Planning Statement & Response to An Bord Pleanála's Opinion

Proposed Strategic Housing Development at Jacob's Island, Ballinure, Mahon, Cork

Client: Hibernia Star Limited

June 2022

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Introduction & Context

Jacob's Island has a long planning history, which has its genesis in 1997 when the development of Jacob's Island was subject to a competitive tender. At the time Jacob's Island was in the ownership of Cork City Council, who identified it as a strategic development opportunity. 23 tenders were submitted from development teams and the scheme proposed by McCarthy Developments Limited & O'Callaghan Properties was selected as the winning tender. This design team were led by Skidmore, Owings and Merrill and the original design concept as outlined in the Design Statement was for mixed use development on Jacob's Island.

Both McCarthy Developments and O'Callaghan Properties lodged applications for the mixed use development of Jacob's Island in accordance with the Masterplan and to date approximately 340 residential homes have been constructed on Jacob's Island. All the physical infrastructure and amenities required to service the entire Masterplan have been provided and these include, work to increase the carrying capacity of the N40, through the additions of extras lanes from the Bloomfield Interchange to Mahon junction and the merging lane to and from the tunnel, the upgrading of the four off ramps from single lane to dual lane, expanding the bridge from 2 to 4 lanes, the upgrade of water and waste water network and the development of the 18 acre Joe McHugh Public Park.

Figure 1.1 Aerial View of Jacob's Island

The subject lands were originally in the ownership of O'Callaghan Properties and were recently purchased by the applicants. Two planning permissions have been granted on the site for mixed use development. In December 2000, Cork City Council granted permission for a development that included a 9290 m^2 Trade Centre and 150 room hotel, with associated bar, restaurants, fitness facilities, 841 parking spaces and associated roads, T.P. 2461 1/00 refers.

The T.P. 24611/00 permission was not implemented and in 2007 Riga Development Limited applied for permission for a mixed use development including 325 no. apartments, a 184 no. bedroom hotel, convenience store, café, medical unit, dentist, crèche building, in 7 no. blocks ranging in height from 2 to 21 storeys, T.P. 07/32686 refers. Cork City Council decided to grant permission for the proposed development and this decision was appealed to the Board by first and third parties, PL28.232275 refers. In 2008 An Bord Pleanála decided to grant permission for the proposed mixed use development.

The applicants wish to deliver a mixed use development originally envisaged for the lands as far back as 2000 and which has been permitted twice in the intervening period. They have updated the mixed use vision for the site and developed a new Masterplan, which includes the concurrent application for a 165 bedroom hotel and 10,000 m^2 of offices (Cork City Council 22/40809) on the lands to the north. The new Masterplan for this portion of the site in conjunction with the recently permitted Strategic Housing Development of 437 no residential units (ABP-301991-18 amended by ABP-310378-21) on the adjacent lands to the east, will see the realisation of the overall Masterplan first developed for Jacob's Island over 20 years ago. Jacob's Island is unique when compared to other strategic development areas, as all the physical infrastructure and the 18 acre Joe McHugh public park required to cater for the overall development has been in place for some time. For various reasons there has been a lag on the development of the office, hotel and additional residential units required to make Jacob's Island a successful mixed use community.

The proposed development has also been altered to respond to the Board's Pre-Consultation Opinion, ABP-311818-21. The design evolution and key changes implemented throughout the process are detailed in the Design Statement prepared by O'Mahony Pike Architects and Chapter 3 of the accompanying Environmental Impact Assessment Report (EIAR).

Circular PL 13/2021 provides details on the transitional arrangements in relation to the expiry of the SHD process and their replacement with a new Large-scale Residential Development application process and specifies that

> *"SHD prospective applicants/ developers who have formally commenced consultations with the Board and are awaiting an SHD opinion on the commencement of the Act (17 December 2021) will have 16 weeks to submit an SHD application to the Board from the date of receipt of the SHD opinion."*

The SHD Opinion (ABP-311818-21) was received from the Board on March 14th, 2022, and therefore the applicants have until July 4th, 2022, to submit a SHD application.

Site Location and Context

The proposed development site is c. 3.95 ha in area and located on Jacobs Island which is situated in the South Eastern suburbs of Cork City. The site is bound to the north by the N40, to the south and west by an internal access road and to the east by the Sanctuary, an existing residential apartment scheme. The Sanctuary comprises 4 no. blocks ranging in height from 6 to 8 no. storeys and the terminus for the 215 bus service is located at its entrance.

The lands to the south of Jacob's Island, a peninsula on Lough Mahon, principally comprise two and three storey dwellings units and public open space known as the Joe McHugh Public Park. The Mahon Point District Centre is located directly to the north of the N40 and includes Mahon Point Shopping Centre, Mahon Retail Park and City Gate Business park.

Mahon is one of Cork's most sustainable locations, benefiting from strong existing and proposed pedestrian and cycle infrastructure, which includes direct access onto both adjacent greenways. Many of these linkages are entirely separate from the road network and provide pedestrian access to Joe McHugh Park to the south and Mahon to the north. These existing links offer current and future residents convenient and safe pedestrian access to employment, retail and amenity opportunities in and beyond Mahon. The existing pedestrian and cycling route at Joe McHugh Park (which were developed in conjunction with the existing residential development) continues along the western edge of Lough Mahon and links the site with Blackrock and onto the City Centre. This route is identified as part of the River Lee/Lough Mahon Waterfront Greenway in the Cork Metropolitan Area Cycle Network Plan. The Plan included a Quality of Service (QoS) assessment of the existing cycling infrastructure to establish how the facilities meet the needs of cyclists. The Plan's assessment of the River Lee/Lough Mahon Waterfront Greenway concluded that ''There is currently a two-way shared pedestrian/cycle path along this route with a QoS of A+".

As highlighted in Figure 1.2 below the Passage Greenway, which forms part of the Lee to Sea Network, is located to the west of the application site providing excellent connectivity to the City Centre, the Marina (including the newly constructed Marina Park) and to the west towards Rochestown and Passage West.

Jacob's Island is currently well serviced by public transport and the Cork Metropolitan Area Transport Strategy (CMATS) makes provision for improved BusConnects routes in the area, and in the longer term for provision of a high frequency light rail network that will further enhance the connectivity of the subject lands to the wider area.

Figure 1.2 Site Context & Connectivity

Figure 1.3 Aerial View of Jacob's Island in Context of Cork Docklands & Greenways © Dennis Horgan

Mahon is one of Cork's most sustainable and successful development locations and is earmarked for considerable growth and investment in the coming years which will further enhance its status and attractiveness. As highlighted on the Infographic below (based on the results of the 2016 Census) Jacob's Island attracts a young sustainable population, the majority of which live in apartments and who spend shorter times commuting to work than the national average. It is considered that the proposed development will help to reinforce these trends and lead to the development of a mixed use residential community within easy walking and cycling distance to all the required services and amenities.

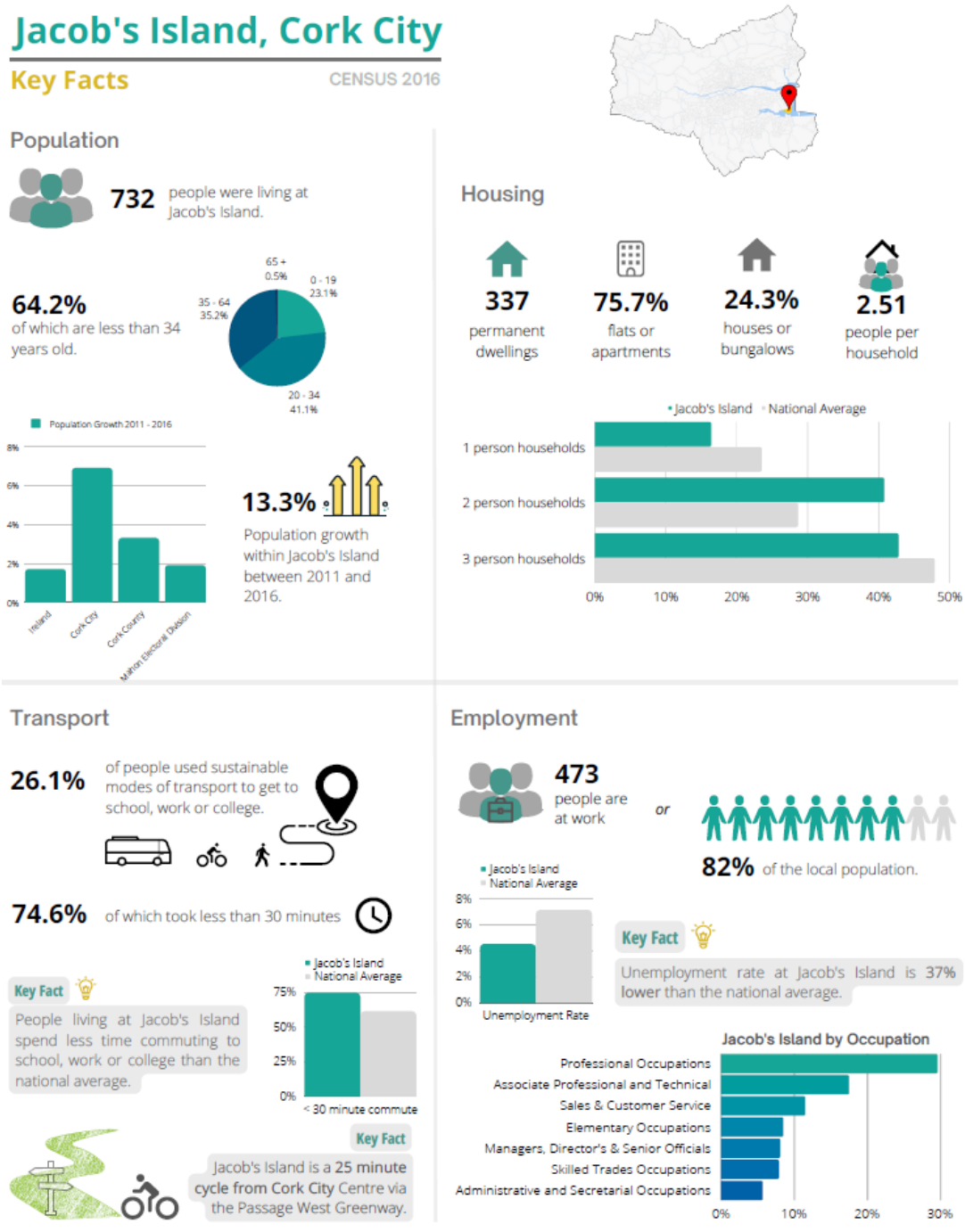


Figure 1.4 Infographic of Jacob's Island's Key Statistic (2016 Census

Planning Policy Context

The *Sustainable Urban Housing: Design Standards for New Apartments: Guidelines for Planning Authorities: 2020* identify 3 of the types of location in cities and towns that may be suitable for apartment development as;

- *Central and / or Accessible Locations;*
- *Intermediate Urban locations; and*
- *Peripheral Urban Locations*

Section 2.4 of the Guidelines define 'Central and / or Accessible Locations' as

> *Sites within walking distance (i.e. up to 15 minutes or 1,000-1,500m), of principal city centres, or significant employment locations, that may include hospitals and third-level institutions;*
>
> *Sites within reasonable walking distance (i.e. up to 10 minutes or 800-1,000m) to/from high capacity urban public transport stops (such as DART or Luas); and*
>
> *Sites within easy walking distance (i.e. up to 5 minutes or 400-500m) to/ from high frequency (i.e. min 10 minute peak hour frequency) urban bus services.*

These definitions are meant to be interpreted as typical rather than 'exhaustive' and the Guidelines indicate that the full range of locations 'will require local assessment that further considers these and other relevant planning factors'.

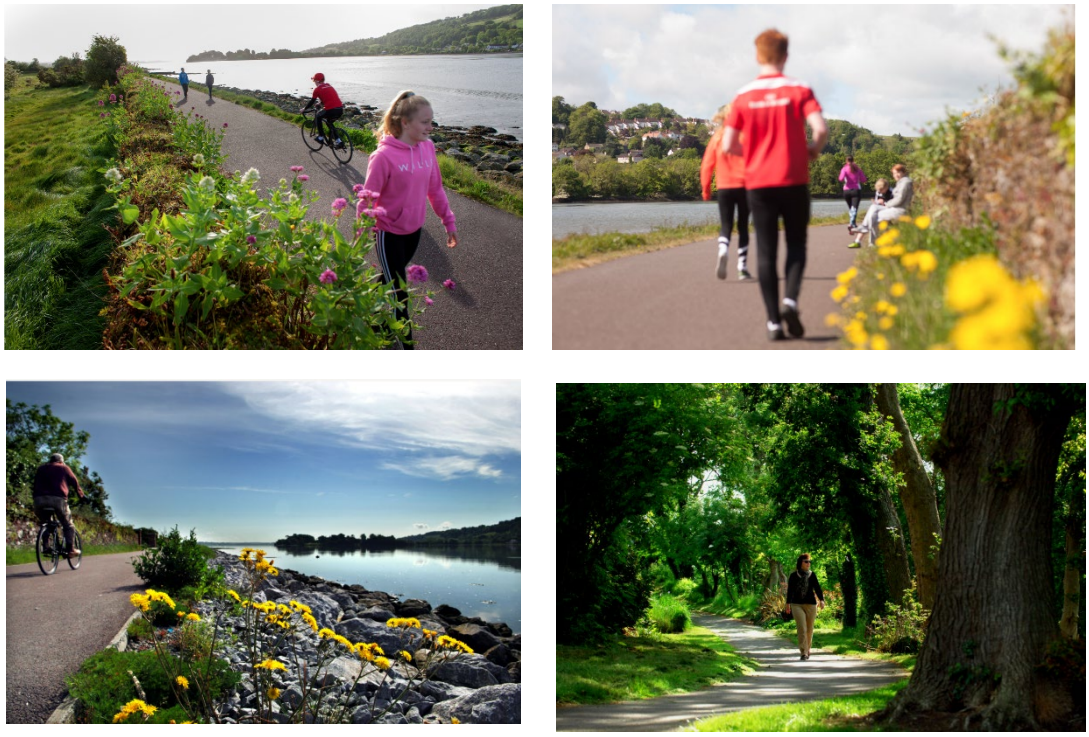
We consider that the proposed development site can be defined as a Central and Accessible Urban Location, that is suitable for large scale, higher density development as it is

> *within walking distance (i.e. up to 15 minutes or 1,000-1,500m) of a significant employment location, being Mahon;*
>
> *within easy walking distance of high frequency urban bus services, being the 202 and 215/215A*

As demonstrated by the planning history and compliance with the definitions contained in the *Sustainable Urban Housing: Design Standards for New Apartments: Guidelines for Planning Authorities: 2020, t*he subject lands are excellently located in a sustainable and well-connected location that is eminently suitable for compact and high density urban development.

