HOLY CROSS COLLEGE SHD

ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR) VOLUME 1 (NON - TECHNICAL SUMMARY)

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Environmental Assessment **Built Environment**

Client: CWTC Multi Family ICAV acting on behalf of its sub-fund DBTR DR DR1 Fund

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1 Introduction

This Environmental Impact Assessment Report (EIAR) presents the assessment of environmental impacts and applicable mitigation measures associated with the proposed Holy Cross College Strategic Housing Development (SHD) located at Holy Cross College, Clonliffe Road, Dublin 3 and Drumcondra Road Lower, Drumcondra, Dublin 9 ('the proposed Project' hereafter).

This Report (Non-Technical Summary (NTS) - Volume 1) is a summary of the information contained in the Main Report - EIAR (Volume 2). For detailed information and key mitigation measures please see the full EIAR (Volume 2).

Having regard to the 2014 EIA Directive, and the Circular Letter PL 1/2017 of the Department of Housing, Planning, Community and Local Government, the Main Report has been titled an Environmental Impact Assessment Report (EIAR). This constitutes and fulfils the requirement of an Environmental Impact Statement (EIS) as required under and in accordance with the Planning and Development Act, 2000, as amended, (Part X); and Part 10 of the Planning and Development Regulations, 2001-2017.

1.1 The Applicant

The Applicant for the proposed Project is CWTC Multi Family ICAV acting on behalf of its sub-fund DBTR DR1 Fund.

1.2 The Proposed Project

The proposed Project will consist of the construction of a Build To Rent (BTR) residential development set out in 12 no. blocks, ranging in height from 2 to 18 storeys, to accommodate 1,614 no. apartments including a retail unit, a café unit, a crèche, and residential tenant amenity spaces. The development will include a single level basement under Blocks B2, B3 and C1, a single level basement under Block D2, and a podium level and single level basement under Block A1, to accommodate car parking spaces, bicycle parking, storage, services and plant areas. To facilitate the proposed Project, the proposed works will involve the demolition of a number of existing structures on the Site.

The proposed Project sits as part of a wider Site Masterplan for the entire Holy Cross College lands which includes a permitted hotel development (ABP Reg. Ref.: PL29N.308193) and future proposed GAA pitches and clubhouse.

The Site contains a number of Protected Structures including The Seminary Building, Holy Cross Chapel, South Link Building, The Assembly Hall and The Ambulatory. The application proposes the renovation and extension of the Seminary Building to accommodate residential units and the renovation of the existing Holy Cross Chapel and Assembly Hall buildings for use as residential tenant amenity. The wider Holy Cross College lands

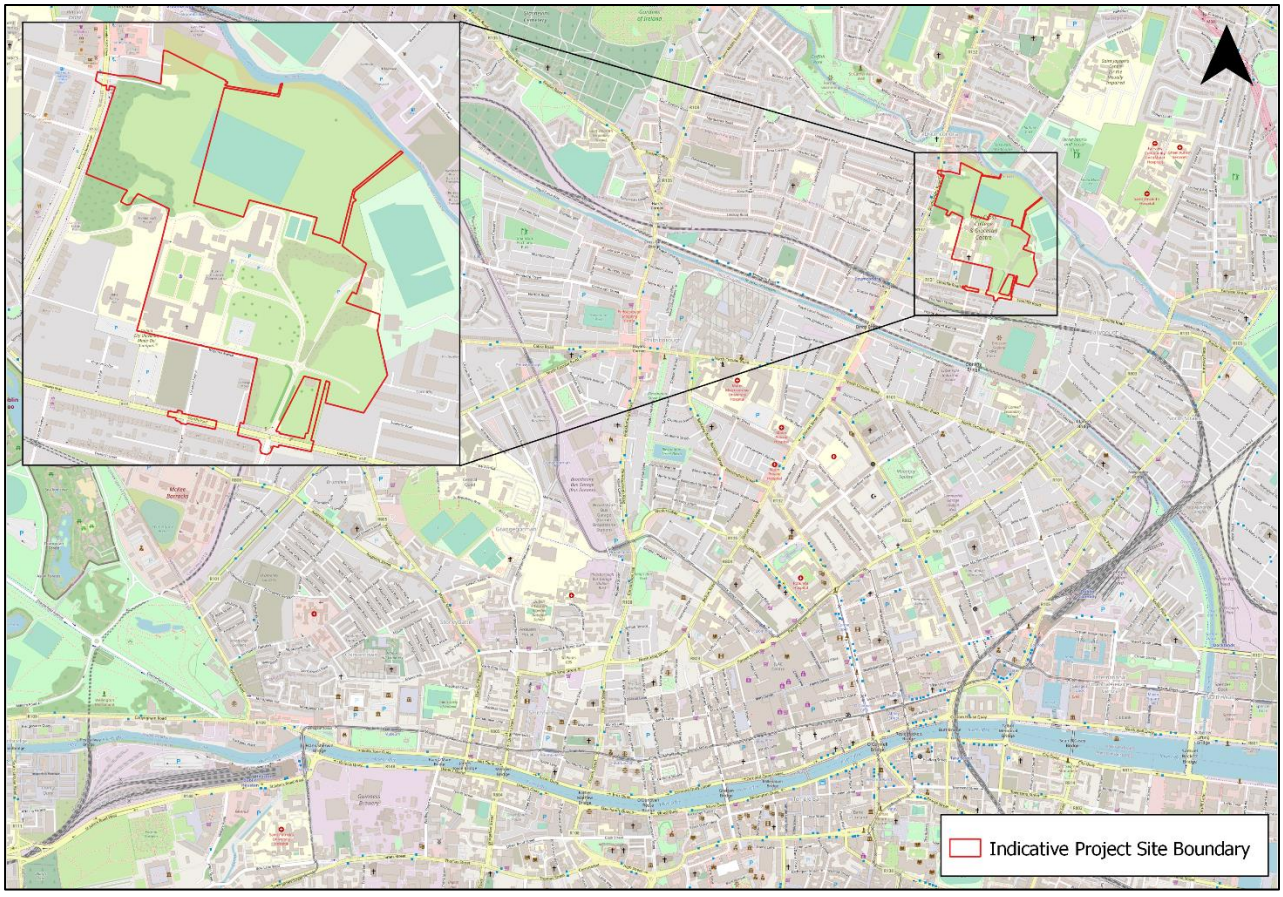
also includes Protected Structures, including The Red House and the Archbishop's House (no works are proposed to these Structures).

The residential buildings are arranged around a number of proposed public open spaces and routes throughout the Site with extensive landscaping and tree planting proposed. Communal amenity spaces will be located adjacent to residential buildings and at roof level throughout the proposed Project. To facilitate the proposed Project, the proposed works will involve the removal of some existing trees on the Site.

The Site is proposed to be accessed by vehicles, cyclists and pedestrians from a widened entrance on Clonliffe Road, at the junction with Jones's Road and through the opening up of an unused access point on Drumcondra Road Lower at the junction with Hollybank Rd. An additional cyclist and pedestrian access is proposed through an existing access point on Holy Cross Avenue. Access from the Clonliffe Road entrance will also facilitate vehicular access to future proposed GAA pitches and clubhouse to the north of the site and to a permitted hotel on Clonliffe Road.

The proposed Project includes all Site landscaping works, green roofs, boundary treatments, PV panels at roof level, ESB Substations, lighting, servicing and utilities, signage, and associated and ancillary works, including Site development works above and below ground.

Figure 1.1: Location of the Proposed Project (© OpenStreetMaps, 2021)



1.3 Format & Structure of the EIAR

Table 1.1 below sets out the format and structure of this Environmental Impact Assessment Report.

Table 1.1: Structure of the EIAR

Section	Description
Volume 1: Non-technical Summary (NTS)	
NTS	A summary of the EIAR in non-technical language.
Volume 2: Main Report	
Chapters 1 – 3	*Introduction; The EIA Process; Planning & Development Context* An introduction to the proposed Project and EIA process, and description of the planning and development policy context.
Chapter 4	*Consideration of Alternatives* An overview of the alternatives considered for the proposed Project.
Chapter 5	*Description of the Proposed Project* A description of the design and construction methodology for the proposed Project, as assessed in the EIA.
Chapter 6	*Consultation* An overview of input received from consultees in relation to the proposed Project.
Chapter 7	*Population & Human Health* An assessment of the impacts of the proposed Project on population and human health in the receiving environment.
Chapter 8	*Biodiversity (Flora and Fauna)* An assessment of the impacts of the proposed Project on biodiversity in the receiving environment.
Chapter 9	*Land, Soils, Geology & Hydrogeology* An assessment of the impacts of the proposed Project on land, soils, geology and hydrogeology (i.e. groundwater) in the receiving environment.
Chapter 10	*Hydrology (Surface Water)* An assessment of the impacts of the proposed Project on surface water, including flood risk, in the receiving environment.
Chapter 11	*Air Quality & Climate* An assessment of the impacts of the proposed Project on air quality and climate in the receiving environment.
Chapter 12	*Noise & Vibration* An assessment of the impacts of the proposed Project on levels of noise and vibration in the receiving environment.
Chapter 13	*Landscape & Visual* An assessment of the impacts of the proposed Project on landscape character and visual amenity in the receiving environment.

Section	Description
Chapter 14	*Architectural Heritage* An assessment of the impacts of the proposed Project on architectural heritage in the receiving environment.
Chapter 15	*Archaeology* An assessment of the impacts of the proposed Project on archaeological heritage in the receiving in environment.
Chapter 16	*Microclimate – Daylight / Sunlight* An assessment of the impacts of the proposed Project on daylight / sunlight performance in the receiving environment.
Chapter 17	*Microclimate – Wind* An assessment of the impacts of the proposed Project on the movement of wind (and resultant impacts on pedestrians) in the receiving environment.
Chapter 18	*Traffic & Transportation* An assessment of the impacts of the proposed Project on traffic and transportation in the receiving environment.
Chapter 19	*Material Assets – Waste* An assessment of the impacts of the proposed Project in relation to waste generation and waste management.
Chapter 20	*Material Assets – Services* An assessment of the impacts of the proposed Project on utilities and services in the receiving environment.
Chapter 21 – 22	*Interactions & Cumulative Impacts* An overview of all major interactions between the different environmental aspects, as outlined above, and cumulative impacts of the proposed Project in combination with other plans / projects in the vicinity.
Chapter 23	*Mitigation & Monitoring* The schedule of environmental commitments / mitigation and monitoring measures included in the EIAR Document for ease of reference.
Volume 3: Appendices	
A8.1 – 19.2	Technical reference material supporting the EIAR Chapters.

1.4 Impact Assessment Methodology

Unless otherwise stated, the criteria for describing effects / impacts in this Environmental Impact Assessment Report are as per the EPA 2017 EIAR Draft Guidelines (set out in Table 1.2, below).

Table 1.2: Criteria for Effect / Impact Characterisation (EPA, 2017)

Criteria	Definition
Quality	
Positive	A change which improves the quality of the environment (for example, by increasing species diversity; or the improving reproductive capacity of an ecosystem, or by removing nuisances or improving amenities).
Neutral	No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.
Negative / Adverse	A change which reduces the quality of the environment (for example, lessening species diversity or diminishing the reproductive capacity of an ecosystem; or damaging health or property or by causing nuisance).
Significance	
Imperceptible	An effect capable of measurement but without significant consequences.
Not Significant	An effect which causes noticeable2 changes in the character of the environment but without significant consequences.
Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
Significant	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
Very Significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
Profound	An effect which obliterates sensitive characteristics.
Extent & Context	
Extent	Describe the size of the area, the number of sites, and the proportion of a population affected by an effect.
Context	Describe whether the extent, duration, or frequency will conform or contrast with established (baseline) conditions (is it the biggest, longest effect ever?)
Probability	
Likely	The effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented.
Unlikely	The effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented.
Duration & Frequency	
Momentary	Effects lasting from seconds to minutes.
Brief	Effects lasting less than a day.

Criteria	Definition
Temporary	Effects lasting less than a year.
Short-term	Effects lasting one to seven years.
Medium-term	Effects lasting seven to fifteen years.
Long-term	Effects lasting fifteen to sixty years.
Permanent	Effects lasting over sixty years.
Reversible	Effects that can be undone, for example through remediation or restoration.
Frequency	
Describe how often the effect will occur. (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually	
Type	
Indirect / Secondary	Impacts on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway
Cumulative	The addition of many minor or significant effects, including effects of other projects, to create larger, more significant effects.
Do-Nothing	The environment as it would be in the future should the subject project not be carried out
Worst-case	The effects arising from a project in the case where mitigation measures substantially fail.
Indeterminable	When the full consequences of a change in the environment cannot be described.
Irreversible	When the character, distinctiveness, diversity or reproductive capacity of an environment is permanently lost.
Residual	The degree of environmental change that will occur after the proposed mitigation measures have taken effect.
Synergistic	Where the resultant effect is of greater significance than the sum of its constituents, (e.g. combination of SOx and NOx to produce smog).

