affecting the local population demographic, but this is likely to be absorbed by existing residential or visitor accommodation in the area. Therefore, any impact is likely to be temporary, neutral and slight or negligible.

There is the potential for adverse direct and indirect impacts of short to medium term duration to the resident population – in particular at Granby Row and Sheridan Court - arising from potential nuisance factors associated with the demolition and construction phase of this project. The likely environmental effects of noise, vibration, dust, traffic, visual impact are addressed in other chapters of this EIAR (see Chapters 5.10 Noise & Vibration, 5.11 Climate & Climate Change - Air Quality; 5.5 Material Assets: Transportation and 5.6 Landscape and Visual Impact Assessment for further discussion).

It is noted that the new city library will replace the existing Central Library currently located in the Ilac Centre, located approximately 650m to the south of the application site. It was previously identified above in Section 5.1.2.2.2 that the majority of the residential properties within the Local Area are located to the north and east of the subject site. Thus, the proposed replacement would arguably continue to serve the same or similar local residential population as the existing library at the Ilac Centre.

5.1.5.1.2 Working Population

City Area – Working Population

During demolition and construction phase, there will be no severance of the working population of the City Area, beyond the immediate site area, from their place of work arising from the proposed development. No direct permanent adverse impacts therefore arise.

There is potential that the demolition and construction phase will have indirect positive economic impacts upon the construction sector, for example providing employment opportunities for construction workers, within building supply services, and in the professional and technical professions. Whilst these beneficial impacts on the economic activity in the city area will be largely temporary, they will contribute to the overall future viability of the construction sector and related services and professions over the construction period.

Local Area – Working Population

There may be potential for direct adverse impact on access to employment or business providers at Parnell Square North due to the redirection of pedestrian, cycle or vehicular movement during the public realm works. This issue is addressed in the Traffic Management Plan and Chapter 5.5: Material Assets – Transportation, of this EIAR.

The demolition and construction phase and associated activity may also see an increase in the working population in the local area in the short to medium term due to direct and indirect employment at local level.

It is envisaged that on average there is expected to be 100 construction workers will be engaged on-site, with a maximum of 275 during the demolition and construction phase. The construction workers may be drawn from the local labour pool.

There is also likely to be a positive impact for local businesses, such as cafes, shops and services providers, as a result of an increased local working population. Local businesses or business opportunities may benefit from spin off trade and local spend during the demolition and construction phase.

The demolition and construction phase of the proposed development therefore has potential to have a slight to medium positive impact on reducing local unemployment rates, where

existing businesses benefit from an influx of construction workers and new business opportunities arise in the short to medium term.

In a similar manner to the resident populations, there is the potential for adverse direct and indirect impacts of short to medium term duration to the working population arising from potential typical nuisance factors associated with the construction phase of this project.

This may particularly be the case for:

1. Ilac Centre (including the existing Central Library)
2. Jurys Inn Hotel
3. Maldron Hotel
4. Rotunda Hospital
5. The Ambassador Theatre
6. The Gate Theatre
7. Hugh Lane Gallery
8. Dublin Writers Museum

The likely environmental effects of noise, vibration, dust, traffic, visual impact are addressed in other chapters of this EIAR (see Chapters 5.10 Noise & Vibration, 5.11 Climate & Climate Change - Air Quality; 5.5 Material Assets: Transportation and 5.6 Landscape and Visual Impact Assessment for further discussion)

5.1.5.1.3 Visiting Population

City Area – Visiting Population

At a city level it is not predicted that the visiting population will be generally directly impacted by the demolition and construction phase of development at a discrete site at Parnell Square North.

Some minor, indirect negative impacts may occur relating to the carrying out of construction works to the north of Parnell Square and the anticipated closure of part of the street for the duration. Please refer to Chapter 5.5: Material Assets - Transportation for further information regarding this and mitigations measures to be taken.

Local Area – Visiting Population

In general, the visiting population will be less sensitive to changes to the local environment than the local resident or working populations.

However, visitors to local facilities, amenities or visitor attractions in the streets adjoining the proposed development will be acutely aware of the development taking place during the construction phase.