As illustrated at Figure 1.2, there is an existing Greenway to the west and south of Jacob's Island which form part of the Lee to Sea network. The Lee to Sea cycle network incorporates the Lee Fields, city quays, the Marina and the Passage West railway lines (also referred to as the Passage Greenway). The proposed development will promote sustainable modes of travel including walking and cycling by facilitating the anticipated desire lines of existing and future residents within the landscaping strategy to this existing network. According to CMATS ''*Greenway networks comprise of traffic free or low-trafficked routes and typically comprise of re-purposed derelict railway lines, routes through parks or alongside rivers''*.

Figure 1.5 Images of the Existing Green Infrastructure



The Inspector in assessing the principle of development for the 413 no. unit permitted SHD scheme (ABP-301991-18) to the east was of the opinion that "*The proposal would not represent a car dependent form of development, given the proximity of public transport and local services, retail and employment. The planning authority and the Board have previously granted permission for residential development on this site. The development would not be contrary to objectives of the National Planning Framework in terms of making stronger urban places and planning for urban growth. In these circumstances, the principle of the proposed development is acceptable.*"

Draft Cork City Development Plan 2022-2028

The Draft Cork City Development Plan 2022 – 2028 will come into effect on August 8th, 2022 and will be the relevant local planning policy document pertaining to the subject lands at the time of determining the application. The Core Strategy of the Draft Cork City Development Plan 2022 – 2028, identifies Mahon as an area for growth consolidation and enhancement, with the subject lands zoned ZO5 – Mixed Use Development as outlined in Figure 1.3 below.

Figure 1.6 Site in Context of Draft Cork City Development Plan 2022 – 2028 Zoning

The ZO 5 Mixed Use Development Objective as defined in the Draft City Plan is as below

> ***Zoning Objective 5:*** *To provide and promote a mix of residential and other uses to ensure the creation of a vibrant and sustainable urban area.*

ZO 5.2 of the Draft Plan indicates that

> *The range of permissible uses within this zone includes residential, general offices, local services, conference centre, education, hospital, hotel, commercial leisure, cultural uses, civic institutions, childcare services, local medical facilities, business and technology / research uses and community and civic uses. The range and scale of uses proposed must be commensurate to the scale of the zone.*

Specific Objective 10.86 of the Draft Plan relates specifically to Jacob's Island and sets out to:

> *'To provide for mixed use development on Jacob's Island to accommodate the mix of uses set out under the ZO 5 Mixed Use Development Zoning Objective to include an hotel and up to 15,000 square metres of business and technology office use.'*

Proposed Material Alteration 1.307 to the Draft Plan proposes to amend Objective 10.86 as follows

> *'To provide for mixed use development on Jacob's Island to accommodate the mix of uses set out under the ZO 5 Mixed Use Development Zoning Objective to include an hotel and up to ~~15,000~~ 20,000 square metres of business and technology office use.*

The proposed residential, creche and office uses are compatible with the proposed ZO 5 Objective for the lands and with a new floor area of 2,934 m^2 are significantly below both the proposed office threshold of 15,000m^2 and the Proposed Amended threshold of 20,000 m^2.

To avoid repetition and as a standalone Statement of Consistency has been prepared by HW Planning and is enclosed as part of this application, which deals with compliance with national, regional and local policies, this statement will not elaborate further on policy matters.

Description of Development

The development will consist of the construction of 489 no. apartments, creche and offices in 5 no. apartment blocks ranging in height from part-1 to part-8 no. storeys over lower ground and semi-basement podium levels. The proposed development is located adjacent to a Strategic Housing Development permitted by ABP-301991-18 and amended by ABP-310378-21 containing 6 no. blocks (Blocks 3, 4, 7, 8, 9 & 10) with existing Blocks 1, 2, 5 & 6 constructed on foot of T.P. 24609/00.

The development will contain 1 no. studio, 161 no. 1 bedroom apartments and 327 no. 2 bedroom apartments.

Block 11 is part-3 to part-6 no. storeys over semi-basement podium and lower ground levels and will contain 101 no. apartments.

Block 12 is part-1 to part-4 no. storeys over undercroft car parking and lower ground level office building (4,112 sq m) comprising 2,934 sq m of office floor area.

Block 13 is part-2 to part-8 no. storeys over lower ground levels and will contain a crèche over 2 no. levels (381 sq m) and 39 no. apartments.

Block 14 is part-3 to part-6 no. storeys over lower ground level and contains 130 no. apartments.

Block 15 is part-3 to part-6 no. storeys over semi-basement, podium and lower ground level and contains 219 no. apartments and ancillary resident amenity spaces (576 sq m).

Blocks 12 and 13 will contain ancillary commercial areas including a creche (381 sq m) and offices (4,112 sq m). The development will also contain supporting internal resident amenity spaces (576 sq m) and external communal amenity spaces.

The proposed development also provides for hard and soft landscaping, boundary treatments, public realm works, car parking, bicycle parking, bin stores, signage, lighting, PV panels, sprinkler and water tank, substations, plant rooms and all ancillary site development works above and below ground.

The key site statistics pertaining to the subject lands are provided below:

Item	Figure(s)
Site Area	3.95 ha
Developable Area	3.55 ha
No. of Residential Units	489
Net Density*	138 Units Per Hectare
Plot Ratio (Net)	1:1.3
Site Coverage*	42%
Public Open Space*	4,350m^2 (12.3%)
Housing Mix	1 no. studio (0.2%) 161 one beds (32.9%) 327 no. two beds (66.9%)
Creche (Gross)	381 m^2
Office	4,112 m^2 (Gross) 2,934 m^2 (Net)
Car Parking	327
Bicycle Parking	1,145

*Based on Net Developable Area

Pre-Planning Consultation

A pre-planning consultation (S 247) with Cork City Council took place on the 29th July 2021 where the Design Team presented an initial proposal for the subject lands and provided a design rationale to respond to the site specific characteristics.

A tripartite consultation meeting took place on March 4th, 2022 between An Bord Pleanála, Cork City Council and the Design Team. An Bord Pleanála subsequently issued a Notice of Pre-Application Consultation Opinion (ABP-311818-21) on March 14th, 2022. Section 3.0 of this report provides a comprehensive response to the items raised by An Bord Pleanála in their opinion.

Planning History

The full planning history of Jacob's Island is outlined in Section 1 and 11 of the Design Statement prepared by O'Mahony Pike Architects. The most recent applications relate to the lands to the east and are summarised in the Table 1.1 below.

Reg. Ref.	Development	Decision
ABP PL28.301991	Construction of 413 no. apartments, neighbourhood centre, creche, road improvement works including upgrades to the Mahon Link Road (R852) to the North of the N40 interchange to incorporate a dedicated bus lane and all site development works.	Granted subject to conditions on 3rd October 2018
ABP-310378-21	Amendments to previously permitted strategic housing development reference ABP-301991-18 to increase the number of units from 413 no. units to 437 no. units and amendments to Blocks 4, 7, 8, 9 and 10.	Granted subject to conditions on February 15th, 2022
CCC Ref.: 22/40809	Construction of an office and hotel development in 2 no. buildings. The hotel will contain 165 no. bedrooms, meeting rooms, bar/restaurant, café, and back of house facilities in a part-1 to part-10 no. storey over basement building. The office building (10,632 sq m GFA) will provide 8,361 sq m net office floor area and ancillary staff facilities over part-4 to part-7 no. storeys.	RFI sought on March 15th, 2022.

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Response to An Bord Pleanála's Opinion

This section of the report outlines in detail the applicants' responses to the matters raised in the Board's Pre-Application Consultation Opinion (ABP-311818-21), received on March 14th, 2022. The Board considered that the following issues need to be addressed in the documents submitted that could result in them constituting a reasonable basis for an application for strategic housing development.

Development Strategy

Further consideration and/or justification of the documents as they relate to the design approach of the proposed development and the need for a high-quality, well-designed development which integrated effectively with those permitted and proposed developments in the immediate vicinity. The further consideration/ justification should address the matters of the architectural approach to Blocks 11- 15 and the configuration and interaction of the ground floor layouts and the public realm, with particular emphasis on the movement and flow of pedestrians/cyclists within the carparking strategy and open space design.

Particular regard should be had 12 criteria set out in the Urban Design Manual which accompanies the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (May 2009) and the requirement for good design and the inclusion of a sense of place. Further consideration of these issues may require an amendment to the documents and/or design proposals submitted.

The Design Statement prepared by O'Mahony Pike Architects, and which accompanies the application provides a detailed justification for the design approach of the proposed development. Chapter 3 of the EIAR outlines the alternatives considered and the rationale for the chosen layout and design. Changes to the proposed design and layout in response to the Board's Opinion, Cork City Council's submission at pre-consultation stage and the advice provided at the tri-partite meeting have resulted in a reduction in the proposed development from the 498 no. units presented at pre-consultation stage to 489 no. units, now proposed.

The reduction in the number of units results in a consequent decrease in the density of the scheme from 147.8 units/hectare to 137.7 units/hectare. The public open space has also been slightly increased and car parking is now predominantly under podium or undercroft (67%), with provision being made for car club spaces. The communal open space of Block 15 has been relocated to the north-west of the block to provide active frontage along the pedestrian desire line that runs through the site. Alongside this, the relocated amenity space, counterbalances and acts in conjunction with the proposed hotel plaza area (Cork City Council Planning Application 22/40809) to animate the main access point to the scheme. A series of character areas have been defined across the

scheme, all linked by the central 'Park' area. These areas range is scale and function, from the 'N40 South Link Road' area to 'Local Streets' area, with a variety of public and communal open spaces uses to define their character.

We consider that the Design Statement demonstrates that the proposed development is a high-quality, well-designed residential scheme. More specifically Section 5 of the Design Statement demonstrates that the proposed development will integrate successfully with the existing 4 storey duplex units of The Haven (page 40) and the permitted apartment Blocks identified as Blocks 7, 8 and 10 that form part of the granted ABP-301991-18 SHD scheme (amended by ABP-310378-21) at pages 41-43. We consider that this demonstrates conclusively that the proposed development integrates effectively with those permitted and proposed developments in the immediate vicinity.

As suggested by the Board's Opinion further consideration has been given to the architectural approach to Blocks 11- 15 and to the configuration and interaction of the ground floor layouts with the public realm. Section 7 of the Design Statement (pages 74-77) outlines the 4 typical interactions ground floor apartments have with the public realm and details the specific treatments developed to ensure the residential amenity of these units and their private open space is protected.

The site's excellent connectivity with access to one of Metropolitan Cork's best cycling and pedestrian links to employment opportunities, local amenities and to the City Centre will encourage future residents to use sustainable means of travel and the Design Statement recognises that the movement and flow of pedestrians/cyclists will be critical.

Section 6 of the Design Statement (pages 50-53) details how pedestrians/cyclists will circulate through the proposed development, within the carparking strategy and open space design. Facilitating the convenient, efficient and safe circulation through the proposed development and onto the Greenway has been a fundamental design principle. The Design Statement (page 50) and the Landscape Design Report (page 10 & 11) both highlight the benefit of the existing Lakelands Lane as a pedestrian and cycle link from the proposed development to the existing Greenway. During discussion between the Design Team and the Parks & Recreation Department of Cork City Council in advance of the submission of this application, it as agreed that the applicants design team would propose some upgrades of the existing Lakelands Lane. The improvements discussed were the removal of some vegetation resulting in the widening and resurfacing of the lane. As Lakelands Lane is outside the ownership of the applicants, they are unable to propose the works as part of this application but would welcome the imposition of a condition requiring the payment of a special contribution of €75,000 as suggested by the Senior Parks and Landscape Officer. We understand that this development contribution maybe a recommendation of the Cork City Chief Executive's Report to the Board.

Figure 1.7 Cycle Connectivity (Extract pg. 50 Design Statement)

Figure 1.8 Existing & Suggestion Improvements to Lakelands Lane (Extract pg. 50 Design Statement)

Existing lane and connection to Joe McHugh Park (1.)
Improvements to the lane are currently being discussed with Cork City Council, outside of the subject application, as illustrated by the image to the right.