2 The Environmental Impact Assessment (EIA) Process

2.1 The Purpose of an EIAR

The Environmental Impact Assessment (EIA) Directive aims to provide a high level of protection to the environment and ensures environmental considerations are taken into account in the preparation of a proposed Project, with the view to reducing environmental impacts.

The objective of the EIAR is to identify and predict the *likely environmental impacts* of the proposed Project. The EIAR describes the means and extent by which any environmental impacts can be avoided, reduced or

improved; to interpret and communicate information about the likely impacts; and to provide an input into the decision making and planning process.

2.2 The Requirements for an EIAR

The 2014 Directive specifies the classes of project for which an EIA is required and the information which must be contained within the EIAR. In accordance with *Article 4(1)* of the 2014 Directive. All projects listed in Annex I are considered as having *significant effects* on the environment and are subject to an Environmental Impact Assessment (EIA). Projects listed in Annex II of the EIA Directive, the national authorities may determine whether an EIA is needed, either on the basis of thresholds / criteria or on a case by case examination.

Projects needing an EIA are listed in Schedule 5 of the Planning and Development Regulations 2001-2017.

Schedule 5 (Part 2) of the Planning & Development Regulations 2001 (as amended) set mandatory thresholds for each project class. Sub-sections 10(b)(i) and 10(b)(iv) addresses '*infrastructure projects'* and requires that the following class of project be subject to EIA:

> *"Class 10(b) (i).* ***Construction of more than 500 dwelling units****."* [1]

Therefore, taking into consideration the nature and scale of the proposed Project, an EIA is required and an EIAR (Volume 2 - Main Report) has been prepared and will be submitted to An Bord Pleanála with the Strategic Housing Development (SHD) Planning Application.

The following topics have been scoped into this Environmental Impact Assessment:

- Population & Human Health
- Biodiversity (Flora & Fauna)
- Land, Soils, Geology & Hydrogeology
- Hydrology (Surface Water)
- Air Quality & Climate
- Noise & Vibration
- Landscape & Visual
- Architectural Heritage
- Cultural Heritage & Archaeology
- Microclimate – Daylight & Sunlight
- Microclimate – Wind
- Traffic & Transportation
- Material Assets – Waste

[1] Emphasis added.

- Material Assets – Services

The following standalone reports, submitted under separate cover as part of this application, are referred to in this Environmental Impact Assessment Report:

- Barret Mahony Civil & Structural Consulting Engineers (BMCE) (2021). *Outline Construction Surface Water Management Plan*.
- BMCE (2021). *Infrastructure Planning Report*.
- BMCE (2021). *Site Specific Flood Risk Assessment*.
- BMCE (2021). *Masterplan Area Flood Risk Report*.
- Brady Shipman Martin (BSM) (2021). *Material Contravention Statement*.
- BSM (2021). *Statement of Consistency*.
- BSM (2021). *Planning Report*.
- BSM (2021). *Community and Social Infrastructure Audit*.
- BSM (2021). *Childcare Facilities and Schools Demand Assessment*.
- BSM (2021). *Appropriate Assessment Screening Report*.
- DCON Safety Consultants (2021). *Construction Environmental Management Plan*.
- DCON Safety Consultants (2021). *Development Construction Management Plan.*
- Henry J Lyons (HJL) (2021). *Masterplan Development Document*.
- HJL (2021). *Architectural Design Statement*.
- HJL (2021). *Site Strategy Document*.
- NMP Landscape Architecture (2021). *Landscape Design Statement*.
- The Tree File (2021). *Arboricultural Report*.

3 Planning & Development Context

3.1 Introduction

This Chapter provides a review of the planning policy context at a national, regional and local level, as it relates to the proposed Project. The following policy documents of relevance are discussed in relation to the proposed Project herein:

Multilateral and European Policy Context

- United Nations Sustainable Development Goals

National Policy Context

- Project Ireland 2040 – National Planning Framework (2018 – 2040)
- Rebuilding Ireland – Action Plan for Housing and Homelessness (2016)

- Smarter Travel – A Sustainable Transport Future (2009 – 2020)
- Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (2009)
- Urban Design Manual – A Best Practice Guide (2009)
- Sustainable Urban Housing – Design Standards for New Apartments (2020)
- Urban Development and Building Heights – Guidelines for Planning Authorities (2018)
- Design Manual for Urban Roads and Streets (2013)
- Childcare Facilities – Guidelines for Planning Authorities (2001)
- The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009)
- National Cycle Manual (2011)

Regional Policy Context

- Eastern and Midland Regional Assembly – Regional Spatial and Economic Strategy (2019 – 2031)
- Transport Strategy for the Greater Dublin Area (2016 – 2035)

Local Policy Context

- Dublin City Development Plan (2016 – 2022)
- Dublin City Tree Strategy (2016 – 2020)

The following sections provide a high-level overview of the policy context as it related to the proposed Project.

3.1.1 National Level

The proposed Project, which will deliver 1,614 new apartments to rent, is consistent with national level policy, particularly the Government's National Planning Framework and its Action Plan for Housing and Homelessness, which set out the need for high density and high quality residential development, in the context of the ongoing housing crisis in Ireland's urban areas. The National Planning Framework – the key national level policy setting the agenda for development in Ireland to 2040 – emphasises the need to delivery residential development in the right locations, with a focus on areas within the existing built-up footprint of urban areas and areas that are well served by public transport services.

3.1.2 Regional Level

At Regional level, the key policy is the Eastern and Midland Regional Spatial and Economic Strategy (RSES). The RSES sets out 16 Regional Strategic Outcomes (RSOs). In relation to 'Compact Growth & Urban Regeneration', the RSO of greatest relevance to the proposed Project, it is stated that there is a need to *"Promote the regeneration of our cities, towns and villages by making better use of under-used land and buildings within the*

existing built-up urban footprint and to drive the delivery of quality housing and employment choice for the Region's citizens" (p. 25). A number of 'growth enablers' for the Region are identified, which include promoting *"compact urban growth to realise targets of at least 50% of all new homes to be built, to be within or contiguous to the existing built up area of Dublin city and suburbs"* (p. 33). As well as calling for increased residential density in Dublin City, the RSES emphasises the need for healthy placemaking, i.e. *"integration of better urban design, public realm, amenities and heritage to create attractive places to live, work, visit and invest in"* and *"sustainable communities to support active lifestyles including walking and cycling"* (p. 48). In built up areas, a general intention to minimise private car use in favour of public transport and walking or cycling, is expressed in the RSES. It is stated that new developments should *"give competitive advantage"* to these modes, for example by providing for filtered permeability and appropriately designed bicycle parking (p. 187).

3.1.3 Local Level

At local level, the Dublin City Development Plan (2016 – 2022) establishes the planning and development policy for Dublin City, having regard to national and regional plans and policies. The overarching policy of the Development Plan is for a 'sustainable, resilient Dublin'. It is stated that *"The alternative is to continue along an unsustainable path of low-density development with extensive urban sprawl, unsustainable travel patterns, high levels of fossil fuel consumption and a reliance on imported energy sources"* (p. 12).

Under the Development Plan, the Site of the proposed Project is predominantly zoned as Z12 'Institutional Land (Future Development Potential)' which has the stated aim *"to ensure existing environmental amenities are protected in the predominantly residential future use of these lands".* The Development Plan provides an overview of its vision for the Z12 lands as follows:

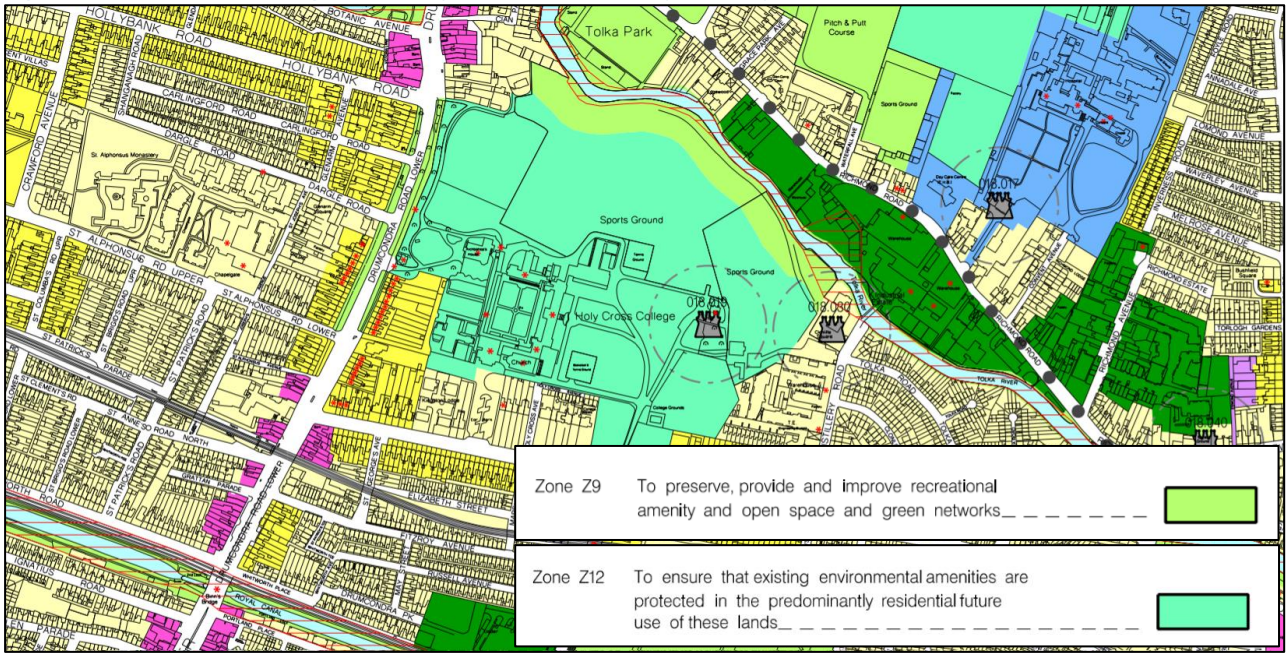
> *"These are the lands the majority of which are in institutional use, which could possible by developed for other uses. […] Where lands zoned Z12 are to be developed, a minimum of 20% of the site, incorporating landscape features and the essential open character of the site, will be required to be retained as accessible public open space. The predominant land-use on lands to be re-developed will be residential, and this will be actively encouraged."* (p. 248)

In general the proposed Project is consistent with the objectives of the Dublin City Development Plan (2016 – 2022), with the exception of its building height restrictions, which the proposed Project will exceed. This contravention is addressed in the Material Contravention Statement, prepared by BSM and submitted under separate cover as part of this application. It provides a justification for the material contravention of the building height limits set out for the area in the current City Development Plan, in the context of the more recent, national-level Urban Development and Building Heights Guidelines (UD&BHGs) for Planning

Authorities (Department of Housing, Planning & Local Government, 2018) and the Government's National Planning Framework (2018).

It is considered that, in this case, the material contravention is well justified. The majority of the proposed Project is balanced around the 24 m mark with two taller elements providing focal points. The massing of the proposed Project has been considered such that the taller elements will be set back from the Site boundaries, providing landmark focal points while minimising visual impacts on adjacent receptors. Additionally, it is considered that the strategically located, underutilised and extensive Holy Cross College lands are representative of the type of site which, according to the UD&BHGs, can accommodate increased building heights (and higher residential densities) in a sustainable manner.

Figure 3.1: Land Use Zoning at the Project Site (Dublin City Development Plan, 2016 – 2022)



4 Consideration of Alternatives

This Chapter provides a summary of the main alternatives which were considered for the proposed Project in terms of the 'Do-Nothing' alternative and alternative layouts / designs. As per the EPA 2017 Draft EIAR Guidelines, alternative locations and processes may also be considered, where relevant. These categories are not considered relevant in this case, as discussed in the main text of the Environmental Impact Assessment Report (Volume 2).

4.1 'Do-Nothing' Alternative

The 'Do-Nothing' alternative considers the likely scenario that would arise, assuming the proposed Project were not progressed, i.e. if nothing were done. In this case, the Do-Nothing scenario might entail:

a) A continuation of the existing status and use of the lands and buildings (i.e. very limited use by the Catholic Archdiocese and charitable organisations); or

b) Development (likely residential) under the scope of a separate application / proposal, at some point in the future.

In the context of the ongoing housing crisis in Dublin City, the former scenario (a) is considered to represent an inefficient, uneconomical and socially suboptimal use of the Holy Cross College lands. The opportunity cost, in this scenario, would include the 1,614 proposed residential units, which would otherwise provide rented accommodation for over 3,000 persons[2].

The latter scenario (b) is considered somewhat more likely, taking into consideration the existing policy context, development trends, and the strategic location of the Site.