There may be potential for direct adverse impacts on access to the Hugh Lane Gallery, Chapter One restaurant, the Irish Writers Museum and the Abbey Church, all fronting Parnell Square North during construction works associated with the public realm enhancements. This issue is addressed in the Outline Construction Management & Waste Management Plan, Construction Traffic Management Plan and Chapter 5.5: Material Assets – Transportation, of this EIAR.

In a similar manner to the local resident and working populations, there is the potential for adverse indirect impacts of short to medium term duration to the visiting population arising from potential typical nuisance factors associated with the demolition and construction phase of this project. This is particularly relevant for the visiting population arriving at the attractions which front onto Parnell Square North and entrance to the Garden of Remembrance to the south.

The likely environmental effects of noise, vibration, dust, traffic, visual impact is addressed in other Chapters of this EIAR (see Chapters 5.10 Noise & Vibration, 5.11 Climate & Climate Change - Air Quality; 5.5 Material Assets: Transportation and 5.6: Landscape and Visual Impact Assessment for further discussion).

5.1.5.2 Operational Phase Impacts

5.1.5.2.1 Resident Population

City Area – Resident Population

There is no potential for a direct negative impact on the resident population at Dublin City level during the operational phase of the library.

There is potential for a negative impact arising from the loss of the Central Library in the Ilac Centre for the wider City's resident population. Similarly, there is potential for positive impact arising from the colonisation of that vacated space within the shopping centre complex with other local retail services that meet the demands of the City's resident population.

In respect of the loss of the Central Library at the Ilac Centre, this is considered to be reasonably compensated by the construction of

an enhanced replacement facility at the application site. The proposed facility at this site remains within c.650m north of the existing facility, but would potentially be more visible to the wider population than at its current location within an enclosed shopping centre. Associated improvements to the public realm should enhance the positive appearance and accessibility of the facility by the general public.

The potential exists therefore for an indirect positive impact in the long term for the resident population of the city area due to the creation of a high quality new public city library and associated public realm improvement works in an area of historic interest.

The replacement of the Central Library with an existing limited floor space of c.2,276 sqm, with a new architecturally designed public city library with a proposed floor area of c.11,198 sqm (with capacity to accommodate library and cultural uses for up to 3,000 visitors at any one time) will deliver an excellent community and cultural facility, in an attractive setting and highly accessible location, benefitting a growing city population.

Local Area – Resident Population

There is no potential for a direct negative impact on the local resident population arising at the operational phase of the project.

In a similar manner as described for the City population, but more acutely felt by the local study area resident population, the proposed replacement of the municipal Central Library with the proposed new city library at an alternative site, has some potential to give rise to a temporary negative perception that the local community is losing its library at the Ilac Centre.

However, the new library will be located within 650m of the existing facility that it replaces. Thus, any negative perception should be quickly outweighed by the direct positive impact of an enhanced, recognisable and locally accessible public library and improved public realm being delivered at a vacant property within the local area, to the benefit of the local resident population who will use it.

The construction of the replacement library at an alternative site would allow the existing library to remain operational until such time as the new library is constructed. There would then be potential for the colonisation of the vacated space within the Ilac shopping centre by other local shopping, commercial or community services that meet the demands of the local resident population.

The local community, in particular residents immediately north of the site will be aware of the proposed new extension to the existing

buildings due to their height and proximity to neighbouring properties. Potential environmental impacts relating to visual impact, sunlight and daylight impacts are examined in other chapters of this EIAR. (see Chapters 5.6 Landscape and Visual Impact Assessment, 5.12 Sunlight Analysis, and 5.13 Daylight Analysis, for further discussion of potential impacts.)

5.1.5.2.2 Working Population

City Area – Working Population

There is no potential for a direct negative impact on the working population of the wider City arising from the operational phase of the project.

There is potential for slight positive impacts during the operational phase of the development for the working population of the city with respect to employment.

It is anticipated that, when operational, the library will account for approximately 70no. jobs, representing an increase of approximately 40no. jobs compared to that offered by the existing facility at the Ilac Centre.

There may be further spin off for local businesses, arising from the reuse of a long time vacant property for a significant active civic use, attracting visitors to the area and resulting in potential for further employment opportunities.

Local Area – Working Population

The predicted impact of the operational phase of the development is likely to be more acutely experienced by the local working population.