Section 10 of the Design Statement demonstrates that the proposed development has full regard to the 12 criteria set out in the Urban Design Manual which accompanies the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (May 2009).

The Board's Opinion also requested that the following specific information should be submitted with the SHD application

1. Carparking Rationale

A rationale for the proposed car parking provision should be prepared, to include details of local census, mobility split, car parking management, car share schemes and a mobility management plan

The applicants recognise that the proposed parking provision needs to find an appropriate balance between providing adequate parking to ensure no over spill parking in the existing residential areas and not to over provide, so as to discourage travel by more sustainable modes. The Board will note that the parking policy and standards of Cork City Council are currently in transition with the new Draft City Development Plan 2022-2028 coming into effect on August, 8th, 2022 replacing the current Cork City Development Plan 2015-2021. The overall parking provision for the proposed development is compliant with the parking standards contained in both plans.

The parking provision and assessment of its impact is based on the Traffic Impact Assessment (TTA) (Appendix 5 of EIAR) and Mobility Management Plan (MMP) prepared by SWECO. Section 3 of the TTA provides base traffic flows established by traffic surveys at locations agreed with Cork City Council and more local traffic information garnered from traffic counters that were placed at two locations on Jacobs Island in two different period of time, from the 3rd September to the 30th September 2021 and from the 1st February 2022 to the 21st February 2022. An additional traffic survey was undertaken between 25th April and 15th May 2022 in order to obtain a traffic survey with no effects of covid restrictions. This allows for the development of an accurate and recent modal spilt as outlined in Section 3.5 of the TTA.

Parking Provision

In accordance with the current Cork City Development Plan the subject site is located within 'Car Parking Zone 3' where Table 16.8of the 2015 City Development Plan sets out a maximum car parking standard as:

- 1/2 bedroom units – 1 space.
- 3+ bedroom units – 2 spaces.
- Creche – 1 per 6 students.
- Offices Enterprise and Employment - 1 space per 50m^2 of gross floor area

The subject site is located within 'Car Parking Zone 2' where Table 11.13 of the Draft CDP 2022 sets out a maximum car parking standard as:

- 1/2 bedroom units – 1 space.
- 3+ bedroom units – 2 spaces.
- Creche – 1 per 6 students.
- Offices Enterprise and Employment - 1 space per 150m^2 of gross floor area

Table below highlights the compliance of the scheme with the current and new City Development Plan

Unit Size	No. Units Provided	CDP 2015 Parking Standards	CDP 2022- Parking Standard	**Max Permissible**	Proposed Provision	Compliance
Studio	1	1 space /unit	1 space /unit	1	246	243 below Max Compliant
1 bed	161	1 space /unit	1 space /unit	161		
2 bed	327	1 space /unit	1 space /unit	327		
Creche	53 Child place	1 per 6 students *	1 per 6 students *	9	6	3 below Max Compliant
Office	4,112m^2	1 space per 50m^2	1 space per 150m^2 *	82 – 2015 CDP 27 – 2022 CDP	69	13 below Max in 2015 CDP Exceeds Maximum for 2022 CDP
Car-club					6	-
Total	489			525	327	Compliant

* Based on Proposed Material Alteration 1.332

Table 2 Car Provision Compared to the Draft CDP & Existing CDP

The proposed development makes provision for 246 no. residential parking spaces, 6 no creche spaces, 69 no. spaces and 6 no. car club spaces, resulting in a total of 327 no. car parking spaces. Overall, this is significantly less than the maximum standard for the scheme as set out in the current City Development Plan which equates to 580 no. spaces and the Draft CDP 2022 which equates to 525 no. spaces. However, while the proposed 69 no. spaces allocated for office use is in compliance with current Development Plan standard, it is excess of the reduced standard in the Draft City Development Plan.

While the underlying concept in this scheme is the juxtaposition of housing and employment to reduce the significant volume of unsustainable inwards commuting into Mahon, the proposed layout has had regard to the existing pattern of commuter travel in the area. Based on this the proposed parking provision has been allocated to ensure the immediate viability of the office development in terms of worker access while the imbalance in the housing provision in the wider Mahon area is addressed.

The site's excellent connectivity with access to one of Metropolitan Cork's best cycling and pedestrian links to employment opportunities, local amenities and to the City Centre will encourage future residents to use sustainable means of travel and the Design Statement recognises that the movement and flow of pedestrians/cyclists will be critical. In further recognition of this the proposed development overprovides for bicycle parking for the office element, with 80 no. bicycle spaces proposed, whereas 30 spaces would be required in accordance with the Draft Cork City Development Plan standard.

Travel by car will remain an element of the modal spilt as highlighted in the accompanying MMP and will have to be facilitated through the provision of parking. The Board will note from the observations on the current Hotel and Office planning application (Cork City Council Planning Ref. 22/40809) that the under provision of parking is of principle concern to local residents.

These observations echo a general concern that parking standards may be reduced too quickly and in the absence of increased frequency public transport provision on which reduced standards are based. This was highlighted earlier this year when An Bord Pleanála refused a Strategic Housing Development of 221. no. residential units (36 no. houses and 185 no. apartments/duplexes), creche and associated site works at the former Devoy Barracks, John Devoy Road, Naas, Co. Kildare, ABP-309954-21 refers. In this case the Board refused permission for the following reason

> *Having regard to the location of the site and in particular the absence of high frequency urban public transport services within easy walking distance of the site, the Board considers that the level of car parking provision is deficient and that it would not serve the needs of future occupants of the development. Furthermore, the Board also considers that the street environment would be dominated to an unacceptable degree by surface car parking and that this would undermine the sense of enclosure and overall amenity of the development, and be contrary to the provisions of the Guidelines for Sustainable Residential Developments in Urban Areas and the accompanying Urban Design Manual, A Best Practice Guide, issued by the Department of the Environment, Heritage and Local Government in May 2009, in particular criteria numbers 7 Layout and 11 Parking and the Design Manual for Urban Roads and Streets (DMURS) issued by the Department of Transport, Tourism and Sport and the Department of the Environment, Community and Local Government in March 2019, as amended, in particular Section 2.2.1 and Section 4.4.9. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.*

While the proposed development site is located within an accessible urban location, enjoys excellent connectivity and a high frequency bus service, the reduced parking standards for offices are based on the future implementation of CMATS. The first phase of this, BusConnects, which will bring increased frequency bus service to Jacob's Island will not be delivered within the lifetime of the Plan. Later phases include the development of a light railway network, which is set to be delivered before 2040.

Section 7.2.4 of the *Cork City Strategic Employment Locations Study*, which was published as a supporting document to the Draft City Development Plan highlights that an employment density of 1 worker per 18m^2 of office space. Based on this the offices with a net floor area of 2,934 m^2 will accommodate approximately 163 workers. In accordance with the Draft City Development Plan standards of 1 space per 150 m^2 of gross floor area of 4,112 m^2, the offices will be served by 27 spaces.

One of the strategic outcomes of CMATS is to reduce the AM Mode Share of the private car from 66% in 2011 to 49.3% in 2040. Allowing 49.3% of the future employees to travel to work by private car would still require 80 spaces, which would indicate that the current City Development Plan standards are appropriate and will allow the City to meet CMATS targets. The provision of just 27 no. spaces will require 136 employees or 83% to travel to work by more sustainable means, which is far in excess of the CMATS 2040 target of 50.7%.

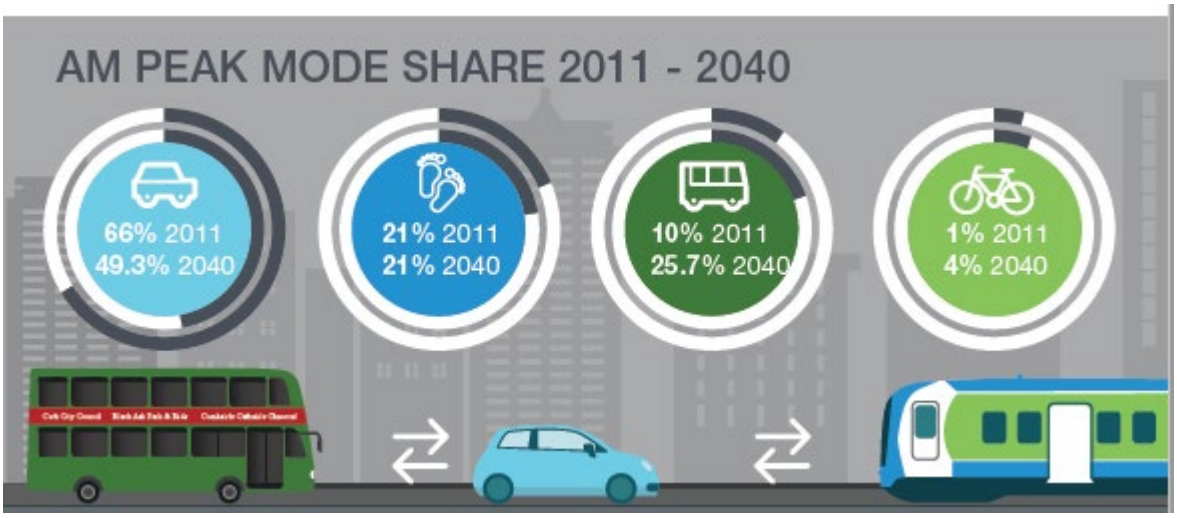


Figure 1.9 CMATS Strategy Outcomes (Extract pg. 14)

The challenges that the achievement of such a high modal shift, which is driven by a dramatic reduction in parking standards between Development Plans, is highlighted by the demographic analysis prepared as part of Chapter 13, Population and Human Health of the accompanying EIAR.

This chapter indicates that in the 2016 Census the commuting pattern of workers travelling into the Mahon neighbourhood indicated that 93% of Mahon workers come from elsewhere in the City or outside the city. The use of private transport amongst this group at 80% is higher than the resident population (64%) and significantly higher than the city average (49%).

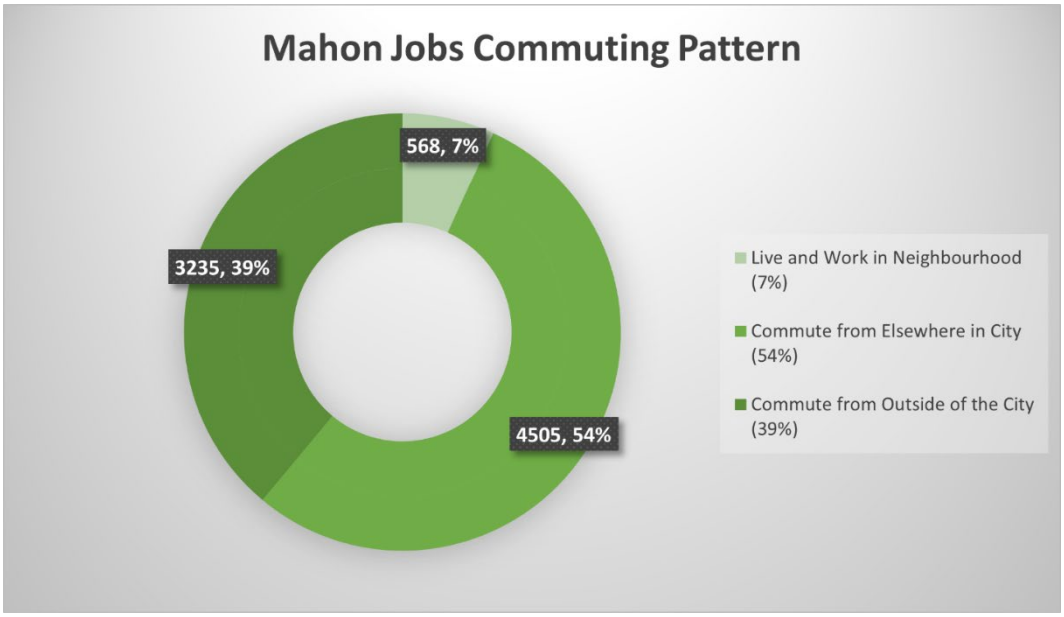


Figure 1.10 Census 2016 – Mahon Jobs - Worker Commuting Pattern

The proposed mixed-use development will contribute towards addressing these unsustainable travel patterns, by providing housing in close vicinity to employment accessible by existing walking and cycling routes. However, in the short-term, while the wider imbalance in housing in the area is being addressed, the viability of the office development would be curtailed if parking provision, reflecting the current commuter patterns is not provided for their future workers. In reality the shift to an aggressively low parking standard over a very short period of time, will not result in increase modal share for sustainable travel as the infrastructure is not in place and the services have not been increased and many will have no other option other to drive to work. This as local residents fear could result in ad hoc parking in established residential areas, if appropriate parking provision is not made.

As Chapter 5, Material Assets – Traffic & Transportation, of the accompanying EIAR notes the average number of vehicles leaving Jacob's Island in 2021 traffic survey was relatively low considering the number of parking spaces available on Jacob's Island. Chapter 5 considers this may be due to the range of other modes easily available on the Island such as bus, cycle and walk with car usage more for leisure and weekend purposes. This underlines the sustainable nature of Jacob's Island, where the commuting patterns contrast with those of the wider Mahon area.