4.2 Alternative Layouts & Designs

During the design process for the proposed Project, a range of iterations of the proposed Site layout were considered. Principally, three alternative layouts / designs were considered prior to arriving at the proposed layout / design, as assessed in this Environmental Impact Assessment Report. These arrangements emerged consecutively, based on feedback received from a series of consultations with DCC:

1. Masterplan Conceptual Design;
2. Amended Masterplan Proposal; and
3. Pre-application Layout.

The key considerations which influenced the evolution of the design of the proposed Project were as follows:

- Improving dual aspect count for residential units;
- Resolution of massing and building heights across the Site;
- Retention of maximum feasible number of existing trees;
- Proximity and impact of perimeter blocks to neighbouring buildings;
- Building materiality, which is to be of a high quality throughout;
- Interface with adjoining Archbishop's lands; and
- Connection with and impact on neighbouring elements of the wider Masterplan scheme.

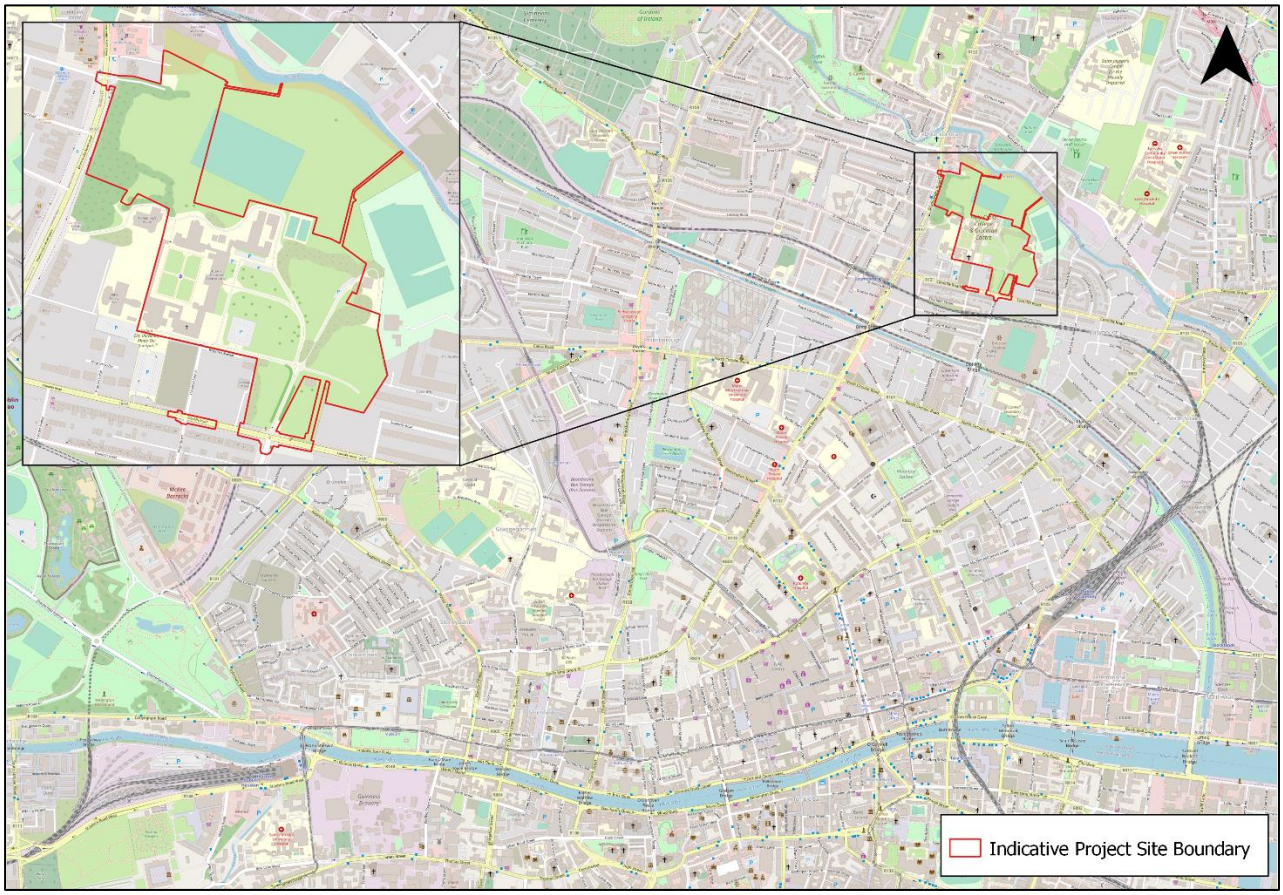
[2] Based on an average household occupancy of 1.9 for new development areas in Drumcondra.

5 Description of the Proposed Project

5.1 Site Location & Context

The Site of the proposed Project is located at Holy Cross College, Clonliffe Road, Dublin 3 and Drumcondra Road Lower, Drumcondra, Dublin 9. It is a site of approx. 8.9 ha, with a site development area of c. 8 ha. The Site is located c. 1.7 km north of Dublin City Centre. It is bound by Drumcondra Road Lower, Mater Dei College and the Archbishops House (a Protected Structure) to the west; Clonliffe Road to the south; Cornmill Apartments and Belvedere College Rugby Grounds to the east; and by the River Tolka to the north.

Figure 5.1: Location of the Proposed Project (© OpenStreetMaps, 2021)



The Holy Cross College Lands were acquired by the Roman Catholic Archdiocese of Dublin in 1859. College facilities were developed, including a seminary for the Catholic Church in Ireland, and administration offices for the Archdiocese and various diocesan activities. The seminary ceased operation in 2000 but the buildings still accommodate administration offices for the Archdiocese, the various diocesan activities and offices for some charitable organisations (Crosscare and DePaul). These activities are vacating the properties. The land and buildings on the Site are significantly underutilised at present.

The Archdiocese has since entered into an agreement with the Gaelic Athletic Association (GAA) to acquire these lands. The GAA have subsequently entered into an agreement to onward sell these to Hines Real Estate

Ireland (through the applicant CWTC Multi Family ICAV acting on behalf of its sub-fund DBTR DR1 Fund). The Archdiocese will retain the Archbishop's Residence and surrounding lands in the south-west corner of the Holy Cross College property, which includes the Mater Dei building and a large surface car park. The GAA are retaining a permitted hotel site and future proposed pitches.

The Site is part of the wider c. 12 hectare Holy Cross College lands, for which a Masterplan has been prepared on behalf of Hines and the GAA, in accordance with the requirements of the 'Z12' zoning of the lands under the scope of the Dublin City Development Plan 2016 – 2022. For further information, refer to the Masterplan by Henry J Lyons Architects, submitted under separate cover as part of this application.

The Site comprises a number of green spaces and existing large institutional buildings (approx. 11,865 m²) associated with its current use (some of which are Protected Structures). The site has many large mature trees, giving it a unique character in the context of the surrounding residential areas and busy roads.

The Site sits between the established residential communities of Drumcondra to the west and north and Clonliffe Road and Ballybough to the south and east. Both are established, mature suburbs of Dublin City with the surrounding area predominately developed. The immediate area gives access to a range of public facilities including community centres, healthcare, libraries, shops and sports / recreation facilities.

5.2 Main Features of the Proposed Project

The proposed Project will consist of the demolition of a number of existing office / former college buildings on Site, including the New Wing and Library Wing Buildings, (c. 6,130 m²) and the construction of a residential development with a gross floor area of c. 119,459 m² (excluding basement parking areas) set out in 12 no. residential blocks, ranging in height from 2 to 18 storeys to accommodate 1,614 no. Build to Rent (BTR) apartments with associated residential tenant amenity, 1 no. retail unit, 1 no. café, and a crèche.

The Site will accommodate a total of 508 no. car parking spaces and 2,507 no. bicycle parking spaces in three separate basement / podium areas and at surface level. Landscaping will include extensive new public open spaces and communal courtyards, podiums and roof terraces.

The 12 no. residential buildings range in height from 2 storeys to 18 storeys, accommodating 1,614 no. BTR apartments comprising:

- 540 studios,
- 603 no. 1 bed units,
- 418 no. 2 bed units and
- 53 no. 3 bed units.

Figure 5.2: Proposed Layout

The breakdown of residential accommodation is as follows:

- Block A1 is a 4 to 8 storey building, including setbacks, balconies and terraces, accommodating 305 no. units
- Block A2 is a 7 storey building, including setbacks and balconies, accommodating 73 no. units
- Block A3 is an 8 storey building, including setbacks and balconies, accommodating 87 no. units
- Block A4 is a 6 to 13 storey building, including setbacks, balconies and terraces, accommodating 104 no. units
- Block B1 is a 5 to 6 storey building, including setbacks and balconies, accommodating 92 no. units
- Block B2 is a 6 to 8 storey building, including setbacks and balconies, accommodating 137 no. units
- Block B3 is a 5 to 6 storey building, including setbacks and balconies, accommodating 80 no. units
- Block C1 is a 6 to 8 storey building, including setbacks and balconies, accommodating 146 no. units
- Block C2 is a 5 to7 storey building, including setbacks and balconies, accommodating 96 no. units
- Block D1 is an 18 storey building, including setbacks, balconies and terraces, accommodating 151 no. units

- Block D2 is an 4 to 8 storey building, including setbacks and balconies, accommodating 239 no. units
- The Seminary Building and South Link Building (E1 and E2) are existing Protected Structures of 2 to 4 storeys with a proposed 5 storey extension to the rear of the Seminary Building and conversion of both buildings to accommodate 104 no. residential units including balconies.

Residential tenant amenity space is provided throughout the existing and proposed blocks, totalling c. 3,463 m² and communal external amenity space is provided adjacent each block and at roof level on Blocks A1, A4, and D2, totalling c.13,729 m².

The Site contains a number of Protected Structures, including the Seminary Building, Holy Cross Chapel, South Link Building, Assembly Hall and the Ambulatory. The application proposes the renovation and extension of the Seminary Building to accommodate residential units and the renovation of the existing Holy Cross Chapel and Assembly Hall buildings for use as residential tenant amenity. The wider Holy Cross College lands also includes Protected Structures, including The Red House and the Archbishop's House (these are not included in the application boundary and no works are proposed to these Protected Structures with the exception of the proposed works to the Drumcondra Road boundary wall which is listed under the Protected Structure of the Archbishop's House as noted below). The works to the Protected Structures within the Site are set out as follows:

- *The Seminary Building (RPS Ref 1901):* The works consist of the careful refurbishment and alteration of the existing four storey Seminary Building to provide residential accommodation, with the addition of a new five storey residential block to the rear (west elevation); floor levels carry through on the four lower levels. It is proposed that the existing structure, the Library Wing, on the northern elevation of the Seminary and the connecting corridors to the Seminary will be demolished; new infill concrete walls are located to fill the gap where elements are removed. Materials that can be salvaged from these blocks will be surveyed, their location noted, and re-used in the conservation and restoration works in The Seminary Building. The projecting WC blocks to the rear (west) elevation of the building are also proposed to be demolished. The external envelope of the building, with existing chimneys, stone and render finishes, windows and doors is maintained and re-used; the stone cross from the pediment is removed and built into a wall in the new residential block which forms an extension to the existing Seminary Building. Selected window opes on the lateral north and south elevations are lowered from door opes to provide for balcony access. The proposed Project proposes 56 no. apartments installed within the existing shell on the east side of a corridor running along the rear of the plan; the 48 no. apartments in the new block are linked to this corridor through a number of the window opes of the rear elevation which are lowered to ground level. Lightwells, lifts and staircases are also accessed in this way.

- *The South Link Building (RPS Ref 1901):* The South Link Building consists of a two- storey stone and render block with slate roof and bellcote between Holy Cross Chapel and the Seminary Building; this building will be conserved and restored. Alterations to the South Link Building include the insertion of a new doorway within the existing front (eastern) façade to link the front of the building to the cloister garden, and the insertion of two no apartments in the ground and first floor space. The existing organ at first floor level will be moved to a new location within the Holy Cross Chapel.

- *Holy Cross Chapel (RPS Ref 1901):* Holy Cross Chapel is retained and restored as a tenant amenity space. External alterations include a new metal door and ramp to the south elevation; interior alterations are limited to services and decoration; a section of the existing tiled floor will be lifted to allow for service connections to furniture installations. The following items will be moved from the Chapel as a part of the works: main altar, 2 no. side altars, 2. no paintings to either side of chancel arch, stations of the Cross, 2 no. marble statues to narthex, loose pews, confessional, fixed furniture to sacristy. Method statements for these works are included in the application documents.

- *The Assembly Hall (RPS Ref 1901):* The Assembly Hall comprises a two- storey hall with its front façade, steps and projecting porch orientated towards Clonliffe Road. The building is conserved and restored as a tenant amenity space as a part of the proposal; the existing balcony level within the main space is removed. The existing stage area is also removed to provide a gym area; bicycle storage is provided within the envelope to the north-west. Existing doors and windows are retained and repaired. A new window is provided into the cloister, with smaller secondary opes cut between spaces.