There is no potential for a direct negative impact on the working population of the local area arising from the operational phase of the project.

There is potential for a positive impact upon local employment through the redeployment of existing staff and the creation of additional job opportunities within the new library, compared to the existing facility at the Ilac Centre. The space freed up within the existing shopping centre may then be colonised by other local shopping, commercial or community facilities that may provide local employment opportunities.

There may be further spin off for local businesses, arising from the reuse of a long time vacant property for a significant active civic use, attracting visitors to the area and resulting in potential for further employment opportunities.

There is therefore potential for indirect positive impacts for the local working population arising from the active use of the application site as a public civic amenity and community facility, and the associated enhancement and rejuvenation of the neighbouring area, giving rise to opportunities to attract new customers to established and new local businesses.

5.1.5.2.3 Visiting Population

City Area – Visiting Population

There is no potential for a direct negative impact on the visiting population of the wider City arising from the operational phase of the project.

The provision of a new cultural and community facility will result in a positive impact in respect of delivering further city attractions and amenities for the visiting population.

The new city library is expected to become a significant visitor attraction within this historic quarter of Dublin City, and is therefore likely to have a positive long term impact on the identity of the City.

It is considered that there are no likely significant negative impacts arising for the visiting population to the wider Dublin City area.

Local Area – Visiting Population

There is potential for a direct negative impact on the visiting population to the local study area if they perceive a negative visual impact arising from the change in the landscape that would detract from their visiting experience. We consider this highly unlikely, but refer to Chapter 5.5 Landscape and Visual Impact Assessment for further discussion on visual impact at the operational phase of the project.

It is considered likely that the impact of the operational stage of the project will be positive for the visiting population to the local area, due to its likely positive contribution to enhancing the range of civic and cultural attractions in this historic area that are publicly accessible. The attraction of an increased number of visitors to the area is likely to improve the perception of the area as an animated and attractive local area within the City.

5.1.6 Do-Nothing Impacts

5.1.6.1 City Area

In a 'Do-Nothing' scenario at city level the existing site would remain unchanged and its buildings would likely remain vacant given their current state of disrepair.

It is unlikely that this would result in any significant direct negative impacts for the City's resident, working or visiting population demographic.

Indirect negative impacts have the potential to arise if the existing buildings.

The existing site characteristics in its current state does not make a positive contribute to the development of the City generally as an attractive place to live or work in, or visit. The enhancement of the City's central library would not be realised for these populations.

5.1.6.2 Local Area

In a 'Do-Nothing' scenario at local level the existing site would remain unchanged and its buildings likely to remain vacant given their current state of disrepair.

It is unlikely that this would result in any significant direct negative impacts for the local population demographic.

However, it may be the case that indirect negative impacts would arise given that the existing buildings in their current state, do not make a positive contribution to the development of the local area as an attractive place to live or work. The replacement of the existing municipal central library with an improved facility, and associated local spin off, would also not be realised at this site within the local area.

5.1.7 Mitigation Measures

The proposed mitigation measures as part of the population aspect of the EIAR Chapter are set out below. In addition, Chapter 6 of this EIAR, titled 'Mitigation Measure' sets out the proposed mitigation measures from this EIAR.

5.1.7.1 Demolition & Construction Phase

5.1.7.1.1 Resident Population

City Area

The demolition & construction phase of the proposed city library is not likely to result in any significant adverse impacts on the resident population at city level. Accordingly, no ameliorative, remedial or reductive measures are proposed.

Local Area

There are no specific mitigation measures proposed relating to the resident population during the construction phase, other than those identified under other specific Chapters of this EIAR under Chapter 5.5: Material Assets: Transportation, Chapter 5.9: Water (Drainage, Supply & Flood Risk and Groundwater), Chapter 5.10: Air - Noise and Vibration, and Chapter 5.11: Climate & Climate Change - Air Quality.

In addition, an Outline Construction Management & Waste Management Plan and a Construction Traffic Management Plan have been prepared for this development, part of which would include a dedicated liaison manager. Both documents can be located within Volume 2, Appendix 3.1 and 3.2 of this EIAR. This will ensure that a communication channel remains open between the project team and the local residents.

The Local Area resident population will be kept informed of developments and the dedicated liaison officer will be available for local residents to raise any matters during the course of the demolition & construction phase.