It is the intention of the proposed development to build on this trend. The reduced residential parking provision, which is 50% of the Draft Development Plan maximum standards, aims to influence the modal choice of future residents in their commuting patterns. However, in order to safeguard the commercial success of the proposed office development the parking provision reflects the current commuting profile of Mahon job employees. It is considered that this is a short to medium term requirement and the introduction of a significantly reduced parking standard in a short period of time will place the proposed development at a disadvantage to the developments which have been granted in accordance with the current City Development Plan. This is due to the fact that the FDI clients that have been attracted to Mahon to date are unlikely to take up offices, with a low parking provision, which they will consider to be a barrier to their ability to attract skilled staff. The

inability to attract FDI investment or commitments will have undermine the viability of office development.

As planned public transport proposals, in particular the LRT, and greenway enhancements are delivered, it is envisaged that inward commuter modal shift will result in a significant reduction in inward car-based commuting. In addition, as more local housing comes on-stream, the juxtaposing of housing and employment will re-balance the commuting pattern in the area, reducing the requirement for car parking in the area, to a pattern in line with that currently in evidence in Jacob's Island, where cars are largely used for weekend leisure activities rather than weekday commutes.

The requirement to maintain the existing parking standard for the office is likely to be a short to medium term one and will cater for employees who don't have access to public transport or parents who need access to a car for school drops etc. However, in time the implementation of CMATS and expansion of the public transport network and the development or orbital bus routes should reduce this requirement. Best practice for mobility management plans is that they are updated at agreed intervals and submitted to the Planning Authority for approval. This provides an opportunity to monitor and mange the demand for parking and once the improved transport infrastructure is in place, the applicants have no objection to the excess space being removed or repurposed as public spaces, at what at the present is identified as the end of the LRT route. The applicants would welcome a condition requiring the updating of the MMP at appropriate intervals, for agreement with the Council with the removal or repurposing of spaces once transport infrastructure is improved.

In view of the fact that the application for the proposed development in under consideration in the transition period between these two plans and their differing standards, we consider the proposed parking provision is appropriate, and will still allow for the achievement of the CMATS 2040 modal share. As Chapter 5 of the EIAR demonstrates the office parking provision will not have a material impact on the function of the Mahon Interchange or the carrying capacity of the N40. The applicants are committed to the delivery of a sustainable mixed use development and the overall parking provision is 28% below the maximum quantum based on the Draft CDP 2022 standard, the parking provision for the residential component of the proposed development is 50% of the maximum standard and 3 times the required number of bicycle spaces have been provided for the office element.

Car Park Management

As outlined in Section 3.4 of the TTA, there are currently a range of residential parking available of Jacobs Island, and the parking provision for The Sanctuary apartments is the only area that is managed by a management company with APCOA managing the car park. This currently operates successfully.

Section 6.4 of the TTA outlines the proposed car parking management strategy for the scheme and indicates that

> *The aim of this parking policy is to support the Mobility Management Plan and commits to promoting sustainable travel and reducing the effects of greenhouse gas emissions arising from transportation. The adoption of this parking policy encourages all users of the proposed employment areas to consider active travel and low carbon alternatives to sole occupancy car journeys. It also supports the utilisation of more efficient and lower carbon vehicles through emissions based permits. A robust parking strategy is a recognised mechanism for road traffic reduction and a major influence on travel choice. The*

management of vehicle parking at the employments areas of the proposed development is an important part of the process

As outlined in the MMP parking at the site may be by permit only other than authorised scheduled visitors. Permits could be distributed based on:

1. Lack of alternative available travel mode;
2. Car sharing
3. Family commitments
4. Short stay permits
5. Visitor permits
6. Essential business permits.

Given the proposed development will be a mixed use scheme the applicants envisage a parking policy which allows those who are both residents and employees in the development to park within the surface parking area identified for office parking. The applicants are also willing to engage with Cork City Council to allow for spaces to be used by those wishing to avail of the amenities offered by the Joe McHugh Park and the Greenways, at off peak periods and weekends. We understand that the lack of parking to accommodate this is also of concern to local residents.

The final parking management strategy for the proposed development will be established in conjunction with the adjacent hotel and office development and agreed in an updated MMP to be agreed with the Planning Authority prior to the commencement of development.

Car Share Scheme

Section 6.3 of the MMP outlines details of the draft car sharing scheme that is aimed at employees of the offices. In addition to this 6 no. Car Share/Car Club surface spaces have been identified and attached is a letter from Go Car which confirms the viability of 4-6 share spaces within the proposed development.

Mobility Management Plan

As the accompanying Mobility Management Plan prepared by Sweco highlights that its primary objective is to facilitate and encourage a positive model shift at the development towards sustainable modes of transport. The objectives of this MMP are as follows:

- To reduce the dependence on the private car as a means of travel;
- To discourage the use of the private car for single occupancy use;
- To increase and facilitate the number of people choosing to walk, cycle or travel by public transport to/from the proposed development;
- To develop a car park management strategy;
- To work closely with Cork City Council, the National Transport Authority, Bus Eireann, and all other relevant stakeholders in a partnership model to promote any updates in public transport; and
- Promote a healthier lifestyle.

2. Justification for Housing Mix

The proposed development shall be accompanied by detailed report providing a justification and rationale for the apartment mix proposed, having regard to, inter alia, National and Local planning policy, the site's context, and locational attributes.

The rationale and justification for the proposed housing mix is outlined in the accompanying Statement on Housing Mix and Material Contravention Statement. The Statement on Housing Mix outlines National and Local policy as it pertains to housing mix and provides a detailed review of the site's context and demographic profile.

The study area chosen study corresponds to the Mahon Neighbourhood Area as defined in the Cork City Neighbourhood Profile prepared by AIRO to support the Cork City Draft Development Plan 2022 – 2028 and is the same Study Area used for the EIAR. Of the 2,243 homes recorded in the Study Area during the 2016 Census, 1,833 (82%) were classified as houses/bungalows, with only 381 being flats/apartments (17%).

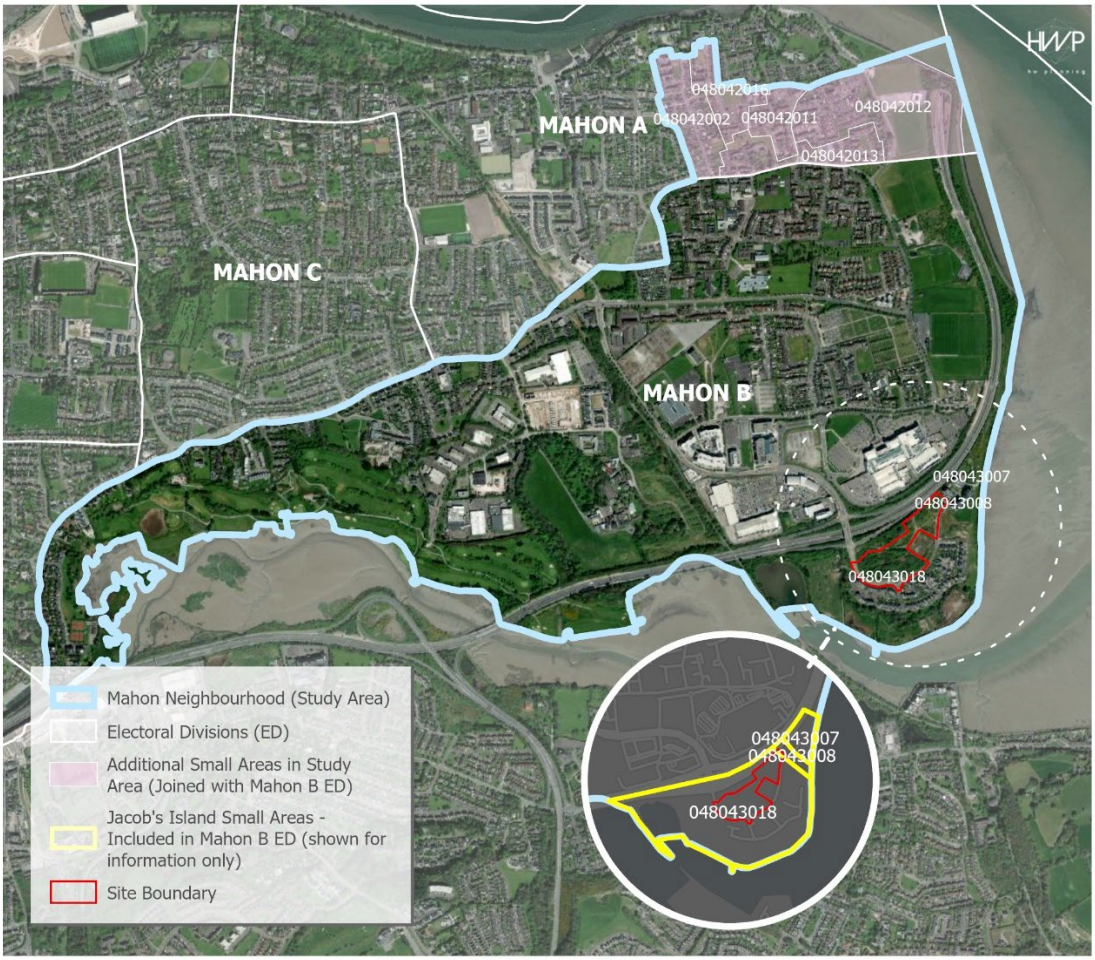
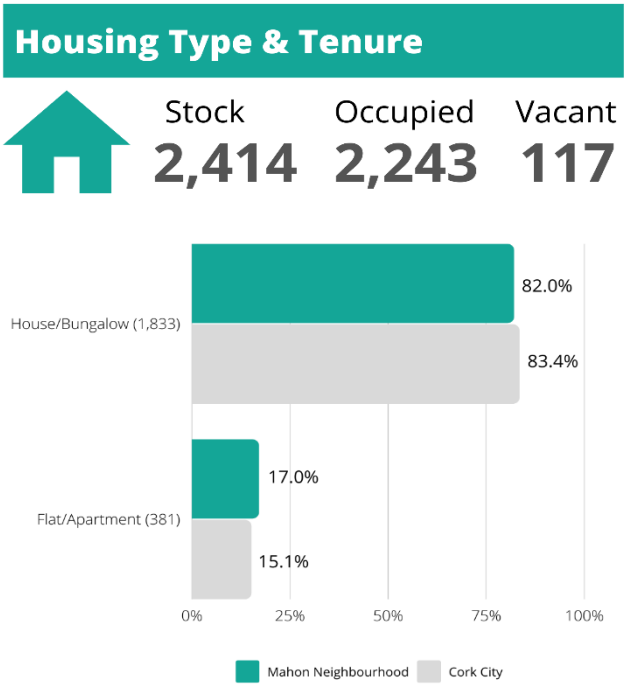


Figure 1.11 Study Area

Figure 1.12 Housing Type & Tenure within the Study Area



Although the Census does not collect data on the number of bedrooms per dwelling, it does record the number of people living per household. The graphic above highlights the large percentage of households that consist of 3 or more people in the Mahon neighbourhood.

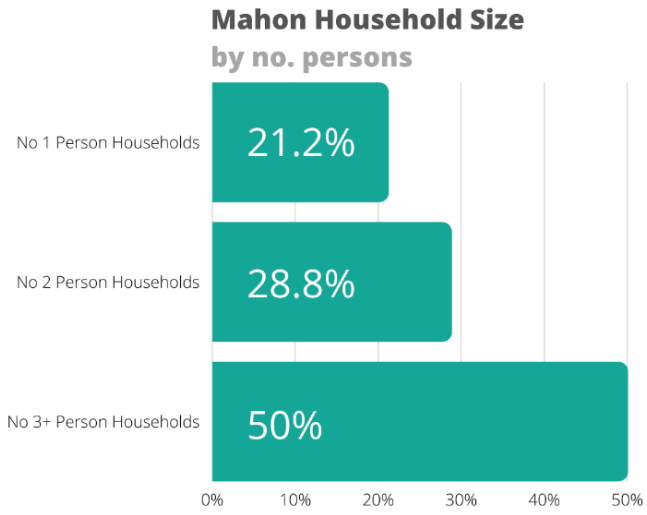


Figure 1.13 Household Size in Study Area

As of June 2022, there are 343 residential units constructed on Jacob's Island. A breakdown of the existing housing mix is shown below:

Unit Type	1 bedroom	2 bedroom	3 bedroom or more	Total
Apartment	28	202	32	262
House	14	4	67	85
Total	42	206	99	347
% of Total	12%	59%	29%	100%

Draft CDP 2022 Objective 11.2 Dwelling Size Mix which sets out that:

> *'all planning applications for residential developments or mixed-use developments comprising more than 50 dwellings will be required to comply with the target dwelling size mix specified in Tables 11.3-11.9, apart from in exceptional circumstances. Where a clear justification can be provided on the basis of market evidence that demand / need for a specific dwelling size is lower than the target then flexibility will be provided according to the ranges specified.'*

	Min	Max	Target
Studios / PBSA (at LRT Stops / Urban Centre / HEI Campus Only)	0%	15%	10%
1 Bedroom	15%	25%	20%
2 Bedroom	25%	40%	34%
3 Bedroom	18%	38%	28%
4 Bedroom / Larger	5%	15%	8%

Figure 1.14 Based on Draft CDP 2022 - Table 11.8 'City Suburbs Dwelling Size Mix for Housing Developments'

A breakdown of the proposed housing mix is detailed below alongside the Draft Cork City Development Plan 2022-2028 (CDP) housing mix targets. The proposed housing mix is in excess of CDP targets for 1- and 2-bedroom units, and that no 3-bedroom or larger type units are to be provided.