- *The Ambulatory (RPS Ref 1901):* All of the above referenced buildings are linked by a cloister colonnade (i.e. the Ambulatory) around two sides of a central garden; there is a part section of the colonnade on the north side and an indented (enclosed) section directly outside Holy Cross Chapel; the fourth (east) side is completed by the rear elevation of the Seminary Building. The Ambulatory will be retained as part of the proposed Project. The cloister garden will be restored and conserved as a part of the proposed Project for circulation and amenity use. Mosaic panels to the cloister will be retained and covered to supply a base for a removable light fitting. The courtyard garden will be re-designed and re-planted as a part of the proposed Project.

- *Drumcondra Rd Boundary Wall Entrance (Listed under Archbishop's House RPS 2361):* The existing entrance gates and the adjoining walls are part of the Archbishop's House Protected Structure. It is proposed to take down the existing stone gate pier to the south, and reconstruct this pier in a new location further to the

south, widening the gate opening in this location. This will involve the taking down of a small portion of the stone boundary wall.

Extensive areas of public open space of c.20,410 m² or 25% of the Site is provided for, including woodland walk, formal lawn seminary garden, dog park and, playground. The proposed landscaping scheme provides for the removal of some existing trees on the site as well as extensive new planting.

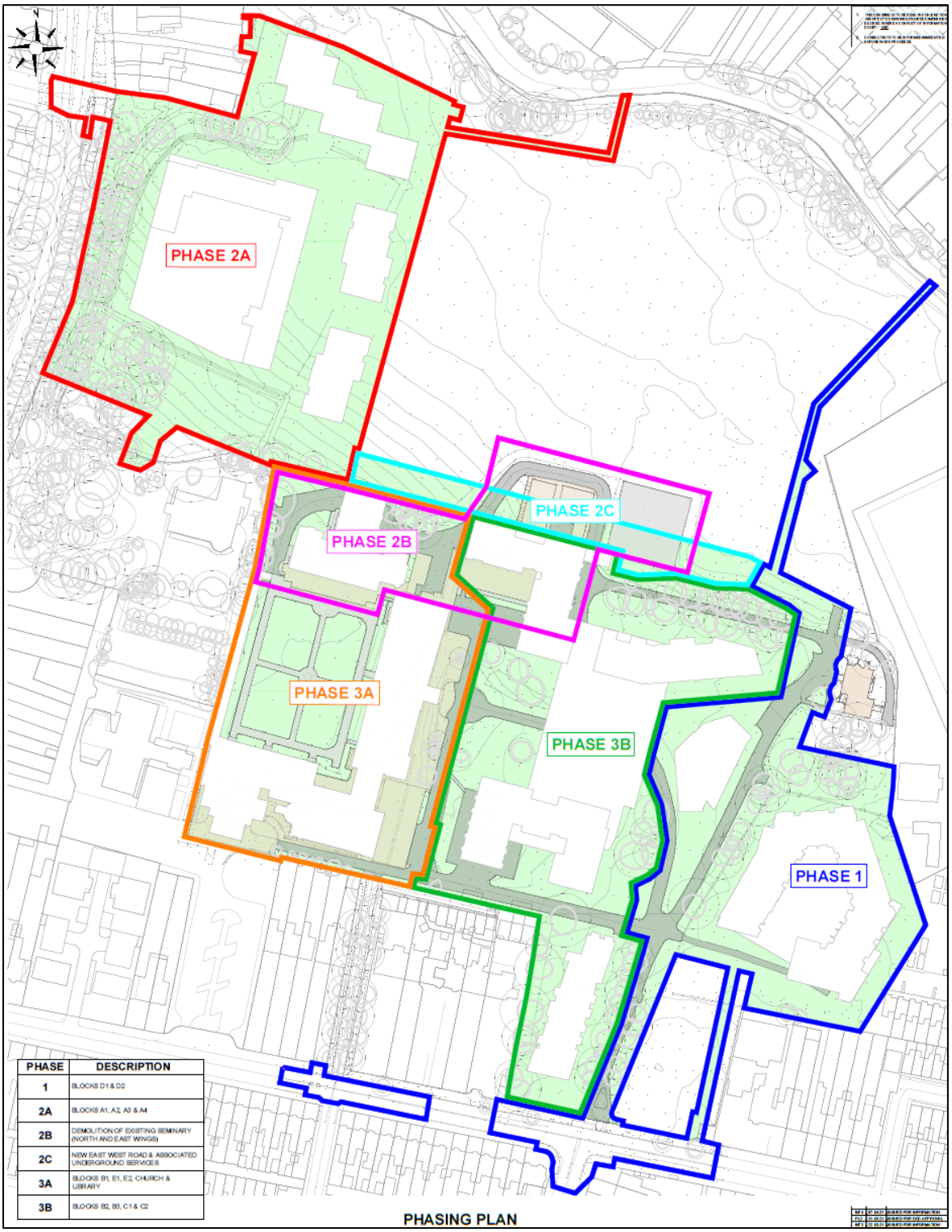
Non-residential uses include a crèche of c. 627 m² and 1 no. retail unit of c. 329 m² in Block A4, and 1 no. café unit of c. 273 m² in Block D1. Total gross floor area of proposed other uses is 1,229 m².

5.3 Indicative Construction Sequence

The indicative construction sequence for the proposed Project is as follows:

- Phase 0: Enabling works (fencing, hoarding, tree protection, construction of temporary access roads, and Block A1 basement creation);
- Phase 1: Blocks D1 and D2 construction, construction vehicular access of Clonliffe Road;
- Phase 2a: Blocks A1 – A4 construction, construction vehicular access off Drumcondra Road;
- Phase 2b: Demolition of selected Block E areas;
- Phase 2c: East West Road construction;
- Phase 3a: Blocks E1 (Seminary, Library and Church) refurbishment works, Blocks E2 and Block B1 construction, construction vehicular access off Clonliffe Road; and
- Phase 3b: Blocks B2 – B3, Blocks C1 – C2 construction, construction vehicular access off Clonliffe Road.

Figure 5.3: Site Phasing Plan



6 Consultation

This Chapter describes the consultation process of the proposed Project. Section 4(1) of the Planning and Development Act of 2016 provides that an application for permission for a SHD shall be made directly to An Bord Pleanála and not to a Planning Authority, as was the case previously.

The SHD process comprises three mandatory stages, which are outlined in Table 6.1.

Table 6.1: SHD Consultation Stages[3]

Stage	Description
Stage 1	**Consultation** with the Planning Authority (under *Section 247 of the Planning & Development Act, 2000, as amended*).
Stage 2	**Pre-Application Consultation** with An Bord Pleanála (under *Section 6 of the Planning & Development (Housing) and Residential Tenancies Act, 2016*).
Stage 3	**Planning Application** to be submitted directly to An Bord Pleanála.

6.1 Stage 1 – Consultation

The context and approach to the Project Site and the design rationale for the proposed Project have been subject to considerable consultation with the DCC Planning Department under Section 247 of the Planning and Development Act 2000, as amended. A series of meetings have been held with the Council's Planning Department on the substance of the proposed Project between the 4th of February 2020 and the 9th of March 2021.

Discussions on the proposed Project have also taken place with the Council's Conservation Department, Traffic & Transportation Department and the Parks Department.

Additionally, the Applicant also held two non-statutory public information events on the 9th of July 2020 and the 8th of April 2021. Because of public health restrictions related to the Covid-19 pandemic, these events were both held online via live online forum / Q&A events, where members of the public were invited to submit comments and questions in relation to the proposed Project, which were addressed by members of the design team.

6.2 Stage 2 – Pre-Application Consultation

The new SHD Pre-Application process requires a number of key steps to be completed which are:

- Request for a Pre-Application Consultation meeting by the prospective applicant to An Bord Pleanála.

[3] DHPLG (2017). *SHD Pre-Application Consultation. Guidance for Prospective Applicants.*

- Planning Authority submits their opinion and Section 247 records to An Bord Pleanála, following request for a Pre-Application Consultation.
- Pre-Application Consultation Meeting will be held with An Bord Pleanála, the Planning Authority and the prospective applicant.
- Record of the Pre-Application Consultation.
- Forming and Issuing of Opinion by An Bord Pleanála.

A tri-partite meeting took place with An Bord Pleanála and DCC on the 18th of January 2021, and an Opinion was subsequently issued on the 3rd of February 2021.

6.3 Stage 3 – Planning Application

The planning application is submitted directly to An Bord Pleanála, and this stage allows for further consultation. The application and all accompanying documents will be available on public display for review by the public and interested parties. Submissions on any aspect of the proposed Project may be made to An Bord Pleanála and such submissions will be taken into account in the determination of the application by the Board.

7 Population & Human Health

Brady Shipman Martin has evaluated the impacts, if any, of the proposed Project on population and human health.

The Site is located on the north side of Dublin City, c. 1.7 km north of the City Centre, in the mature inner suburb of Drumcondra, which has a well-established residential community and supporting services. The surrounding area features a mix of uses, predominantly residential (in all directions), but also including scattered commercial / retail enterprise, light industrial and warehousing, and sports facilities. The dominant settlement pattern in the surrounding area is of low-rise and housing estates / rows. The area is well served by transport infrastructure and public transport services.

The duration of the construction phase is anticipated to be somewhere in the region of 36 months (or three years). During this time, there will be no severance of land, loss of rights of way or amenities as a result of the proposed Project. In the absence of mitigation, predicted impacts on population and human health as a result of the construction phase of the proposed Project may be summarised as follows:

- Nuisance due to dust generating activities – negative, localised (within 50 m of Site), slight, short-term and reversible impact.

- Nuisance and disturbance due to noisy activities and construction traffic – negative, slight to significant, short-term and reversible impact within 40 m of the Project Site; negative, moderate, short-term and reversible impact at distances of greater than 40 m.
- Potential nuisance and disturbance due to vibration – neutral to negative, localised, imperceptible to slight, short-term and reversible impact.
- Negative impacts on journey characteristics due to construction traffic – localised to haulage routes in the city, slight, short-term and reversible.
- Negative impacts on parking availability due to construction traffic – localised, slight, short-term and reversible.
- Negative visual impacts due to presence of construction site – negative, moderate to significant, and short-term;
- Positive direct and indirect economic impacts due to construction employment and increased demand for local businesses, suppliers and other supporting services – local to regional in extent, slight to significant, and short-term.
- Negative impacts on Site personnel and local community due to improper construction site waste management – localised, significant and short-term.

In the absence of mitigation, predicted impacts on population and human health as a result of the operational phase of the proposed Project may be summarised as follows:

- Nuisance and disturbance of residents due to noisy building services plant and vehicular deliveries / collections within the Site – negative, localised, not significant and long-term impact.
- Negative impacts on journey characteristics due to additional operational phase traffic generated by the proposed Project – localised, not significant and long-term.
- Positive impacts on pedestrians and cyclists due to enhanced permeability and provision of public realm which prioritises these users – localised, slight and long-term.
- An imperceptible impact on operational noise due to increased traffic volumes arising from operation of proposed Project - neutral, localised and long-term.
- Visual impacts due to completion of proposed Project, establishing significant new residential development - a moderate, neutral, long-term impact on townscape; and an overall neutral to positive impact on visual amenity in the long-term.
- Direct and indirect positive socioeconomic impacts due to employment opportunities and increased demand for goods and services from local businesses - moderate and long-term.
- Positive impacts on existing and new residents due to provision of new community amenities and facilities – moderate and long-term.

- Positive socioeconomic impacts due to provision of significant additional housing – positive, moderate to significant and short-term (in that the units are likely to be filled in the short-term) at the regional (Dublin City) level.
- Negative impacts on residents and local community due to improper waste management – localised, significant, long-term.

Overall, the proposed Project is expected to result in a net positive impact on population and human health once operational, principally in that it will deliver a high volume of high-quality rented housing in the context of an ongoing housing crisis, in a manner that is consistent with national and regional-level policy. Notwithstanding the proposal's positive impacts, in the absence of mitigation, a number of negative impacts are predicted, as outlined above, and corresponding mitigation measures have been prescribed throughout the Environmental Impact Assessment Report, including measures for dust minimisation (refer to Chapter 11), noise abatement (refer to Chapter 12), traffic management (refer to Chapter 18) and waste management (refer to Chapter 19). Additionally, a Development Construction Management Plan (CMP) will be implemented during the construction phase, which will contain a range of measures to avoid / minimise adverse impacts on the local community.