5.1.7.1.2 Working Population

City Area

The construction phase of the proposed city library is not likely to create any significant adverse effects on the working population. Therefore, no mitigation measures are proposed.

Local Area

The new city library will be constructed to the best industry standards, with priority being given to the health and safety of employees, local residents and the community at large. All contracts will be tendered to reputable and competent Contractors with a track record in the safe delivery of this type of work. Outline Construction Management & Waste Management Plan and Construction Traffic Management Plan forms part of the proposed City Library development.

We refer to other Chapters of this EIAR for mitigation measures recommended for the construction stage, in Chapters of this EIAR under Chapter 5.5: Material Assets: Transportation, Chapter 5.9: Water (Drainage, Supply, Flood Risk & Groundwater), Chapter 5.10: Air - Noise and Vibration, and Chapter 5.11: Climate & Climate Change - Air Quality.

5.1.7.1.3 Visiting Population

City Area

The construction phase of the city library is not likely to create any significant adverse effects on the visiting population at a city level. Therefore, no Ameliorative, Remedial or Reductive measures are proposed.

Local Area

The construction phase will be managed in such a way as to mitigate any physical impacts likely to be caused to the visiting population in the local area during the demolition & construction phase.

There are no specific mitigation measures proposed relating to the visiting population as part of this chapter. We refer however to other Chapters of this EIAR, namely, Chapters of this EIAR under Chapter 5.5: Material Assets: Transportation, Chapter 5.9: Water (Drainage, Supply, Flood Risk & Groundwater), Chapter 5.10: Air - Noise and Vibration, and Chapter 5.11: Climate & Climate Change - Air Quality, and the accompanying a Construction & Demolition Waste Management Plan.

5.1.7.2 Operational Phase

5.1.7.2.1 Resident Population

City Area

The operational phase of the proposed city library is not likely to create any significant adverse effects on the demographics of the resident population at a wider City Level. Therefore, no Ameliorative, Remedial or Reductive measures are proposed.

Local Area

There are no specific mitigation measures proposed relating to the resident population demographic at operational state as part of this chapter.

We refer to mitigation measures in respect of other environmental impacts that may be experienced by the resident population during operational phase, as identified in Chapter 5.5: Material Assets: Transportation, Chapter 5.9: Water (Drainage, Supply, Flood Risk & Groundwater), Chapter 5.10: Air - Noise and Vibration, and Chapter 5.11: Climate & Climate Change - Air Quality of this EIAR.

5.1.7.2.2 Working Population

City Area

The operational phase of the proposed city library is not likely to create any significant adverse effects on the working population at a city level. Therefore, no Ameliorative, Remedial or Reductive measures are proposed.

Local Area

There are no specific mitigation measures proposed relating to the working population, as no significant adverse impacts are identified for the working population during the operational stage of the project.

We refer to mitigation measures in respect of other environmental impacts that may be experienced by the working population during operational phase, as identified under Chapter 5.5: Material Assets: Transportation, Chapter 5.9: Water (Drainage, Supply, Flood Risk & Groundwater), Chapter 5.10: Air - Noise and Vibration, and Chapter 5.11: Climate & Climate Change - Air Quality, of this EIAR.

5.1.7.2.3 Visiting Population

City Area

The operational phase of the proposed city library is not likely to create any significant adverse effects on the visiting community at the wider City level. Therefore, no Ameliorative, Remedial or Reductive measures are proposed.

Local Area

There are no specific mitigation measures proposed relating to the visiting population at local level, as no potential significant adverse impacts are identified during the operational stage.

We refer to mitigation measures in respect of other environmental impacts that may be experienced by the visiting population, as identified in Chapter 5.5: Material Assets: Transportation, Chapter 5.9: Water (Drainage, Supply, Flood Risk & Groundwater), and Chapter 5.11: Climate & Climate Change - Air Quality of this EIAR.

5.1.8 Residual Impacts

5.1.8.1 Demolition & Construction Phase

5.1.8.1.1 Resident Population

City Area

It is not predicted that there will be a direct or indirect likely significant adverse impact on the resident population demographic at city level during the demolition and construction stage.

Local Area

It is not predicted that there will be a direct or indirect likely significant adverse impact on the resident population demographic at local level during the demolition and construction stages.