Unit Size	No. Units Proposed	Proposed Unit Mix (%)	CDP 2022-2028 Housing Mix Targets		Consistency
			Min %	Max %	
Studio	1	0.2%	0%	15%	Compliant
1 bed	161	32.9%	15%	25%	Exceeds Max
2 bed	327	66.9%	25%	40%	Exceeds Max
3 bed	0	0	18%	38%	-
4 bed / larger	0	0	5%	15%	-
Total	489	100%	-	-	-

However, we consider that the proposed housing mix is appropriate when the wider neighbourhood context is considered. The Mahon neighbourhood consists primarily of houses or bungalows, at 82% of the 2016 housing stock. Given that the average household size in Mahon is nearing 3 persons per household, and that 3 person or more type households are the most common household type, we consider that the majority of this housing stock consists of 3-bedroom or more type units. Therefore, we expect that between 50-82% of households in Mahon are 3-bedroom or more type units.

Based on the demographic profile it's reasonable to conclude that in excess of 50% of the existing housing stock in Mahon consists of 3-bedrooms or more, this percentage is already in excess of the maximum CDP target of 53% (the lower being 23%). We consider that given the existing Mahon housing market consists of predominantly traditional 3 or more-bedroom type housing units, that the proposed development housing mix will add variety and choice to future residents of the Mahon neighbourhood. We also note that as of June 2022, almost 30% (29%) of the existing housing stock at Jacob's Island consists of 3 or more-bedroom apartments and houses.

The Infographic outlined in Section 1, highlights that Jacob's Islands contains a young professional workforce who commute shorter distances to work. The market demand for residential units in Jacob's Island is within this cohort and we consider that this demographic analysis, Census results and market demand provides the evidence required that the need for 3 and 4 bedroom units is lower than the Draft City Plan target. In accordance with Objective 11.2 of the Draft CDP 2022, we consider that the Board should interpret these targets flexibly and we consider that the proposed housing mix is appropriate.

3. Materials & Finishes

A report that specifically addresses the proposed materials and finishes to the scheme including specific detailing of finishes, the treatment of balconies in the apartment buildings, landscaped areas, pathways, entrances, boundary treatment/s and retail/ crèche area. Particular regard should be had to the requirement to provide high quality and sustainable finishes and details which seek to create a distinctive character for the development. The documents should also have regard to the long-term management and maintenance of the proposed development and a life cycle report for the apartments in accordance with section 6.3 of the Sustainable Urban Housing: Design Standards for New Apartments (2020).

Section 9 of the Design Statement provides details of the distinctive and resilient palette of materials and finishes that are proposed to compliment those of the existing and permitted buildings of Jacob's Island. Section 8.5 of the Landscape Design Report provides details of the streetscape and its materials, whereas Section 10 outlines the proposed planting and boundary treatments for the proposed development.

As requested, a Building Life Cycle Report for the proposed development in accordance with Section 6.3 of the Sustainable Urban Housing: Design Standards for New Apartments (2020) has been prepared by Aramark and is Appendix 2.2 of the EIAR.

4. Breakdown of the public and communal open space areas.

A quantitative and qualitative assessment which provides a breakdown of the public and communal open space areas. A detailed landscaping plan clearly illustrating the quantum and functionality of all areas designated for communal and public open space. The landscaping details shall include, inter alia, designated communal open space, the inclusion of useable space for play provision necessary to comply with Section 4.13 of the Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities and the design, a detailed trees survey and proposed tree planting scheme and shall clearly indicate the quantum and designated areas of useable public open space

Section 6 of the Design Statement (pages 46-49) provide a quantitative assessment and a breakdown of the public and communal open space areas serving the proposed development.

Aerial view of proposed masterplan

Figure 1.15 Proposed Public & Communal (Extract pg.49 Design Statement)

Sections 8.0-8.3 of the Landscape Design Report provides a qualitative assessment of these open space and their design rationale and clearly illustrates the functionality of all areas designated for communal and public open space. In terms of functionality, Section 4 of the *Sunlight and Daylight Access Analysis of the Proposed Development* prepared by ARC Architectural Consultants Limited also assesses sunlight access to the proposed open and communal spaces within the development. Table 4.1 of the report is extracted below, and which demonstrates that all proposed public and communal open spaces will receive an adequate amount of sunlight access over the course of the year in accordance with BRE Guidance.

Table 4.1: Open Space Areas – Proportion of space receiving two hours of sunlight on 21st March

Location of Open Space	Proportion of space (grid points) capable of receiving two hours of sunlight on 21st March	Does this achieve the BRE Guide recommendations for sunlight access?
Public Open Spaces		
Central Public Open Space (3,262sq m)	99.1%	Yes
Block 12 Public Open Space (667 sq m)	100.0%	Yes
Block 15 Public Open Space (421 sq m)	65.2%	Yes
Communal Open Spaces		
Block 11 Courtyard (705 sq m)	55.0%	Yes
Block 13 Open Space (281 sq m)	100.0%	Yes
Block 14 Courtyard (973 sq m)	61.6%	Yes
Block 15 Courtyard (1,511 sq m)	66.2%	Yes

Figure 1.16 Sunlight Access to Public & Communal Area (Extract Section 4 Arc Report)

As requested, the landscape design package prepared by Doyle O'Troithigh Landscape – Architecture is informed by detailed tree surveys, an Aboricultural Assessment and includes an overall planting plan.

As identified in Section 6 of the Design Statement a total of 4,350 m^2 of public open space is proposed, which represents 12.3% of the net developable site area. This exceeds the City Development requirement of 10%. In addition, 3,470 m^2 of communal open space is proposed, which exceeds the 3,075 m^2 of communal open space which is required in accordance with the Apartment Guidelines standards.

The Design Statement and Landscape Package highlights that future residents of the proposed development will have access to a diverse range of communal and open spaces which will contribute to the creation of a sustainable and successfully residential community.

5. Phasing Plan

A Phasing Plan clearly indicating the proposed development of the residential units, crèche, community and commercial uses in conjunction with the necessary infrastructure, including the road, water and wastewater

A Phasing Plan clearly indicating the proposed development of the residential units, crèche, community and commercial uses in conjunction with the necessary infrastructure, including the road, water and wastewater has been prepared as part of the Construction Environmental Management Plan by MMOS Consulting Engineers and is included as Appendix 2 of the EIAR.

6. Submission of a Construction Management Plan.

A Construction Environmental Management Plan has been prepared by MMOS Consulting Engineers and is included as Appendix 2 of the EIAR.

7. Submission of a Waste Management Plan.

A Waste Management Plan has been prepared by MMOS as part of the Construction Environmental Management Plan and is included as Appendix 2.1 of the EIAR and as a standalone document.

8. Submission of an Operational Waste Management Plan.

As requested, an Operational Waste Management Plan has been prepared by AWN Consulting and accompanies this submission.

9. Submission of a Stage 1 and Stage 2 Road Safety Audit.

A Stage 1 and Stage 2 Road Safety Audit has been prepared as part of an overall Quality Audit prepared by PMCE. All issues identified within the Road Safety have been resolved.

10. Submission of an Invasive Species Management Plan

An Invasive Species Management Plan has been prepared by O'Donovan Agri Group and is included as Appendix 9.2 of the EIAR. This Plan highlights that invasive species have been identified on the site and that O'Donovan Agri Group are currently in the second year of the defined and agreed treatment programme.

11. A Sunlight/Daylight/Overshadowing Analysis

A Sunlight/Daylight/Overshadowing analysis including all relevant plans/ documentation showing an acceptable level of residential amenity, which includes details on the standards achieved within the proposed residential units, in private and shared open space, and in public areas within the development and in adjacent properties. This report should address the full extent of requirements of BRE209/BS2011, as applicable.

A Sunlight/Daylight/Overshadowing analysis detailing the standards achieved within the proposed residential units, in private and shared open space, and in public areas within the development and in adjacent properties has been prepared by ARC Architectural Consultants Limited.

The Analysis demonstrates full compliance with the BRE209/BS2011 guidance, however as detailed in Section 5 of the Analysis and as the Board will be aware The BS 8206-2: 2008 – 'Lighting for Buildings – Part 2: Code of Practice for Daylighting' was withdrawn in May 2019 and was replaced with BS EN 17037: Daylight in Buildings in May 2019. In June 2022, the second edition of the Building Research Establishment's Site Layout Planning for Daylight and Sunlight (2011) was replaced with a third edition, which references BS EN 17037.

The issues of what guidelines or standards should be applied when assessing Daylight/Sunlight was considered at length by Humphreys J in the judgment of the High Court in Atlantic Diamond Limited v. An Bord Pleanála & EWR Innovation Park Limited [2021] IEHC 322. In making his judgement Humphreys J was aware of the change in standards noting that

> *34.British Standard BS 8206-2 Code of Practice for Daylighting, 2008 is the other standard referred to in the Building Height Guidelines. I am informed that that has since been revoked and replaced by BS EN 17037:2018, but that these two documents appear to be in similar terms for present purposes.*

Notwithstanding, this Humphreys J considered that as the British standard and BRE Guidance are specifically noted in the 2018 Urban Development Guidelines appropriate and reasonable regard must be had to the specified standard and Guidelines

> *40. The board's defence is essentially that the 2018 guidelines are permissive and that there is some sort of absolute choice between the BRE guidelines and the British Standard or indeed some other document. I don't accept that argument. The obligation is to have "appropriate and reasonable regard" to guides of this nature, and regard would not be appropriate or reasonable unless one considered all of the material and acted in conformity with it or, if not, explained why.*
>
> *41. The board predictably says that there is an element of discretion and planning judgement and endeavours to characterise this as an unreasonableness challenge. As noted above, that misses the point that the 2018 ministerial documents are binding mandatory statutory guidelines which require as a matter of legal obligation that the decision-maker have appropriate and reasonable regard to identified standards.*

In addition, we would consider those standards and Guidelines which replaced it and which Humphreys J noted as being 'similar' should also be considered. Based on this ARC assessed daylight access within the proposed development in accordance with the BRE Guide of 2022 and which provides guidance on BS EN 17037:2018. Section 5.4 of the Analysis suggests that

> *99% of the 489 no. units proposed as part of this development are likely to achieve the recommendations of the third edition (2022) of the BRE Guide with regard to Daylight Factor (Method 1).*

Notwithstanding the likely high conformance rate of the proposed development with both British standards and BRE Guides, the latest *BRE 209 2022 Edition - Site layout planning for daylight and sunlight. A guide to good practice* indicates at page 4 that

> *This report is a comprehensive revision of the 2011 edition of Site layout planning for daylight and sunlight: a guide to good practice. It is purely advisory and the numerical target values within it may be varied to meet the needs of the development and its location. Appendix F explains how this can be done in a logical way, while retaining consistency with the British Standard recommendations on interior daylighting.*

Section 1.6 and 1.7 of the Guide highlights that

> *1.6 The guide is intended for building designers and their clients, consultants, and planning officials. The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design (see Section 5). In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the*

height and proportions of existing buildings. Alternatively, where natural light is of special importance, less obstruction and hence more sunlight and daylight may be deemed necessary. The calculation methods in Appendices A and B are entirely flexible in this respect. Appendix F gives advice on how to develop a consistent set of target values for skylight under such circumstances.

1.7 The guidance here is intended for use in the United Kingdom and in the Republic of Ireland, though recommendations in the Irish Standard IS EN 17037 may vary from those in BS EN 17037. Many of the principles outlined will apply to other temperate climates. More specific guidance for other locations and climate types is given in BRE Report Environmental site layout planning. .[1]

The Board may also be aware of a third standard, IS EN 17037: Daylight in Buildings was published by the National Standards Authority of Ireland (NSAI) on 28th January 2019. This sets out different methodologies for assessment of daylight access within buildings, as well as different minimum standards. To date this standard has not been applied by the Board or local authorities and while in place at the time, was not referenced or referred to as a relevant standard in Atlantic Diamond Limited v. An Bord Pleanála & EWR Innovation Park Limited [2021] IEHC 322.

In term of the use of IS EN 17037:, Appendix 16 of the Draft Dublin City Development Plan on Daylight and Sunlight notes

Prior to 2018, Ireland had no standard for daylight. In 2018, the National Standards Authority of Ireland8 adopted EN 17037 to directly become IS EN 17037. It is important to note that no amendments were made to this document and unlike BS EN 317037, it does not contain a national annex. It offers only a single target for new buildings (there are no space by space targets – e.g. a kitchen would have the same target as a warehouse or office). It does not offer guidance on how new developments will impact on surrounding existing environments. These limitations make it unsuitable for use in planning policy or during planning applications. BR 209 must still be used for this purpose.

The unsuitability and impact of the application of EN 17037 to apartment design is also described in detail in the *Sunlight & Daylight Commentary* prepared by O'Mahony Pike and which is Appendix 1 of this report.

Notwithstanding the above and the fact that the standard has not been applied to date, in order to ensure that appropriate and reasonable regard is had to all guides and standards Appendix A of the ARC Report carried out an analysis of daylight access within the proposed development using Method 1 outlined in IS EN 17037: Daylight in Buildings and BS EN 17037: Daylight in Buildings (National Annex). This indicates that 47 of 120 (39%) of sample rooms subject to detailed daylight access analysis are likely to achieve the recommendations set out in IS EN 17037: 2018 for Method 1 / Daylight Factor analysis.