Assuming the implementation of the mitigation measures set out in the Environmental Impact Assessment Report, significant negative residual impacts on population and human health will be largely avoided, with the exception of the following:

- The application of binding noise limits and hours of operation, along with implementation of appropriate noise and vibration control measures, will ensure that noise and vibration impacts are minimised as far as practicable. However, given the nature of the proposed works and the proximity to residential receptors; the possibility remains for short-term, negative, slight to significant noise impacts to arise within a 40 m radius. These impacts will entail nuisance during daytime hours only, and the nature of noise levels generated will be typical of urban construction works of this nature.
- Significant and unavoidable, negative, short-term visual impacts on surrounding areas as a result of the proposed works.
- There is the potential for short-term significant, negative visual impacts to viewpoints in the surrounding area upon the completion of the proposed Project, but that these are expected to ameliorate to an overall neutral to positive visual impact in the long-term, once the proposed Project has become established in its surroundings.

8 Biodiversity (Flora and Fauna)

Brady Shipman Martin has undertaken an appraisal of the likely effects on biodiversity (flora and fauna) resulting from the proposed Project.

A separate Screening for Appropriate Assessment (AA) under the EU Habitats and Birds Directives has been completed (submitted under separate cover as part of this application), and has concluded that there will be no risk of significant effects on any European site as a result of the proposed Project, either alone or in-combination with other plans or projects. Therefore, the AA process – preparation of a Natura Impact Statement (NIS) – is not required.

8.1 Existing Environment

The lands at Holy Cross College are typical of such an urban parkland site, and overall, with the exception of the River Tolka corridor which is of County Importance (at a minimum), and the woodland on the western Site boundary, which is of Local Importance (Higher Value), the site is of Local Importance (Lower Value) in accordance with the ecological resource valuations presented in the NRA Guidelines. The River Tolka corridor is outside the proposed Project Site but connected by proximity and by the proposed surface water outfalls.

The Site has some value for commuting and foraging bats, and for breeding birds. There is no evidence of roosting bats and the Site is not utilised by significant numbers of wintering bird species, including those species listed as Special Conservation Interest (SCI) species in any European sites. No evidence of badgers was found on the Site. The River Tolka is of very high ecological value, for its habitats, for its importance as a habitat corridor, and for its bird, mammal and fish species (including, for example, kingfisher, otter and Atlantic salmon).

A total of four species listed on the Third Schedule of the Birds and Habitats Regulations 2011 – 2015; Japanese knotweed (*Fallopia japonica*), giant hogweed (*Heracleum mantegazzianum*), Himalayan balsam (*Impatiens glandulifera*) and three-cornered leek (*Allium triquetrum*); have been recorded at various points within the Holy Cross College lands (i.e. the wider Masterplan lands and not strictly the proposed Project Site). A management plan to eradicate all these species is currently being implemented at the Holy Cross College lands. This will continue until all these invasive species are entirely eradicated from the site.

The nearest European sites are the Special Areas of Conservation (SAC) and Special Protection Areas (SPA) associated with Dublin Bay: South Dublin Bay SAC (site code 000210), c. 4.2 km to the south east; North Dublin Bay SAC (site code 000206), c. 4.7 km to the east; South Dublin Bay and River Tolka Estuary SPA (site code 004024), c. 1.7 km to the east; and North Bull Island SPA (site code 004006), c. 4.7 km to the east. Full details of these and all other European sites with potential links to the proposed development site are contained in the AA Screening Report.

The nearest site designated for nature conservation, not otherwise designated as a European site, is the Royal Canal proposed Natural Heritage Area (pNHA) (site code 002103). At its closest point, the pNHA is c. 300 m from the proposed Project Site.

8.2 Impact Assessment

Based on the studies undertaken and the features of the proposed Project, the AA Screening process concluded that none of the habitats and species listed as qualifying interests or special conservation interests in any European site designation will be affected by the proposed Project and full AA, including the preparation of a Natura Impact Statement (NIS), is not required. Similarly, there is no direct or indirect pathway between the proposed Project site and any pNHA not already designated as a European site, and therefore no impacts on any pNHA will occur. Specifically, there is no possibility of any impacts on the Royal Canal pNHA.

The proposed Project will result in the removal of some existing habitats of Local Importance (Lower Value) as well as alterations to parts of the Site that are of Local Importance (Higher Value). Appropriate landscape planting, including the planting of semi-mature trees, as well as long-term biodiversity-focused landscape management will be undertaken within the Site.

Two new surface water connections will be made from the proposed Project to the River Tolka. This will require the creation of two new outfall channels. The locations of the outfalls have been selected by the design team (including the engineer, ecologist and landscape architect, with inputs from Inland Fisheries Ireland (IFI)) in order to minimise any potential for impacts on the River Tolka. The construction methodology and habitat reinstatement will mean that no permanent significant impacts arising from the installation of the surface water outfall and headwall connection.

While no bat roosts have been recorded on the proposed Project Site, there are several trees with roost potential and the felling of trees creates a risk of roost loss. Reduced vegetation will also lead to reduced insect abundance.

There will be a reduction in the vegetation cover and removal of the scrub and some of the mature trees that offer nest sites for the bird species noted within the Site. Trees that are retained will be subject to considerable pressure from disturbance for the duration of construction as a result of noise and lighting. However, the landscaping proposed will ultimately lead to an increase in habitat (feeding and nesting) for birds.

No significant impacts on otters, badgers or any other large mammals within the Site are expected as a result of the proposed Project, both within the Site and along the River Tolka corridor. Further, there will be no significant impacts on amphibians, reptiles, lepidopterans or any other species groups as a result of the proposed Project.

The implementation of biosecurity measures will ensure that no invasive alien plant species will be introduced, either deliberately or inadvertently, to the Site. A long-term plan for the eradication of all such species on the Holy Cross College lands is already being implemented.

No significant impacts on wintering birds are expected as a result of the proposed Project. No Brent Geese utilise the Site and other SCI species use the site only on an occasional basis. Similarly, there will be no significant impacts on bird species along the River Tolka corridor, such as kingfisher, grey wagtail, cormorant and heron.

The construction phase of the proposed Project could potentially have short term impacts on water quality in the River Tolka, via contaminated run-off and sedimentation, in the absence of mitigation. However, all construction works will proceed in line with the recommendations and guidance provided in the Outline Construction Surface Water Management Plan (submitted under separate cover as part of this application). Provided that Site facilities are correctly designed and proper working procedures are strictly adhered to, no impacts on existing watercourses are expected, either during the construction or operation of the proposed Project.

There will be no significant impacts related to lighting, habitat disturbance, surface water, flooding, foul water management or otherwise, in the context of biodiversity, as a result of the operation of the proposed Project.

8.3 Mitigation Measures

Where feasible and practicable, the clearance of scrub and any other vegetation that may be suitable for use by small numbers of nesting birds, will be undertaken outside the bird nesting season.

The proposed Project incorporates a comprehensive landscape design, with biodiversity-focussed planting. The planting and long-term management proposed will enhance the biodiversity resource on the proposed Project Site by creating new, pollinator-friendly habitats. All planting plans and landscaping proposals will further ensure that no invasive species are introduced, either deliberately or inadvertently, to the proposed Project site.

The lighting design for the proposed development includes measures to prevent any impacts on commuting or foraging bats.

It is proposed to install a total of 18 no. bat and bird boxes of various types (including boxes designed to be used by swifts) both within the proposed Project itself and within the retained woodland blocks. The reason for the installation of additional bat boxes is not to provide replacement roosts; rather, it is to augment the overall ecological value of the Site. This will contribute to enhancing the ecological value of the proposed Project.

8.4 Residual Impacts

Overall, although the proposed Project may have temporary negative impacts on biodiversity at the Site level during the construction phase, these impacts will be fully mitigated over time to be rendered negligible. There will be no long-term impact on the River Tolka and its associated habitats, either as a result of the proposed Project itself or the installation of two new surface water outfalls to the watercourse.

8.5 Monitoring

A suitably experienced Project Ecologist will be appointed for the duration of the construction phase, and regular monitoring of all related works will take place to ensure the correct and full implementation of all mitigation measures. The Project Ecologist will ensure that all construction works take place in accordance with the project Construction Management Plan, the Construction Surface Water Management Plan (both submitted under separate cover as part of this application), and the mitigation measures set out in Volume 2 of the Environmental Impact Assessment Report.

Should vegetation clearance be required during the bird nesting season, this work will take place only after the Project Ecologist has undertaken a survey to ensure that no active bird nests or recently fledged birds are present. Similarly, no evidence of roosting bats was recorded on the Site during any of the comprehensive bat surveys undertaken. Regardless, a pre-construction survey will be required to ensure that any necessary tree felling or works to buildings continues to have no impact on roosting bats.

No long-term ecological monitoring is required, other than post-construction monitoring of the bat and bird boxes installed. The bat and bird boxes installed on the Site will be checked annually for a period of five years post-completion of the works, to ensure that they continue to be accessible to these species.

On completion of construction, the lighting installed will be reviewed by the Project Ecologist and a bat specialist, to ensure that it is operating according to the approved specifications.

9 Land, Soils, Geology and Hydrogeology

AWN Consulting has prepared this Chapter, which assesses and evaluates the potential impacts of the proposed Project on the geological and hydrogeological environment.

The existing environment in respect of land, soils, geology and hydrogeology was established through a desk study, an on-Site ground investigation, and soil testing. The profile on the Site is comprised of topsoil, tarmacadam and some concrete overlying c. > 10 m of made ground. Bedrock is recorded as strong mudstone interbedded with limestone. This is typical of the Lucan Formation, which is noted on the geological mapping of the Site. The depth to rock varies from 12.6 metres below ground level (mbgl) in BH01 to a maximum of 19.6 mbgl in BH05. The Groundwater Body (GWB) underlying the site is the 'Dublin GWB'. Currently, the EPA

(2021) classifies this GWB as being under review, but in the previous Water Framework Directive (WFD) assessment cycle (2013 – 2018), it was recorded as having 'Good Status'. Soil analysis has found that the soil underlying the Site is of relatively good quality. Elevated total organic carbon (TOC) levels recorded in a select number of trial pits appear to be associated with the shallow depths they were recovered from, and will need to be re-assessed prior to removal from Site to a licenced waste facility (during the construction phase).

Based on the National Roads Authority (NRA[4]) / Institute of Geologists of Ireland (IGI) criteria, the importance of the hydrogeological features at this site are rated as being of 'Medium Importance'. This is based on the assessment that the attribute has a medium quality significance or value on a local scale. The aquifer beneath the site is a locally important (LI) bedrock aquifer, (bedrock which is generally moderately productive). It is not used for public water supply or widely used for potable use, and is well protected (low vulnerability).

During construction of the development, there is a risk of accidental pollution incidences from the following sources:

- Spillage or leakage of temporary oils and fuels stored on site;
- Spillage or leakage of oils and fuels from construction machinery or site vehicles;
- Spillage of oil or fuel from refuelling machinery on site;
- Run-off from concrete and cement works; and
- Emission of sediment-laden run-off.

Construction works will require the removal of soils / stones from the Site. Proposed excavations will be to a maximum depth of 4 – 5 mbgl due to the installation of basement levels. The aquifer vulnerability is classified as 'Low' throughout the Site. Due to the thickness of the overburden, the underlying hydrogeological environment will have significant protection from surface infiltration during construction. Temporary storage of soil will be carefully managed to prevent any potential negative impact on the receiving environment, particularly the River Tolka and any surface water drains / gullies. This material will be stored away from the surface water drainage network. Movement of material will be minimised in order to reduce degradation of soil structure and the generation of dust.

It is proposed to remove 70,000 m^3 of excavated material off-Site. This material will be visually assessed for signs of possible contamination, such as staining or strong odours. In the event that any unusual staining or odour is noticed, samples of this soil will be analysed for the presence of possible contaminants in order to ensure that historical pollution of the soil has not occurred. Should it be determined that any of the soil

[4] Now Transport Infrastructure Ireland (TII)

excavated is contaminated, this will be segregated, classified and appropriately disposed of by a suitably permitted / licensed waste disposal contractor.

A small substation is currently located on-Site (to the north of the college buildings), which a utilities survey found to be leaking small volumes of fuel oil. Soil sampling from the area surrounding the substation shows none of the samples exceed generic assessment criteria 'Suitable for Use Levels' for residential land use with homegrown produce, the most conservative of these types of levels available. This substation will need to be removed and replaced for the purposes of the proposed Project. It is proposed that when the substation is to be decommissioned, the concrete slab and soil to 2 mbgl beneath it is to be excavated by a qualified contractor, segregated, classified, and removed to a licenced waste facility for appropriate disposal.

There will be no direct discharges to the ground or abstractions from the aquifer during the operation of the proposed Project. The potential impacts of the proposed Project's operation have been assessed in relation to accidental emissions and reduction in local recharge to groundwater. The aquifer vulnerability is classified as 'Low' throughout the site area based on site investigations. Due to the thickness of the overburden and the fact that a large proportion of the Site will be capped / paved this will provide protection from surface infiltration during operation.