5.1.8.1.2 Working Population

City Area

It is not predicted that there will be a direct or indirect likely significant adverse impact on the working population demographic at city level.

It is predicted that during the construction phase there may be a direct positive impact for the City's working population due to the potential for job creation at the demolition and construction stage.

Local Area

It is not predicted that there will be a direct or indirect likely significant adverse impact on the working population demographic at local level during construction stage.

Mitigation measures, as identified in other chapters of this EIAR, will be put in place to ensure that construction impacts on local businesses are suitably ameliorated.

It is predicted that during the construction phase there will be a direct positive impact for the local working population due to the potential for job creation at construction stage.

5.1.8.1.3 Visiting Population

City Area

It is not predicted that there will be a direct or indirect likely significant adverse impact on the visiting population demographic at city level during the construction phase of the project.

Local Area

There is potential for the visiting population to be dissuaded from visiting local attractions or amenities in the local neighbourhood during the construction phase, due to perceptions of lack of accessibility or other nuisance factors.

Mitigation measures, as identified in other chapters of the is EIAR, will be put in place to ensure that construction impacts on neighbouring visitor attractions are suitably ameliorated. Any residual impacts are identified in those chapters.

5.1.8.2 Operational Phase

5.1.8.2.1 Resident Population

City Area

It is not predicted that there will be a direct or indirect likely significant adverse impact on the resident population demographic at city level during operational stage.

The delivery of an enhanced city library and associated public realm within the City, replacing the existing facility in the Ilac Shopping Centre, may contribute generally to the perception of the City as an attractive place to live.

Local Area

It is not predicted that there will be a direct or indirect likely significant adverse impact on the resident population demographic at local level during operational stage.

The delivery of an enhanced city library and associated public realm within the City, replacing the existing facility in the Ilac Shopping Centre within the local neighbourhood, may contribute generally to the perception of this area of the City as an attractive place to live.

5.1.8.2.2 Working Population

City Area

It is not predicted that there will be a direct or indirect likely significant adverse impact on the working population demographic at city level during operational stage.

The delivery of an enhanced city library and associated public realm within the City, may contribute generally to the perception of the City as an attractive place to work.

Local Area

It is not predicted that there will be a direct or indirect likely significant adverse impact on the working population demographic at local level during operational stage.

The delivery of an enhanced city library and associated public realm within this part of the City, may increase the level of local employment opportunities for the local working population and may

contribute generally to the perception of this area of the City as an attractive place to work.

5.1.8.2.3 Visiting Population

City Area

It is not predicted that there will be a direct or indirect likely significant adverse impact on the visiting population demographic at city level during operational stage.

The delivery of an enhanced public city library and associated public realm improvements within the City may contribute generally to the perception of the City as an attractive place to visit.

Local Area

It is not predicted that there will be a direct or indirect likely significant adverse impact on the visiting population demographic at local level during operational stage.

The delivery of an enhanced public city library and associated public realm improvements within this historic quarter of Dublin may contribute generally to visitor perception of the local area as an attractive place to visit.

5.1.9 Cumulative Impacts

No significant adverse cumulative impacts arising from the proposed development in conjunction with other projects are predicted for the resident, working or visitor populations at construction or operational phases of the project.

There may be some positive cumulative impacts arising from the project associated with an improved perception of this area of the city as a place in which to live, work or to visit.

5.1.10 Worst Case Impact

The worst case impact in this instance reflects the 'Do-Nothing' impact in this instance, where the development does not occur, and the existing buildings remain vacant and falling into further disrepair. This would be likely to contribute to a negative perception of the local area as a place to live, work and/or visit.

5.1.11 Interactions

All of the other environmental topics examined in the other Chapters of this EIAR arguably interact with Population and Human Health (i.e. the human beings that make up the resident, working and visiting populations and their general well-being) to various degrees.

5.1.12 Monitoring

Monitoring of the population demographics is not required as part of the proposed project

Specific monitoring in relation to other environmental topics are outlined, where necessary, under each respective Chapter of this EIAR.

5.1.13 Difficulties Encountered

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

5.1.14 Consultations

There was no consultation required in the preparation of this Chapter of the EIAR.

5.1.15 Bibliography

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