The *Urban Development and Building Heights Guidelines for Planning Authorities, December 2018* recognise that

1 BRE 209 2022 Edition - Site layout planning for daylight and sunlight. A guide to good practice pg. 7

Where a proposal may not be able to fully meet all the requirements of the daylight provisions above, this must be clearly identified and a rationale for any alternative, compensatory design solutions must be set out, in respect of which the planning authority or An Bord Pleanála should apply their discretion, having regard to local factors including specific site constraints and the balancing of that assessment against the desirability of achieving wider planning objectives. Such objectives might include securing comprehensive urban regeneration and or an effective urban design and streetscape solution.

The proposed development does not meet the full requirements of the IS EN 17037 standard and the legal rationale and planning precedent for the alternative British standard and BRE Guides is outlined in detail above. The development of the subject site will complete a Masterplan for Jacob's Island and result in an effective urban design and streetscape solution, welcomed by Cork City Council's City Architect. The compensatory design solutions justifying a deviation from the IS EN 17037 standard are outlined in detail in the O'Mahony Pike report.

12. Material Contravention Statement

Where the applicant considers that the proposed strategic housing development would materially contravene the relevant development plan or local area plan, other than in relation to the zoning of the land, a statement indicating the plan objective(s) concerned and why permission should, nonetheless, be granted for the proposed development, having regard to a consideration specified in section 37(2)(b) of the Planning and Development Act 2000. Notices published pursuant to Section 8(1)(a) of the Act of 2016 and Article 292 (1) of the Regulations of 2017, shall refer to any such statement in the prescribed format. The notice and statement should clearly indicate which Planning Authority statutory plan it is proposed to materially contravene.

The applicant considers that the proposed development materially contravenes policies, objectives and standards contained in the Draft Cork City Development Plan 2022 – 2028 (Draft CDP 2022) in respect of height, density, housing mix and car parking provision. As the Draft Cork City Development Plan 2022 -2028, which will come into effect on August 8th, 2022, it will be the development plan in place, at the date of the decision of the Board in respect of the application, the statement is based on this Draft Plan. HW Planning have prepared a statement detailing why permission should, nonetheless, be granted for the proposed development, having regard to a consideration specified in section 37(2)(b) of the Planning and Development Act 2000.

Notices published pursuant to Section 8(1)(a) of the Act of 2016 and Article 292 (1) of the Regulations of 2017, refer to the material contravention statement in the prescribed format.

13. Statement of Consistency

In accordance with section 5(5)(b) of the Act of 2016, as amended, any application made on foot of this opinion should be accompanied by a statement that in the prospective applicant's opinion the proposal is consistent with the relevant objectives of the development plan for the area. Such statement should have regard to the

development plan or local area plan in place or, likely to be in place, at the date of the decision of the Board in respect of any application for permission under section 4 of the Act

HW Planning have prepared a Statement of Consistency which details how the proposed development is consistent with the relevant development objectives for the area. The statement has regard to the Draft Cork City Development Plan 2022 -2028, which will come into effect on August 8th, 2022, and will be the development plan in place, at the date of the decision

14. Compliance with article 299B(1)(b)(ii)(II) and article 299B(1)(c) of the Planning and Development Regulations 2001-2018

As the application is accompanied by an EIAR, article 299B(1)(b)(ii)(II) and article 299B(1)(c) of the Planning and Development Regulations 2001-2018 are not relevant to the consideration of the application.

03 //

Other Planning Considerations

Principle of Development

As established at Section 1 of this report, the proposed residential, creche and office uses are compatible with the proposed ZO 5 Objective for the lands and with a new floor area of 2,934 m^2 are significantly below both the proposed office threshold of 15,000m^2 and the Proposed Amended threshold of 20,000 m^2.

As demonstrated in the accompanying Statement of Consistency prepared by HW Planning, the proposed development is consistent with the zoning objectives pertaining to the lands.

Building Height

The height and massing strategy for the proposed development is outlined in detail in Section 4 (pages 35-37) of the Design Statement and which highlights the aim is to

> create a strong urban landscape, with a distinct sense of place. Volumes are kept simple, and the proposed heights are carefully modulated to respond to existing conditions and enhance the local context.

The height strategy has full regard to the permitted (SHD ABP-301991-18, amended by ABP-310378-21) to the east and the concurrent hotel and office application to the north (22/40809). The Design Statement identifies that

- At the heart of the site, a 9 storey pavilion block (Block 13) bookends the park and acts as a central focal point for the neighbourhood.
- At the northern end of the site, an 8 storey residential gable (block 11) addresses the bus stop and access to the existing Sanctuary buildings and permitted residential blocks to the north.
- Along Longshore Avenue, legible volumes define the public realm. A general height of 4 to 5 storeys is maintained opposite the existing 4, 3 and 2 storeys existing residential development.
- Slightly taller blocks (5 and 6 storeys) faces the existing roundabout to emphasize the main site entrance and announce the taller heights within. This height creates an appropriate urban edge to the road.
- To the north, 5 to 8 storeys blocks are proposed opposite permitted buildings (SHD ABP-301991-18, amended by ABP-310378-21) of similar height.

Within the site, a maximum shoulder height of 7 storeys residential and 5 to 7 storeys commercial frames the public realm, highlights the main circulation loop and offers a suitable backdrop to the park.

Along the N40 and slip road, the clear volumes of proposed offices blocks offer a gentle increase in height from the existing 6 storeys residential blocks to the North (The Sanctuary), to the bridge.

The maximum height for the Fringe/Corridor/Centre area of Mahon as set out in Table 11.2 of the Draft City Plan is 6 storeys and this approach appears to conflict with the National Planning Framework, which discourages the use of numerical limitations in determining appropriate heights. This is reflected in NPO 13 which states that:

> *'In urban areas, planning and related standards, including building height and car parking will be **based on performance criteria** that seek to achieve well-designed high quality outcomes in order to achieve targeted growth. These standards will be subject to a range of tolerance that enables alternative solutions to be proposed to achieve stated outcomes, provided public safety is not compromised and the environment is suitably protected.'*

The 2018 Urban Development Guidelines also refer to the traditional building heights in our urban areas which have been limited and generally low rise in terms of height. The need to secure compact and sustainable urban growth forms will require the reuse of brownfield infill sites that are located in well serviced urban locations and are served by good public transport links. As such SPPR1 stipulates that:

> *'In accordance with Government policy to support increased building height in locations with good public transport accessibility, particularly town/City cores, planning authorities shall explicitly identify, through their statutory plans, areas where increased building height will be actively pursued for both redevelopment and infill development to secure the objectives of the National Planning Framework and Regional Spatial and Economic Strategies and shall **not provide for blanket numerical limitations** on building height.'*

The vision of the NPF incorporates the principle of compact growth in our town and cities through the activation of strategic areas by increased height and densities therefore reducing the occurrence of urban sprawl. In this respect the NPF has a specific objective (No. 35) to:

> *'Increase residential density in settlements, through a range of measures including reductions in vacancy, re-use of existing buildings, infill development schemes, area or site-based regeneration and increased building heights.'*

The proposed height of the development has been designed having regard to the site-specific characteristics, technical assessments such as daylight and sunlight and wind micro-climate and the guidance contained within national and regional planning policy that seeks increased heights and densities on strategically located sites that are served by existing infrastructure.

There is significant investment in infrastructure planned in the South Mahon areas as set out in the Cork Metropolitan Area Transport Strategy (CMATS) 2040. CMATS has been published in the context of the National Planning Framework which envisages that Cork will become the fastest growing city region in Ireland in the coming years. This projected population and associated economic growth will result in a significant increase in the demand for travel. This demand needs to be managed and planned for carefully to safeguard and enhance Cork's attractiveness to live, work, visit and invest in.

A key deliverable of CMATS is a Light Rail Transit (LRT) from Ballincollig to Mahon via Centre Park Road. The LRT will be preceded by a high frequency bus service in the short term. The LTR will serve the Mahon with a number of indicative stops identified, one of which is in proximity to the subject site. The planned development of the LTR therefore underpins the development of a high-density scheme on the subject lands.

The Urban Development Guidelines have arisen from a recognition that the ambitious targets contained within the NPF, particularly in relation to accommodating 50% of future growth within the existing footprint of our cities, will not be met unless developments of greater height and scale are supported by the Planning Authorities. SPPR3 of the Guidelines state that:

> *It is a specific planning policy requirement that where…an applicant for planning permission sets out how a development proposal complies with the criteria above; and…the assessment of the planning authority concurs, taking account of the wider strategic and national policy parameters set out in the National Planning Framework and these guidelines; then the planning authority may approve such development,* ***even where specific objectives of the relevant development plan or local area plan may indicate otherwise****.*

Section 3.2 of the Building Heights: Guidelines for Planning Authorities, 2018 promotes increased heights in urban areas where certain criteria can be met and the Statement of Consistency accompanying this application and the Design Statement clearly demonstrates compliance with this requirement.

The Board will note that this area and the subject site has long being considered as a suitable location for taller buildings with 5 no. buildings ranging in height from 2 to 21 storeys permitted on the subject site in 2009 T.P. 07/32686 and PL28.232275 refers. In assessing the issue of building height, the Inspector in his report noted

> *I consider that the appeal site has more absorptive capacity for large buildings, due to its location next to the elevated interchange. When viewed from the N25, I consider that the design as proposed will lead to a more visually distinctive pattern of development, and will give the area a more distinctive visual identity than at present. While I would normally consider that such a large and high group of buildings would not be appropriate in what is a generally low rise city, I consider that this site is suitable for a more high density approach. I consider that the overall architectural approach is of high quality and will give Jacobs Island a more distinctive identity.*

More recently the permitted SHD to the east, contained buildings ranging in height from part 6 to part 25 no. storey and the Inspector in that case was of the opinion that

> *In addition, given the proportions of the ancillary nine storey block to the south of the tower, I would advise against any attempts to reduce the overall height. Any reduction in height, would in my opinion, injure the architectural integrity of the composition and result in a sub-standard tower building that would not meet the design criteria set out by the planning authority with respect to this site."*
>
> *Furthermore, adding that "I agree with the substance of the observations insofar as the development will be highly visible from a number of viewpoints and will change the landscape of the east of Cork City. However, I see this as an advantage and a bold design statement creating a visual gateway to Mahon. There are no protected views in the vicinity that will be impacted by a building of the height proposed and I am satisfied that the massing of apartments and a tower at this location and of the design quality exhibited by the Architect is appropriate and acceptable*

The Board will note that the height and scale of the proposed development at Pre-Consultation stage is very similar to that proposed and in his assessment of the proposal in the City Council's submission of November 21st, 2021, the City Architect noted

> *In principle, the layout concept is clear and works well, creating urban blocks which make an urban edge to the N40 and its link road, plus the main access/distributor road and a centrally located park with frontages between both routes.*

In terms of the architecture, he added

> *The overall height and massing of each urban block are reasonably considered and satisfactory. Similarly, in each block the solid to void proportions are satisfactory and fenestration proportions and divisions are quite elegant. The use of brick as a cladding material is welcomed, together with a precast concrete frame to the elevations of the office and crèche.*

The proposed development ranges in height from part 1 storey to part 8 storeys. The locational characteristics of the subject site to the south of the N40 were a significant consideration in the detailed design of the proposed development. The increased height along this boundary provides a noise baffle for the more sensitive residential and amenity uses to the south and represent a significant opportunity to define the future sustainable development of Mahon as the eastern gateway to the City Centre through the delivery of high-density developments

Given, national guidance, the strong long standing planning precedent, support of the City Architect and the high quality architectural approach, we consider the proposed heights are appropriate and warranted at this location.

Density

The subject lands are situated within the 'Inner Fringe, Corridor, Centre', and specifically within the 'Mahon' sub-category as defined in the Density and Building Height Spatial Strategy in the Draft CDP 2022

Objective 3.5 refers to Table 11.2 which sets out the density target for this area as between 50 (lower)-120 (upper) units her hectare. The proposed development will provide a density of 137.7 no. units per ha. comprising 489 no. apartments on a developable area of 3.55 ha.

As outlined previously in this statement in accordance with the definitions provided in the 2.1.3 of the *Sustainable Urban Housing: Design Standards for New Apartments, 2020* the subject site can be defined as an Accessible Urban Location, that is suitable for large scale, higher density development as it is

- within walking distance (i.e. up to 15 minutes or 1,000-1,500m) of a significant employment location, being Mahon District Centre and adjacent employment hubs;
- within easy walking distance of high frequency urban bus services, being the 202/202A and 215/215A

The subject lands are excellently located in a sustainable and well-connected location that is eminently suitable for compact and high density urban development. The 2 no. existing greenways to the west and south of Jacob's Island will promote sustainable modes of travel including walking and cycling for future residents. The site is also set to benefit from the proposed high capacity Light

Rail Transit (LRT) as identified in the Cork Metropolitan Area Transport Strategy (CMATS) that will extend from Mahon to Ballincollig through the city centre. The Guidelines indicate that such areas are suitable for higher density apartment developments

In 2018 the ABP Inspector in granting permission for a net density of 137 no. units per ha at the adjacent site on Jacob's Island (ABP Ref: ABP-301991-18) stated that:

> *Given the location of the development in the context of the facilities, services and employment opportunities of Mahon and Cork City Centre, the combination of high density and extremely low density residential development in the vicinity, I am satisfied that the applicant has satisfactorily increased residential density to an acceptable and sustainable level.*

More recently the ABP Inspector, in granting permission for a net density of 275 no. units per ha on the Former Ford Site (ABP Ref: APB-309059-20) stated that:

> *the provision of higher density development on such brownfield docklands sites is supported at national, regional and local planning policy level and transport infrastructure proposals set out in CMATS are predicated on consolidation of development along public transport corridors.*

We consider both these comments apply equally to the subject application. We consider that the proposed density is consistent with national policy and the long established principle of high density development on the subject site and more recently the adjacent site.