A suite of mitigation measures have been prescribed in order to avoid / minimise construction phase impacts on land, soils, geology and hydrogeology, under the following headings:

- Control of soil excavation;
- Export of material from Site;
- Sources of fill and aggregates for the proposed Project;
- Fuel and chemical handling, transport and storage; and
- Control of water during the construction phase.

Following implementation of mitigation measures detailed in Volume 2 of the Environmental Impact Assessment Report, the predicted residual impact during the construction phase is ***short-term***, ***imperceptible*** and ***neutral***. The predicted residual impact during the operational phase is **long-term, imperceptible** and **neutral**.

10 Hydrology

AWN Consulting has prepared this chapter of the EIAR which assesses and evaluates the potential impacts of the proposed Project on the hydrological environment, in terms of surface water (groundwater is addressed in the preceding Chapter – 9: Land, Soils, Geology & Hydrogeology). In assessing likely potential impacts, account is taken of both the importance of the hydrological attributes and the predicted scale and duration of the impacts.

Currently, the northern section of the Site is hydraulically connected to the Tolka via overland flows. The Tolka, along with the River Liffey, drains a large catchment of Dublin City. It flows along the southern margin of Finglas, and then north of the suburban districts of Glasnevin and Drumcondra. At the southern side of Tolka Park, the Tolka forms the border between Ballybough and Fairview, before entering Dublin Bay between East Wall and Clontarf, discharging to the South Dublin Bay and River Tolka Estuary Special Protection Area (SPA). Based on the distance between the Site and this SPA (which is the nearest European / Natura 2000 Site at c. 1.8 km to the east), an impact on the SPA as a result of hydrological connectivity is not likely.

The Tolka and its estuary are currently identified as being 'At Risk' of not meeting their Water Framework Directive (WFD) objectives. These waters were categorised as having a 'Moderate' status during the previous WFD assessment cycle (2013 – 2018).

Based on the NRA criteria, the hydrological features at the Site are rated as being of 'medium importance'. This is due to a poor biotic index (Q value of 2 – 3) and its lack of use as a potable water source.

The Site is entirely located within Flood Zone C and, as such, there is negligible flood risk associated with the proposed Project, and negligible flood risk to surrounding areas arising from the proposed Project. Therefore, the proposed Project is deemed 'Appropriate' in accordance with the Office of Public Work (OPW) Flood Risk Management Guidelines.

In the absence of mitigation, predicted impacts of the proposed Project during the construction phase include those associated with increased run-off due to introduction of impermeable surfaces and soil compaction, sediment loading, discharge of cementitious material, and accidental spillage or leakage of pollutant substances (such as hydrocarbons, paints and solvents). A corresponding suite of mitigation measures prescribed to avoid / minimise impacts during the construction phase, under the following headings:

- Construction Management Plan (CMP);
- Surface water run-off;
- Fuel and chemical handling;
- Accidental releases; and
- Soil removal and compaction.

Additionally, an Outline Construction Surface Water Management Plan (CSWMP) has been developed by Barrett Mahoney Consulting Engineers (BMCE) and submitted under separate cover as part of this application. It details the proposed Sustainable Drainage Systems (SuDS) measures to be implemented during the construction phase to ensure a minimum of two-stage treatment of surface water prior to discharge / emission.

The implementation of mitigation measures detailed in Volume 2 of this Environmental Impact Assessment Report will ensure that the likely impacts on the hydrological environment during the construction phase will be ***short-term, imperceptible, and neutral***.

In the absence of mitigation, predicted impacts of the proposed Project during the operational phase include those associated with increased surface water run-off due to hardstanding / capping, foul water emissions from the buildings, and water supply for the buildings.

The proposed drainage system for the Site as outlined in BMCE's Infrastructure Planning Report (submitted under separate cover) has been designed in accordance with Greater Dublin Strategic Drainage Strategy's specifications. Surface water run-off from the proposed Project Site will go through at least a two-stage treatment train prior to discharge into the River Tolka via two (2 no.) outfalls. Proposed SuDS measures; which include green roofs, filter drains, permeable pavements, rain gardens and tree pits, rainwater harvesting and proprietary treatment systems (such as catchpits, oil separators and sediment removers); will reduce the quantity and improve the quality of water discharging into the receiving system.

All incidental drainage from the proposed car park will be discharged separately via a Class 2 oil separator to the combined sewer. All foul effluent will be treated at Ringsend WWTP, which operates under EPA licence D0034-01. Irish Water have confirmed connection to its water supply and foul water drainage networks can be facilitated, subject to a connection agreement. The water main layout and details; including valves, hydrants, metering, etc.; will be in accordance with Irish Water's Code of Practice and Standard Details for water infrastructure.

Following implementation of the mitigation measures prescribed in Volume 2 of the Environmental Impact Assessment, the predicted likely impact on the hydrological environment during the operational phase is ***neutral, imperceptible,*** and ***long-term***.

11 Air Quality & Climate

AWN Consulting Limited has been commissioned to conduct an assessment of the likely impacts of the proposed Project on air quality and climate, the results of which are presented in this Chapter.

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

The existing climate baseline can be determined with reference to data from the EPA on Ireland's total greenhouse gas (GHG) emissions and compliance with European Union's Effort Sharing Decision "EU 2020 Strategy" (Decision 406/2009/EC). The EPA states that Ireland was predicted to have had total GHG emissions

of 59.9 Mt CO2eq in 2019. This is 6.98 Mt CO2eq higher than Ireland's annual target for emissions in that year. Emissions are predicted to continue to exceed the targets in future years.

Impacts on air quality and climate can occur during both the construction and operational phases of the proposed Project. With regard to the construction stage, the greatest potential for air quality impacts is from fugitive dust emissions impacting nearby sensitive receptors. Impacts to climate can occur as a result of vehicular and machinery GHG emissions. In terms of the operational stage, air quality and climate impacts will predominantly occur as a result of the change in traffic flows on the local road network as a result of the proposed Project.

In accordance with the UK Institute of Air Quality Management's guidance, a high level of sensitivity was assigned to the study area in relation to dust soiling impacts in the immediate vicinity of the proposed Project. The local area is considered to be of low sensitivity to human health impacts from dust emissions. The scale and nature of the construction works were reviewed, and it was determined that a high level of dust control was required for the demolition and construction phases. Once the dust mitigation measures outlined in Appendix 11.2 are implemented, dust emissions are predicted to be short-term, negative and imperceptible and will not cause a nuisance at nearby sensitive receptors.

Construction phase traffic can also impact air quality, particularly due to the number of heavy goods vehicles (HGVs) accessing the Site. Construction phase traffic levels were reviewed and it was found that the change in traffic was not of the magnitude to require a detailed assessment, in accordance with the UK Design Manual for Roads and Bridges (DMRB) screening criteria. Therefore, it is not predicted that significant impacts to climate will occur during the construction stage. Impacts to climate at this stage are predicted to be short-term, neutral and imperceptible.

Potential impacts to air quality and climate during the operational phase of the proposed Project are as a result of increased traffic volumes on the local road network. The changes in traffic flows were assessed against the UK DMRB screening criteria for an air quality assessment, and it was found that the change in traffic was not of the magnitude to require a detailed assessment. It is considered that the operational phase of the proposed Project will have an imperceptible, neutral and long-term impact on air quality and climate. In addition, the proposed Project has been designed to minimise the impact to climate, where possible, during operation (e.g. by prioritising walking and cycling over private car use, and through the adoption of various clean technologies).

The best practice dust mitigation measures that will be put in place during construction of the proposed Project will ensure compliance with all EU ambient air quality legislative limit values, which are based on the protection of human health. Therefore, the impact of construction of the proposed development is likely to be short-term, localised, negative and imperceptible with respect to human health. Operational phase

predicted concentrations of pollutants are predicted to be significantly below the EU standards. Therefore, the impact of the operational phase to human health is predicted to be imperceptible, neutral and long term.

In short, no significant impacts on either air quality or climate are predicted during the construction or operational phases of the proposed Project.

12 Noise and Vibration

AWN Consulting Limited carried out an assessment of the likely noise and vibration impacts during the construction and operational phases of the proposed Project.

The baseline noise environment has been established through an environmental noise survey conducted at the Site and in the vicinity. Prevailing noise levels are primarily due to local road traffic.

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

Worst-case construction noise levels predicted at nearest sensitive properties at 40 m from construction activity are predicted to be slightly above the threshold for significant impact during the general construction phase. At distances greater than 50 m from noise-generating construction activity, the predicted levels are below the criterion for a significant noise impact.

The application of binding noise limits, hours of operation, along with implementation of appropriate noise and vibration control measures, will ensure that noise and vibration impact are minimised. For any noise sensitive locations within 40 m of the proposed Project, negative, significant and short-term effects are likely. At distances greater than 40 m, the effects are expected to be negative, slight to moderate and short-term.

The primary sources of outward noise in the operational context are long-term and will comprise traffic movements to Site using the existing road network, and building services plant noise.

In respect of traffic movements, in order to increase traffic noise levels by 1 dB, traffic volumes would need to increase by the order of 25%, approximately. A review of the predicted traffic level increases attributable to the proposed Project indicates that it will not give rise to increases of this magnitude on the surrounding road network. Therefore, the predicted increase in traffic flows associated with the Project will result in an increase less than 1 dB along all roads. The predicted effect is neutral, imperceptible and long-term.

It is expected that the principal items of building and mechanical services plant will be for heating and ventilation of the buildings. These items and their locations will be selected at the detailed design stage to ensure that noise emissions to sensitive receivers both external and within the development itself will be within the relevant criteria set out in Chapter 12. The associated effects are considered neutral, not significant and long-term.

13 Landscape and Visual

This Chapter presents an assessment of the likely effects on the landscape and visual environment arising from the construction and operation of the proposed Project, and has been prepared by BSM. Given the urban location of the Site, the term 'landscape' and 'townscape' (i.e. acknowledging the urban setting of the lands) are used interchangeably in this assessment.

A series of Photomontages have been prepared by BSM to illustrate the physical and visual character of the proposed Project from 51 viewpoints on the Site and in the surrounding environment, and have informed this assessment (refer to the accompanying Photomontage Booklet submitted under separate cover as part of this application). In April 2021, permission was granted for a new hotel up to 7 storeys in height on the Holy Cross College Masterplan lands immediately east of the existing entrance on Clonliffe Road (ABP Ref.: 308179-20). The cumulative visual impacts of the proposed Project in combination with this permitted development have been considered in the assessment – and views of both are shown in the Photomontages.

The Site of the proposed Project comprises c. 8.9 ha of buildings and lands within the wider lands at Holy Cross College, off Clonliffe Road Dublin 3, and off Drumcondra Road Lower, Dublin 9. The Site comprises a range of large 19th and 20th century former college buildings and chapel, some of which are Protected Structures: the Main College Building, Holy Cross Church, South Link Building, Ambulatory and Assembly Hall (all RPS Ref No. 1901); the Red House (RPS Ref. No. 1902; RMP Ref. No. 018-109); and the Archbishop's House (RPS Ref. No. 2361). The main buildings are grouped close to the centre of the lands and towards the western boundary. Green areas lie to south, east and north, while Mater Dei College and the Archbishop's House, which is set within its own mature gardens, lie to the west.

The Site of the proposed Project does not fall within the visual context of any of the Key Views and Prospects identified in the Dublin City Development Plan (2016 – 2022). No Tree Protection Orders apply to the Holy Cross College lands.

The assessment has identified a number of townscape and visual features which are of particular sensitivity and significance, including the following of particular note:

- The established collective historic character of the complex of buildings in its landscape setting;
- The individual architectural quality of – and visual connections between – the key buildings on the Site;
- The extent and maturity of tree blocks, tree-lines and individual trees in a parkland setting on the lands;
- The historic character of landscape features such as parklands, quadrangle, walkways, avenues and the boundary wall along Drumcondra Road Lower;
- The open nature of the northern lands and landscape corridor (conservation area) of the River Tolka;
- The presence of residential and other property around and beyond the boundaries of the Site; and

- Potential longer range views across or to the Site from surrounding areas.

In overall terms, the presence of a range of Protected Structures within a building complex and their physical and visual interrelationship in a high-quality parkland setting is of very high sensitivity and significance. Given the partly secluded nature of the Site, the relationship with its wider surrounds and city context is of moderate sensitivity and significance.

The proposed Project will include the following characteristics of landscape and visual significance:

- Provision of new buildings, ranging from two to 18 storeys, with low- to mid-rise perimeters, a general six storey shoulder height, and several taller buildings (a number of eight storey buildings, a 13 storey building and an 18 storey tower) providing variety and acting as visual markers.
- Of a total of 296 existing trees on the Site of the proposed Project, 92 trees will need to be removed, which might otherwise have been suitable for retention, including four higher quality 'Category A' trees, 36 no. moderate quality 'Category B trees', and 52 no. lower quality 'Category C' trees.
- The existing secondary entrance off Drumcondra Road Lower will be opened up as a new access, providing a new junction opposite Hollybank Road. The existing entrance off Clonliffe Road will also be widened for enhanced physical and visual connectivity.
- Delivery of c. 25% of connected public open space within the Site, in excess of the 20% required under the Zone Z12 requirements.