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Conclusion

Mahon remains a key development area and statistically is one of the best performing areas in the City for population and employment growth over the last 15 years. It is a highly sustainable location, and one which can become an exemplar for compact growth in Cork having regard to the planned investment in BusConnects and Light Rail infrastructure as envisaged in CMATS. The existing green infrastructure accessible from the subject lands presents a significant opportunity for Jacob's Island to deliver a sustainable living and working environment for existing and future residents on Jacob's Island.

The subject lands have been identified as a suitable location for high density mixed use development for a considerable period of time and the proposed Masterplan and subject application has full regard to the planning history on the subject lands. The Masterplan has evolved to have regard to current policies and standards, with input from the Board and Cork City Council. The amenities and infrastructure required to see the realistion of the Masterplan vision have been in place for some time and can accommodate the additional commercial and residential development required to complete the Masterplan. The proposed building heights, density and parking ratio are consistent with both the long established and recent planning precedent and are fully compliant with national policy.

The subject application and overall Masterplan represents an excellent opportunity to deliver on the strategic opportunity Jacob's Island presents as a gateway location to Cork, signposting the established employment cluster at Mahon. While Mahon has the potential to become Cork's most sustainable suburb with a high frequency bus service and high quality pedestrian and cycle network, it currently displays some unsustainable attributes. 93% of the workers in Mahon commute into Mahon for work, with 80% of them using private transport. Housing within walking and cycling distance, or on a high frequency bus route to existing and future employment opportunities is what is required for Mahon to develop more sustainable travel patterns.

The Board will be aware of the viability challenges facing high density mixed use schemes particularly outside of Dublin. The current mode share demonstrates the amount of private parking that is available for employees in Mahon and with which any new office development must compete. The applicants are concerned that inadequate parking provision for the offices could have the unintended consequence of putting the proposed office development at a commercial disadvantage to others recently granted and serve to cause conflict with local residents due to overspill parking. To counter this the applicants have developed a parking strategy and MMP which is based on encouraging sustainable travel and achieving the CMATS 2040 modal share targets.

The overall parking provision is below the maximum standards in both the existing Development Plan and the Draft CDP 2022 standard. To encourage future residents to choose more sustainable travel modes the parking provision for the residential component of the proposed development is 50% of the Draft Plan maximum standard. At 1 space per 2.4 workers and with bicycle parking provision 3 times the standard, we consider that proposed development will meet and exceed the CMATS 2040 mode share targets. As Chapter 5 of the EIAR demonstrates

the proposed parking strategy will not have a material impact on the function of the Mahon Interchange or the carrying capacity of the N40. The proposed carparking provision will be required, especially by parents doing the school drop and collections until the introduction of a orbital route as envisaged by CMATS. The proposed parking provision will be monitored and actively managed through the MMP and will be removed or repurposed to public space as agreed with the Planning Authority following the introduction of the LRT.

Jacob's Island was first identified by Cork City Council as a mixed use, transformative project at the gateway to the City in the 1990's. The banking crisis and economic recession prevented the completion of the commercial element of the project including offices and a hotel, which have always played a key role in delivering, what will be Cork's first true mixed use scheme of scale. With all the infrastructure in place, the realisation of the project is once again very close and with a favourable grant of permission, the applicants are excited about the prospects of bringing this long awaited project to fruition.

JACOBS ISLAND

- Constructed to date: 338 residential units/ 42,000 sq.m. residential
- Permitted Development (ABP-301991-18 SHD, as amended by ABP-310378-21) : 437 residential units/ 55,000 sq.m. residential, 1,000 sq.m. retail & creche
- Proposed Development (ABP-311818-21 SHD): 489 residential units/ 47,493 sq.m. residential, 575 sq.m. residential amenity, 380 sq.m. creche, 4112 sq.m. offices
- Proposed Development (CCC Reg. Ref. 22/40809): 165 bedroom hotel/8078.5 sq.m., 10, 626 sq.m. offices

Figure 1.17 Jacob's Island Masterplan – OMP Architects

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Appendix A

Sunlight & Daylight Commentary, prepared by O'Mahony Pike

JACOB'S ISLAND STRATEGIC HOUSING DEVELOPMENT
SUNLIGHT & DAYLIGHT COMMENTARY

23 JUNE 2022

mahony pike

CONTENTS

* Note: This document should be read in conjunction with the Planning Statement by HWP and the Sunlight and Daylight Access Analysis by ARC Architectural Consultants Ltd.

01 | RESIDENTIAL DESIGN

TYPICAL BUILDING ARRANGEMENT

The application of the IS EN 17037 standard in lieu of the BR209 (BRE) standard is likely to have the following impacts on residential design, which will in turn impact on the density & economic vailbility of projects:

- Apartment buildings are designed in line with 2020 Design Standards for New Apartments, and are generally comprised of a combination of single aspect units, corner units and “through” units, with corner units located at the ends of buildings, and single aspect and through units located in the middle of the building.

- Typical unit design is currently based on a unit depth of c. 8 metres, with units accessed off a central corridor, and balconies that are external to the facade which are usually located directly outside the living room.

- The 2020 Design Standards for New Apartments set a maximum of 12 units accessed off a shared core, which suggests a significant proportion of single aspect units. The Dual Aspect ratio recommendations in the same document acts as a balancing device, creates a limitation on single aspect units, with a 50% minimum recommended for locations such as Jacobs Island.

- There are many different possible combinations of unit types, but in principle, the utilisation of the 8 metre deep unit plan results in an efficient building form, with good quality units, which achieves compact urban development in line with national policy. Efficient building form and a low wall to floor ratio are also key factors in the economic viability of apartment development.

Diagram 1:
Typical arrangement of an apartment building , with 8.0 metre deep unit types, which would generally achieve compliance with the BR209 (BRE Guide) standards. All units shown are compliant with the Design Standards for New Apartments 2020.

CHALLENGES OF IS EN 17037 FOR SINGLE ASPECT UNITS

As described on the previous page, residential buildings are generally comprised of a combination of units types, including single aspect, “through” units and corner units. Corner units are likely to perform well under IS EN 17037, and are therefore not focused on in this document. “Through units” generally comprise a very small proportion of units in a scheme, and are therefore not focused on in this document. Single aspect units generally comprise c. 50% of a scheme such as this proposal at Jacobs Island, and they are the most likely typology to perform poorly under IS EN 17037.

Typical single aspect unit design is currently based on a unit depth of c. 8 metres, with units accessed off a central corridor, and balconies that are external to the facade which are usually located directly outside the living room. Within the unit, rooms are generally designed with widths that are given as minima in the 2020 Design Standards for New Apartments. This design approach minimises the overall width of the unit, and thereby also minimises the external wall area required for each unit, which is a key factor in maximising density on a site and minimising building costs.

As per the 2020 Design Standards for New Apartments, paragraph 3.36, “Balconies should adjoin and have a functional relationship with the main living areas”. Therefore, when designing residential units, the balcony is generally placed directly outside the living area. Balcony widths and areas are determined by the standards set out in the 2020 Design Standards for New Apartments, which generally result in the balcony being either the full width of the living room, or slightly wider than the living room with which it is associated.

In apartment buildings, it is generally considered good practice to stack apartments so that each floor has the same arrangement as the floors above and below it, which in single aspect units leads to both living rooms and their associated balconies generally being stacked one on top of the other. The balcony of one unit then becomes a barrier to the penetration of sunlight & daylight to the unit below, but in single aspect units there can be very limited latitude for the balcony to occupy an alternative location. In the subject scheme, where alternative balcony positions are available, they have generally been utilised, such as in Block 14 in the image below.

Balcony & living room of 1 bedroom, single aspect unit stacked over the living room and balcony of the unit below.

The Level 01 units on this facade are dual aspect, therefore an alternative position for their private amenity space is available - it is located on the other side of the unit, facing the communal courtyard. This design approach benefits both the Level 01 unit, whose private amenity area directly adjoins the communal space, and the Level 00 unit below it, which is not overshadowed by a balcony directly over it.

Dashed orange outline highlights location of typical arrangement of stacked apartments, with living rooms located directly above one another.

Level 00 units have a recessed private amenity space, located behind a front garden area with a hedge.

Image: South elevation, facing Longshore Avenue, of Block 14.

02 | ALTERNATIVE, COMPENSATORY DESIGN FACTORS

ALTERNATIVES CONSIDERED: THE UNIT

POTENTIAL IMPACT ON APARTMENT DESIGN IN RESPONSE TO IS EN 17037 STANDARD

The application of the IS EN 17037 standard in lieu of the BR209 (BRE) standard is likely to have the following impacts on residential unit design, which will in turn impact on the density & economic viability of projects:

- Typical corner units with a unit depth of c. 8.0 metres, with dual aspect corner living rooms, are likely to perform well under both IS EN 17037 and BR209 (BRE) .

- Typical single aspect units with a unit depth of c. 8.0 metres, which are permitted to form 33% to 50% of a scheme under the 2018 Urban Development and Building Height Guidelines, and which generally meet the BR209 (BRE) standard may perform poorly under IS EN 17037. Consequently the design of single aspect units may reduce in depth from c. 8 metres to c. 6 metres, and/or incorporate recesses to achieve partial reduction in depth, with a corresponding increase in unit length in order to maintain the appropriate floor area;

- Typical "through" units, which meet the BR209 (BRE) standard may perform poorly under the IS EN 17037 standard. Consequently the design of "through" units may be changed to increase their width, or alternatively they may be eliminated from the building design.

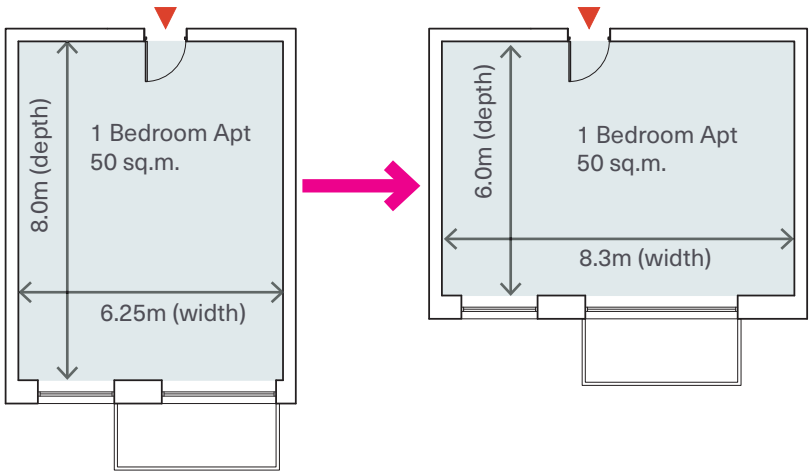

Diagram 2:
Typical single aspect 1 bedroom apartment, which would generally achieve compliance with BR209 (BRE) may change to a wider, shallower typology in order to achieve compliance with IS EN 17037

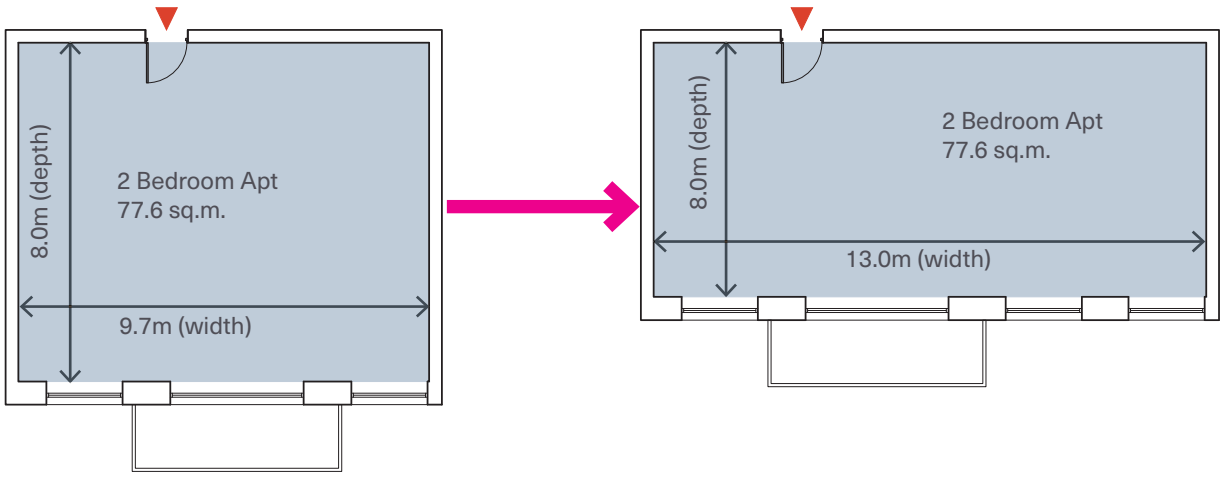

Diagram 3:
Typical single aspect 2 bedroom apartment, which would generally achieve compliance with BR209 (BRE) may change to a wider, shallower typology in order to achieve compliance with IS EN 17037

ALTERNATIVES CONSIDERED: THE BUILDING

POTENTIAL IMPACT ON BUILDING DESIGN IN RESPONSE TO IS EN 17037 STANDARD

The studies on this page demonstrate the potential impact that a reduction in unit depth and increase in unit width may have on building forms. We note that although this study is limited to a single building arrangement, the principles could be applied to alternative building arrangements:

- Diagram 1 is a typical apartment building with a unit depth of c. 8.0metres, which would generally achieve compliance with the BR209 (BRE) standards which have been in place to date. Minimum widths are matched with minimum areas, thereby optimising economy of building fabric, with good wall:floor and net:gross area ratios. This contributes to both sustainable use of zoned land and viable construction costs.