During the construction phase, disturbance and general activity associated with the proposed works will result in substantial alteration to the existing landscape, giving rise to significant landscape and visual impact for the setting of existing structures, including the Red House, other retained buildings and for those properties immediately bounding / surrounding the Site. Assuming the implementation of the mitigation measures set out in Volume 2 of the Environmental Impact Assessment Report, the residual impact of the construction phase on the wider townscape is predicted to be ***moderate, negative and short-term. Short-term negative*** residual visual impacts are also predicted for the construction phase, ranging from ***slight to very significant***, depending on the area affected. Such temporary, negative visual effects are unavoidable and not unusual in the urban context, where change is continuous.

During its operation, the introduction of the proposed Project, which provides for a high density scheme including an 18-storey tower, would signify a dramatic change for the existing layout and presentation of the Holy Cross College lands and its key features. This emerging change in the existing townscape setting has already been initiated in the grant of permission for the up to 7-storey hotel on the Masterplan lands, off Clonliffe Road.

The provision of a new residential neighbourhood with high-quality public open spaces will open up and enliven the Site, while the retained landscape setting around the Red House will appropriately preserve its sensitive characteristics within a new developed context. It is considered that the proposed Project can be appropriately integrated in the townscape without significant negative effects, especially after a short-term period to allow for establishment of the high-quality development and new residential community in its setting. Therefore, and notwithstanding the potential for initial ***short-term, significant negative*** visual impacts; in overall terms the proposed Project is predicted to result in a ***significant positive, long-term*** landscape and visual impact during the operational phase, with the delivery of a new, appropriately located, high-quality residential neighbourhood.

14 Cultural Heritage – Architectural Heritage

This Chapter presents an assessment of the likely effects of the proposed Project on architectural heritage. It has been prepared by David Slattery Conservation Architects.

The Project Site is largely comprised of 19th and 20th Century institutional buildings. It should be noted that several of the structures on the Site are included on the DCC Record of Protected Structures (RPS): The Main Block, Holy Cross Church, South Link Building, Ambulatory and Assembly Hall are all listed under RPS Ref. No. 1901. In the wider setting of the site, the Archbishop's House, on Drumcondra Road Lower, is listed under RPS Ref. No. 2361. The Red House is listed under RPS Ref. No. 1902. The Red House is also included on the Record of Monuments and Places, Ref. No. 018-019. It should be noted that the NIAH Survey for the area has not yet been published. A number of the terraced houses along Drumcondra Road Lower and Clonliffe Road adjoining the Site are Protected Structures and / or are zoned Z2, with the objective to *"protect and/or improve the amenities of residential conservation areas".*

The proposed Project is not within the boundaries or sightlines of any of the Key Views and Prospects identified in the Dublin City Development Plan (2016 – 2022).

In terms of the impacts of the proposed Project, the demolition of some of the structures on Site may result in the loss of historic features of interest. The construction of new blocks within the Site and of a new extension to the rear of the Main Seminary Block will have an impact on the setting of the Protected Structures and on views within the Site. The proposed Project will also have a visual impact on the setting of the Protected Structures on site and on the architectural heritage character of the surrounding area.

The cumulative visual impact of the proposed Project and existing and proposed development of adjoining sites on the architectural heritage character of the wider context has been assessed. A series of verified photomontages have been prepared in respect of the proposed Project (submitted under separate cover as part of the planning application). The visual impact assessment has informed the design of the proposed

Project (i.e. 'mitigation by design') so as to minimize potential visual impacts on Protected Structures on site, the character of their setting and the built heritage of the surrounding area.

In terms of mitigation measures, a full photographic survey of the structures to be demolished has been carried out for record purposes. Furthermore, architectural features of interest and surviving historic fabric, as detailed in the main text of the EIAR and its appendices (Volumes 2 and 3, respectively), will be carefully taken down and salvaged prior to the demolition works. The re-use of this fabric within the proposed Project will be considered, and any items not feasible for re-use within the Site will be salvaged off-Site. This will ensure that significant features are not lost as part of the proposed Project and that the loss of historic fabric is minimised.

During the construction phase, the Developer / Contractor will ensure that a qualified conservation architect oversees the recording, disassembly, taking down, storage and salvaging of material from the Site, so as to ensure minimal damage to the historic features.

The residual impacts of the proposed Project are largely ***neutral*** or ***positive*** with regard to their impact on the historic architectural character of the Site. The Masterplan for the Site was designed with careful consideration of its architectural heritage and takes into account the significant views and vistas within the Site.

The visual impact of the proposed Project on the wider architectural heritage of the surrounding area is not considered to be significant or negative.

15 Cultural Heritage – Archaeology

This assessment has been prepared to assess the impact, if any, on the archaeological and cultural heritage resource of the proposed Project. The assessment was undertaken by Grace Corbett of IAC Archaeology and includes the results of a geophysical survey carried out by Joanna Leigh (Licence Ref.: 20R0046) and a programme of archaeological testing, carried out by Neil O'Flanagan of IAC under licence 20E0286.

There are six recorded monuments within 500 m of the proposed Project Site, in addition to a site listed in the Sites and Monuments Record: an 18th / 19th century house (DU018-019001), to the immediate east of the Site. One potential prehistoric ring ditch was identified during testing at Drumcondra Castle, 500 m to the north (Licence Ref.: 09E437, Bennett 2009:306). Medieval activity was also noted at this site. The grange at Clonliffe is recorded during the medieval period; and Clonliffe House (DU018-019001), located to the east of the Site, may be the location of the original medieval messuage, although no direct evidence of this has been identified to date. A medieval castle (DU018-015001), dating to the 16th century, is also located to the north, at Drumcondra.

Archaeological testing was carried out as part of the assessment, with test trenches targeting anomalies identified during previous geophysical survey, in order to fully investigate the archaeological potential of the

Site. Testing did not reveal areas of archaeological significance. Much of the lands appeared to have been reworked for the purposes of laying out a flat lawn and playing fields associated with Holy Cross College.

Whilst no sites or areas of archaeological potential were noted during the course of the investigations, it remains possible that small or isolated features survive beneath the current ground level and outside of the footprint of the excavated test trenches. Ground disturbances associated with the construction of the proposed Project have the potential to directly and negatively impact on same. In the absence of mitigation, these potential negative impacts on unrecorded subsurface remains may range from moderate to significant. All topsoil stripping during construction of the proposed Project will be monitored by a suitably qualified archaeologist. If any features of archaeological potential are discovered during the course of the works, further archaeological mitigation will be required, such as preservation in-situ or by record. Any further mitigation will require approval from the National Monuments Service of the Department of Housing, Local Government and Heritage and Dublin City Council Archaeologist.

With the exception of the above-stated potential impacts, there will be no negative impacts on any specific site of archaeological or cultural heritage significance as a result of the proposed Project.

Following the implementation of the above-stated mitigation measures, there will be no residual impacts upon the archaeological or cultural heritage resource.

16 Microclimate – Daylight / Sunlight

A daylight and sunlight study has been undertaken in respect of the proposed Project, to analyse the impact of the proposed Project on the surrounding buildings.

When considering the impact of the proposed Project on the levels of skylight (diffuse daylight, excluding direct sun) availability in the existing surrounding environment, it can be stated that the proposed Project has a negligible impact on almost all of the surrounding dwellings. There is a single adjacent property that experiences a minor adverse impact. This is the existing cottage building adjacent to the proposed Block D2 at the east of the proposed Project. In relation to the impact on this cottage building, the following should be noted:

- At this location, the impact is only to skylight. Levels of direct sunlight will still fall within the guidelines.
- At the cottage building, 63% of points will experience a negligible impact to levels of VSC, while 15% will experience a minor adverse impact, and 22% a major negative impact.
- When a proposed massing is constructed within 25° to the horizontal of the adjacent existing building, the proposed building will have a negative impact on the existing. With the above in mind, and also considering the associated change in level between the cottage building and the proposed Project, it becomes apparent that the scale of any proposed massing adjacent to the cottage building would need to be very low rise to cause only a negligible impact to the levels of daylight and sunlight in the existing

apartment. Applying this rule, the resultant proposed Project at this location would need to be in the region of two (2) levels maximum to cause only a negligible impact.

- Additionally, it is to be noted that the other windows of the dwelling will experience no impact.

From the results of the assessment, it can be said that the proposed Project will have a negligible impact on the overall levels of sunlight in the surrounding environment. This includes the quantity of sunlight arriving at peoples' windows in both summer and winter, along with the quantity of sunlight available in surrounding existing amenity spaces.

In short, no significant negative impacts are predicted in relation to daylight / sunlight as a result of the proposed Project.

17 Microclimate – Wind

IES have undertaken an analysis to study the potential wind conditions that might affect the pedestrians within the proposed Project Site during the operational phase.

The analysis used the Lawson's Pedestrian Comfort and Safety criteria to test the suitability of the various locations on the Site for their purposes. The criteria look at activities in terms of 'sitting', 'standing', 'leisure walking' and 'business walking'. The first two categories are applied to amenity spaces, such as balconies, terraces, gardens and outdoor seating areas of hospitality venues. The latter criteria are applied to courtyard pathways, exercise tracks, and thoroughfare paths for accessing various buildings on the Site. These various criteria suggest that Site should be designed in such a way that wind is not allowed to reach speeds exceeding 4 m/s for sitting and 10 m/s for business walking, for more than 95% of the year.

The safety criteria test the possibility of local winds exceeding 15 m/s and 20 m/s, at which point they can start to affect peoples' ability to remain standing. The lower speed threshold applies to children and the infirm. The upper speed threshold is for the general population.

Dublin exhibits predominantly south-westerly and westerly winds. The median wind speed for Dublin is around 5 m/s, i.e. for 50% of the year wind speed exceeds 5 m/s. Therefore, from the outset the challenge, from a wind comfort point of view, is to reduce wind speeds in amenity spaces to one tenth of their frequency of occurrence over 5 m/s.

This assessment has found that, in general, the locations with most likely exceedance of sitting comfort criteria included:

1. Public open space between Blocks C2 and D1;
2. Public open space between Blocks B3 and D1;
3. Public open space between Blocks A1 and A2 / A3;

4. Public open space north of block A3;

5. Some balconies on D1; and

6. Some roof top amenity spaces for blocks A2, A3 and A4.

However, in all cases, whenever the wind speed at the above location exceeds 4 m/s, it is very likely to be less than 6 m/s, as they all show good compliance with the standing criterion. So any exceedance noted can be considered very marginal and subjective to individual preferences. These exceedances would not lead to an environment which is unpleasant to use. The environment on these locations will be typical of, and consistent with, buildings of a similar scale and design in the Dublin metropolitan area.

The proposed Project shows good compliance with the safety criteria for the normal and sensitive pedestrians.

In general, the predicted wind microclimate of the proposed Project can be considered quite suitable for the intended purposes. The design has incorporated features that will reduce the effect of wind, ensuring the use of public and private amenity spaces is comfortable and safe.

18 Traffic & Transportation

This Chapter assesses the potential impacts of the proposed Project in terms of traffic and transport.

The Site of the proposed Project is situated immediately east of Drumcondra Road and bounded by Clonliffe Road to the South and the Tolka River to the North. The site is less than 2 km from Dublin City Centre and there are several public transport options nearby that enable sustainable travel across the metropolitan area.

During the operational phase, the Site is proposed to be accessed by vehicles, cyclists and pedestrians from a widened entrance on Clonliffe Road, at the junction with Jones's Road and through the opening up of an unused access point on Drumcondra Road Lower at the junction with Hollybank Road. An additional cyclist and pedestrian access is proposed through an existing access point on Holy Cross Avenue. Access from the Clonliffe Road entrance will also facilitate vehicular access to future proposed GAA pitches and clubhouse to the north of the site and to a permitted hotel development on Clonliffe Road – these elements are part of the wider Masterplan for the Holy Cross College lands and not included under the scope of the application at hand.

The demolition and construction works will be short-term in nature (approximately 36 months). The traffic generated on Site, both as a result of construction activity and staff required on Site, will vary during this time, depending on the construction stage and activity, though staff will generally be encouraged to travel to Site by sustainable means.

Only minimum essential Site staff parking will be provided. In parallel with this, parking restrictions and management measures on adjacent streets / residential areas will be reviewed and implemented as necessary,

in agreement with the local residents and DCC, to avoid any Site parking overspill issues. In addition, the Contractor will be required to promote travel by sustainable modes of transport.

Access routes for construction vehicles will be via Clonliffe Road (Phases 1 & 3) and Drumcondra Road Lower (Phase 2). The working hours on site will be 07:00 – 19:00 Monday to Friday and 08:00 – 14:00 on Saturdays, meaning the majority of staff will arrive before busiest morning peak and depart after evening peak.

Heavy Construction Vehicles will enter and exit the Site via the M50, a designated route for HGVs within the DCC HGV Strategy. The estimated numbers of HGVs during the construction activity is approximately 49,800 and the number of miscellaneous cars / vans is 37,500. Based on an estimated overall construction programme duration of 36 months, equating to 750 working days, an average of 116 daily two-way trips are forecast to serve the Site over the entire construction period, of which 66 will be HGV and 50 will be miscellaneous cars / vans. The peak construction period will occur during the dig excavation and construction of podium structures, with a maximum daily trips during the concrete pour days.

On average, this will increase the absolute number of HGVs along Drumcondra Road Lower by 16%, though the percentage of HGVs as a proportion of total vehicles on this route will increase by less than 0.81%. The increase in overall traffic as result of the additional HGVs along these links will be less than 1%. This will have an imperceptible effect, based on criteria outlined in the EPA guidelines. The HGV traffic will be spread throughout the day, with commuting peaks avoided where possible.

In summary, the combined additional light and heavy construction traffic is likely to have a negative but slight impact on the local road network during the construction phase. The impact will be short-term in nature and the represents the worst case scenario.

The impact of the proposed Project on the local road network during the operational phase has been assessed by modelling the projected traffic flows with and without the proposed Project in place. The proposed Project will likely open in phases. However, for the purposes of this assessment an opening year of 2025 has been assumed.

Based on the traffic surveys carried out for the purposes of the assessment, the peak hours of 8:00 – 9:00 and 17:00 – 18:00 have been chosen for assessment as they represent the busiest case in terms of background traffic conditions. These peak hours have been assessed for the following forecast years in line with TII Traffic and Transport Assessment Guidelines (2014):

- Opening Year: 2025 (With / Without Development); and
- Opening Year +15 Year Forecast: 2040 (With / Without Development).

In line with best practice, the TRICS database has been utilised to obtain people trip rates for the proposed Project, comprising the residential units, crèche and retail space. Additionally, this assessment considers the

trip generation potential of the wider Masterplan site. This means that the trip generation of the GAA pitches / clubhouse, and the 200 bedroom hotel have also been included, even though they are not the subject of this application. This inclusion allows for a more robust assessment of the impact of the proposed Project.

The contribution of the proposed Project to overall traffic is low in both peaks, with the highest contribution at 10.2% along Jones's Road, south of the proposed Project, in the evening peak. Based on the criteria outlined, this will have a moderate effect on this link. It is noted that Jones's Road is a minor road with a low level of traffic. All other links show an effect falling into either the imperceptible, not significant or slight categories. The contribution on most links is less than 5% of total hourly traffic volumes in both peak periods, which will have a 'not significant' impact on the local road network.

There are a number of measures which have been included from the outset in the design of the proposed Project to mitigate potential negative impacts on the local transport network arising from additional traffic generated by the Project. The most significant measure is the parking ratio which has been applied with just 0.3 car parking spaces per residential unit, compared with 1.3 bikes spaces per unit.

The internal network has been designed to limit car speeds and promote the priority of walking and cycling. It will not be possible for car traffic to cut through the proposed Project from Drumcondra Road to Clonliffe Road, to ensure internal streets are as calm as possible.

The main mitigation measures during the operational phase will be to implement the Mobility Management Plan (MMP) submitted under separate cover in this application, which is intended to reduce levels of private car use by encouraging people to walk, cycle, use public transport, and car share. The MMP includes measures such as the appointment of a Mobility Manager, a Welcome Travel Pack for residents and a Car Parking Strategy.

19 Material Assets – Waste

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

During the construction phase, typical construction and demolition (C&D) waste materials will be generated, which will be source segregated on-Site into appropriate skips / containers, where practical, and removed from Site by suitably permitted waste contractors to authorised waste facilities. Where possible, materials will be reused on-Site to minimise raw material consumption. Source segregation of waste materials will improve the re-use opportunities of recyclable materials off-site.

Excavation of the basements and construction of new foundations along with the installation of underground services will require the excavation of c. 100,000 m³ of material. It is anticipated that 30,000 m³ of this excavated material will be able to be re-used on-Site. The remaining balance of excavated materials (70,000 m³), which is either unsuitable for use as fill, or not required for use as fill, will be exported off-site. Excavated material which is to be taken off-site will be taken for re-use, recovery, recycling and / or disposal.

A carefully planned approach to waste management and adherence to the site-specific Construction and Demolition Waste Management Plan (Appendix 19.1) during the construction phase will ensure that the effect on the environment will be short-term, neutral and imperceptible.

During the operation phase, waste will be generated from the residents as well as the commercial tenants. In the design of the proposed Project, dedicated communal waste storage areas have been allocated throughout the development for residents. The residential waste storage areas have been appropriately sized to accommodate the estimated waste arisings in both apartments and shared residential areas. The waste storage areas have been allocated to ensure a convenient and efficient management strategy with source segregation a priority. Waste will be collected from the designated waste collection areas by permitted waste contractors and removed off-site for re-use, recycling, recovery and / or disposal.

An Operational Waste Management Plan (Appendix 19.2) has been prepared, which provides a strategy for segregation at source, storage and collection of wastes generated within the proposed Project during the operational phase. The Plan complies with all legal requirements, waste policies and best practice guidelines and demonstrates that the required storage areas have been incorporated into the design of the proposed Project.

Provided the mitigation measures outlined in Chapter 19 are implemented and a high rate of re-use, recycling and recovery is achieved, the predicted effect of the operational phase on the environment will be long-term, neutral and imperceptible.

20 Material Assets – Services

This Chapter was prepared by Brady Shipman Martin and assess the potential impacts of the proposed Project on ownership, access and services / utilities infrastructure.

In terms of ownership, the current owner of the lands (the Archdiocese) has entered into an agreement with Cumann Lúthchleas Gael / the Gaelic Athletic Association (GAA) to acquire these lands, who have subsequently entered into an agreement to onward sell these to Hines Real Estate Ireland through the Applicant. The Archdiocese will retain the Archbishop's Residence and surrounding lands and lands in the south-west corner of the Holy Cross College property. The Red House and curtilage is owned by Páirc an Chrócaigh Teoranta Cuideachta Faoi Theorainn Ráthaíochta / GAA, as well as the land at the south eastern corner of the Holy Cross

College lands which has been subject to an approval by An Bord Pleanála for a 2 to 7 storey 200 room hotel. The land parcel to the north of the Holy Cross College lands, former grass playing pitches, are operated by the GAA and are due to be formally acquired by the GAA from the Archdiocese.

The proposed works will be carried out on lands under the ownership of the Applicant and on lands within the wider site with the approval of the other landowners. Works on lands identified under the control of Dublin City Council will also be carried out in consultation and agreement with them. As such, there will be no compulsory purchase of private property under the scope of a Compulsory Purchase Order (CPO). The proposed SHD Project is a BTR scheme and, as such, will remain owned and operated by an institutional entity for a minimum period of not less than 15 years and that similarly no individual residential units are sold or rented separately for that period; as required by Special Planning Policy Requirement 7 of the Sustainable Urban Housing: Design Standards for New Apartments 2020. It follows that no significant impacts in relation to land ownership are anticipated as a result of the proposed Project.

The proposed Project is expected to improve access to the Site (which is closed to the public at present), and to improve permeability across the wider area for cyclists and pedestrians. The internal road network and public realm of the proposed Project has been designed to tie-in with permitted and proposed elements of the wider Masterplan site – as well as a planned future bridge traversing the River Tolka. Overall, the proposed Project is predicted to have a positive, moderate, long-term impact on access.

The Project Site is currently served by gas, electricity and telecommunications infrastructure, with broadband infrastructure situated at the periphery of the Site. In order to facilitate the proposed Project; removals, upgrades and diversions of the various existing utilities infrastructure will be required during the construction phase. All such works will be carried out in consultation with the relevant service provider, and in a manner which avoids / minimises service interruptions to the local community. No significant impacts on services / utilities infrastructure are anticipated as a result of the proposed Project.

Notwithstanding the absence of significant impacts, a suite of mitigation measures have been set out in relation to utilities infrastructure, in order to avoid / minimise associated impacts insofar as possible.

21 Interactions

As a requirement of the Planning Regulations and the EPA Draft Environmental Impact Assessment Report Guidelines (2017), not only are the individual significant impacts required to be considered when assessing the impact of a proposed Project on the environment, but so must the inter-relationships between these factors be identified and assessed. This Chapter addresses these interactions in respect of the proposed Project.

Interactions are addressed, where relevant, in the corresponding specialist Chapters of the Environmental Impact Assessment Report, as per the EPA Draft Environmental Impact Assessment Report Guidelines (2017). As appropriate, corresponding mitigation measures have been prescribed to avoid / minimise impacts.

The key interactions which have been identified and addressed in this Environmental Impact Assessment Report are summarised in Table 21.1, below.

Table 21.1: Interactions Matrix

Source \ Receptor	Population & Human Health	Biodiversity	Land, Soils, Geology & Hydrogeology	Hydrology	Air Quality & Climate	Noise & Vibration	Landscape & Visual	Architectural Heritage	Archaeology	Microclimate –Daylight / Sunlight	Microclimate – Wind	Traffic & Transportation	Material Assets – Waste	Material Assets – Services
Population & Human Health							✓							
Biodiversity														
Land, Soils, Geology & Hydrogeology		✓		✓	✓								✓	
Hydrology		✓	✓											
Air Quality & Climate	✓			✓										
Noise & Vibration	✓													
Landscape & Visual	✓	✓						✓						
Architectural Heritage														
Archaeology														
Microclimate – Daylight / Sunlight														
Microclimate – Wind														
Traffic & Transportation	✓				✓	✓								
Material Assets – Waste	✓		✓									✓		
Material Assets – Services														

22 Cumulative Impacts

The EU Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions (1999) define cumulative impacts as *"Impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project"* (p. iii). The EPA Draft Environmental Impact Assessment Report Guidelines (2017; Section 3, p. 54) state that:

> *"While a single activity may itself result in a minor impact, it may, when combined with other impacts (minor or significant), result in a cumulative impact that is collectively significant. For example, effects on traffic due to an individual industrial project may be acceptable however it may be necessary to assess the cumulative impacts taking account of traffic generated by other permitted or planned projects. It can also be prudent to also have regard to the likely future environmental loadings arising from the development of zoned lands in the immediate environs of the proposed project."*

The potential for cumulative impacts to occur as a result of the proposed Project in combination with other proposed plans and Projects in the area has been assessed in the various specialist Chapters of this Environmental Impact Assessment Report. This Chapter provides an account of the plans and projects that have been scoped in to the cumulative impact assessment.

Considering the nature and scale of the proposed Project, and its likely impacts as assessed in this Environmental Impact Assessment Report, a search for plans and projects that may have the potential to result in cumulative impacts was carried out, with the following principal sources consulted:

- Dublin City Council Planning Portal;
- Dublin City Development Plan (2016 – 2022);
- Masterplan for Holy Cross College lands; and
- An Bord Pleanála website.

Following a review of the above sources, the following projects were identified:

- Hotel (ABP Ref.: PL29N.308193);
- GAA pitches and clubhouse (not formally proposed); and
- Mixed use development on Drumcondra Road (DCC Ref. 2187/21).

The hotel development (ABP Ref.: PL29N.308193) was granted planning permission with revised conditions following an appeal of a previous grant decision, on the 8th of April 2021. The permitted hotel development is part of the wider Masterplan for the Holy Cross College lands, and has been considered by the Environmental Impact Assessment specialists in their respective cumulative impact assessments.

The planned GAA pitches and clubhouse are also part of the wider Masterplan proposal for the Holy Cross College lands. However, this development has not been formally proposed to the Competent Authority to date. As such, there are no finalised planning documents available upon which to base an assessment of cumulative impacts. Notwithstanding this fact, information has been made available to the Environmental Impact Assessment specialists in relation to this development, which has been assessed (in terms of the potential for in-combination effects) insofar as possible in the various specialist Chapters.

The mixed use development on Drumcondra Road (DCC Ref. 2187/21) was refused planning permission by Dublin City Council on the 1st of April 2021, and was therefore discounted form further consideration in the cumulative impact assessment.

Due to the City Centre location and the planning objectives / zoning for the area, development is continually occurring in the area. However, no major projects have been identified that would have the potential to result in significant negative cumulative impacts in combination with the proposed Project.

23 Mitigation & Monitoring

This Chapter of the EIAR lists the mitigation measures prescribed in all of the preceding Chapters of the Environmental Impact Assessment Report – the measures required to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment – as well as all monitoring measures / programmes prescribed, for both the construction and operational phases.

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