- Diagram 2 is an apartment building of the same overall length as in Diagram 1, but with reduced unit depth and/or reduced living room depth in order to achieve compliance with the IS EN 17037 standards. The reduced building and/or living room depth results in a reduction in unit numbers from Diagram 1 of c. 14.2%, and an increase in wall:floor ratio of c. 13%, which would effect both density and economic viability.

- Diagram 3 is an apartment building of the same overall length as in Diagram 1, but with reduced unit depth in order to achieve compliance with the IS EN 17037 standards. The reduced building depth results in a reduction in unit numbers from Diagram 1 of c. 28.4%, and an increase in wall:floor ratio of c. 10%, which would effect both density and economic viability.

In conclusion, the impact of the adoption of IS EN 17037 is likely to be significant changes to the depth and form of residential buildings, which are likely to have an adverse impact on density and economic viability of apartments.

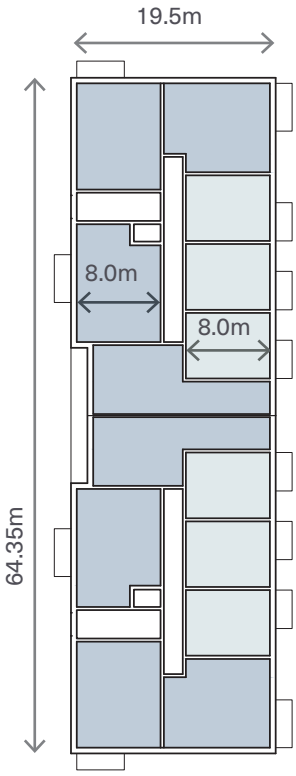

Diagram 4:
Typical Apartment Building with 8.0 metre deep unit types

No. of Units: 14
1 Bed: 6 no.
2 Bed: 8 no.
Dual Aspect Ratio: 42.8%
No. of Units per Core: 7
External Wall Area: 538.17 sq.m.
Wall to Floor Ratio: 0.47

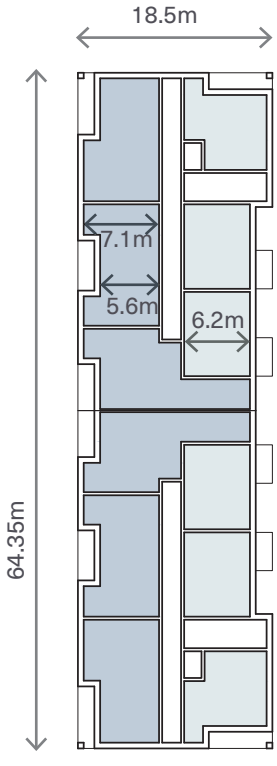

Diagram 5:
Apartment Building with c. 7.1-6.0 metre deep unit types

No. of Units: 12
1 Bed: 6 no.
2 Bed: 6 no.
Dual Aspect Ratio: 50%
No. of Units per Core: 6
External Wall Area: 581.49 sq.m.
Wall to Floor Ratio: 0.60

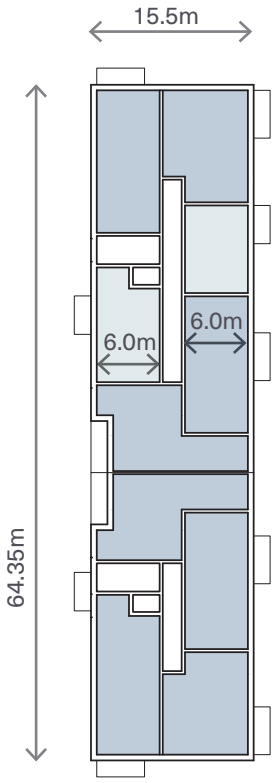

Diagram 6:
Apartment Building with c. 6.0 metre deep unit types

No. of Units: 10
1 Bed: 2 no.
2 Bed: 8 no.
Dual Aspect Ratio: 54.5%
No. of Units per Core: 4-6
External Wall Area: 512.9 sq.m.
Wall to Floor Ratio: 0.57

COMPENSATORY FACTORS: RESIDENTIAL DESIGN

Compensatory measures have been incorporated into the design of the proposed development, to offset any perceived daylight performance when the scheme is measured to the IS EN 17037 standard instead of the BR209 (BRE) standard. As per national planning policy, the local authority and/or An Bord Pleanala should apply their discretion, having regard to local factors including specific site constraints and the balancing of that assessment against the desirability of achieving wider planning objectives. Such objectives might include securing comprehensive urban regeneration and/or an effective urban design and streetscape solution.

RESIDENTIAL UNITS: SIZE

- Units are generously sized, being on average c. 11% above minimum required areas; This is double the requirement in Section 3.8 Safeguarding Higher Standards of the Design Standards for New Apartments 2020, which seeks >50% of all units to be 10% larger than the minimum requirement, i.e. on average 5% above minimum required areas.
- 58.7% of proposed residential units have internal floor areas that are 10% or more above the minimum required floor area.
- The Housing Quality Assessment demonstrates that all units are fully compliant with the standards, and the potential 5% reduction in room widths & sizes that is allowed by those guidelines has not been applied in any area of the proposed development;
- Private Amenity Spaces are generously sized, being on average c. 45% higher than the required minimum, demonstrating a generosity of provision throughout the scheme;
- 73.4% of proposed residential units have private amenity areas that are 10% or more above the minimum required private amenity area.
- Please refer to the schedule on the following page of this document which details these figures for each proposed building.

RESIDENTIAL UNITS: OTHER DESIGN FACTORS

- 50.7% of the proposed residential units are dual aspect, which is in excess of the minimum 33% requirement, and also in excess of the recommended 50% standard for locations such as Jacobs Island;
- All external windows in the proposed development are a minimum of 2.4metres high, with higher windows provided for in some ground floor areas which have higher floor to ceilings. The standard domestic window height of 2.1m has not been proposed in any buildings in the subject scheme;
- All units exceed the minimum floor to ceiling height of 2.4metres, with units on typical building levels generally having a floor to ceiling height of 2.55metres. The floor to ceiling height in ground floor units varies from 2.7metres to 3.7metres.

COMMUNAL AMENITIES:

- The proposed scheme incorporates a Internal Residents' Amenity area, which is located in Block 15. As the proposed scheme is designed as a Build-to-Sell scheme rather than Build-to-Rent, there is no requirement to provide this facility, so its provision will be a significant additional amenity for all residents. The proposed Internal Residents' Amenity area measures c. 575.9 sq.m., and will include a concierge service, management suits, coffee dock area, lounge, shared kitchen & dining, spaces for work, meetings and functions, and a gym. The internal spaces will also have direct access to generous outdoor areas. Please refer to the OMP drawings and design statement for further detail;
- The proposed scheme provides communal amenity space for each apartment building, in line with the 2018 Design Standards for New Apartments. The total area of external communal amenity space provided is 3,081 sq.m., which is in excess of the required area of 3,470 sq.m. Please refer to the OMP drawings and design statement for further detail;

PUBLIC OPEN SPACE:

- The proposed scheme incorporates high quality public open spaces, which are designed to make the most of the sites' locational attributes. The area of public open space that is proposed is 4,350 sq.m., which is in excess of the area that is required by the Cork City Development Plan, which is 10% of the net site area, or 3,550 sq.m.

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Project:	Jacob's Island Masterplan	**Proj. No.:**	1730D
Location:	Jacob's Island, Mahon, Cork	**Proj. Lead:**	SD
Client:	Hibernia Star Ltd.	**Created by:**	AB
Doc. Title:	GIA & Private Amenity Figures	**Doc. Purpose:**	For Information
Doc. No.:	1730D-OMP-00-ZZ-SA-A-0005	**Revision:**	P4 (22-06-2022)

GIA & Private Amenity Figures

BLOCK	NIA required	NIA proposed	Private amenity required	Private amenity proposed
11	6269.0m²	6952.0m² (+10.9%)	626.0m²	805.0m² (+12.8%)
13	2847.0m²	3176.0m² (+11.5%)	273.0m²	399.0m² (+14.6%)
14	7860.0m²	8788.7 m² (+11.8%)	791.0m²	1330.0m² (+16.8%)
15	13970.0m²	15443.5m² (+10.5%)	1384.0m²	1913.8m² (+13.8%)
TOTAL	**30946.0m²**	**34360.2m² (+11%)**	**3074.0m²**	**4447.8m² (+44.7%)**

BLOCK 11		**NIA**		**PRIVATE AMENITY**	
Level	**Units**	**> min. requirement**	**10% > min. requirement**	**> min. requirement**	**10% > min. requirement**
Level G1	4	4	3	4	4
Level G2	12	12	8	10	9
Level 01	19	19	13	15	13
Level 02	19	19	12	14	10
Level 03	19	19	12	15	10
Level 04	12	12	8	10	5
Level 05	12	12	8	9	4
Level 06	4	4	1	2	1
TOTAL	**101**	**101**	**65**	**79**	**56**
% OF BLOCK 11		**100.0%**	**64.4%**	**78.2%**	**55.4%**

BLOCK 13		**NIA**		**PRIVATE AMENITY**	
Level	**Units**	**> min. requirement**	**10% > min. requirement**	**> min. requirement**	**10% > min. requirement**
Level G3	4	4	3	4	4
Level 01	5	5	4	4	4
Level 02	5	5	4	4	4
Level 03	5	5	4	4	4
Level 04	5	5	4	4	4
Level 05	5	5	4	4	4
Level 06	5	5	4	4	4
Level 07	5	5	4	4	4
TOTAL	**39**	**39**	**31**	**32**	**32**
% OF BLOCK 13		**100.0%**	**79.5%**	**82.1%**	**82.1%**

BLOCK 14		**NIA**		**PRIVATE AMENITY**	
Level	**Units**	**> min. requirement**	**10% > min. requirement**	**> min. requirement**	**10% > min. requirement**
Level G1	11	11	3	11	11
Level 01	26	26	20	23	22
Level 02	26	26	20	21	17
Level 03	26	26	20	21	17
Level 04	21	21	15	16	12
Level 05	10	10	7	9	7
Level 06	10	10	7	8	6
TOTAL	**130**	**130**	**92**	**109**	**92**
% OF BLOCK 14		**100.0%**	**70.8%**	**83.8%**	**70.8%**

BLOCK 15		**NIA**		**PRIVATE AMENITY**	
Level	**Units**	**> min. requirement**	**10% > min. requirement**	**> min. requirement**	**10% > min. requirement**
Level G2	9	9	5	9	9
Level G3	30	30	16	27	26
Level 01	38	38	17	35	32
Level 02	38	38	17	35	31
Level 03	38	38	17	35	30
Level 04	32	32	15	29	25
Level 05	17	17	6	16	13
Level 06	17	17	6	16	13
TOTAL	219	219	99	202	179
% OF BLOCK 15		**100.0%**	**45.2%**	**92.2%**	**81.7%**
TOTAL	**489**	**489**	**287**	**422**	**359**
		100.0%	**58.7%**	**86.3%**	**73.4%**

Model No.: 1730D-OMP-00-ZZ-SA-A-0005

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Suitability-Checked by-Date

COMPENSATORY FACTORS: EXISTING AMENITIES

EXISTING PUBLIC OPEN SPACE AND AMENITIES:

Jacob's Island benefits from close proximity, and direct access to a generous number of amenities:

- The Lee to Sea network of Greenways, which are currently undergoing capacity and lighting upgrades. They provides direct connections for cyclists and pedestrians with key centres of employment in Mahon and Blackrock and beyond to the City Centre. The paths also connects to Rochestown and Passage West to the south.
    - Near the site, the River Lee / Lough Mahon Riverfront Greenway and the Passage West Greenway line Lough Mahon offer kilometres of paths, and expansive views of the water and the estuary.
    - To the north, the Passage Railway Greenway offers a direct route to Blackrock and the city centre beyond, in a sheltered, forested environment. This greenway is undergoing significant improvements in terms of amenities and connections to the surrounding areas. Planned works include a widening of the greenway, new lighting, new CCTV, resurfacing works, construction of two new ramps for better accessibility, and landscaping.
- The existing 18 acres Joe McHugh Park to the south encompasses paths, meadows, and wetland habitats, and covers a significant portion of Jacob's Island. This park is 2-3 minute walk away from the subject site.
- In Blackrock, 30min walk / 15 minutes cycle away, phase 1 of Cork's Marina Park was recently opened. Once completed, the 60 acres park will feature woodland, marshland, meadows, playgrounds, a heritage trail and water features wrapped around Páirc Uí Chaoimh. The recently opened phase 1 includes a central plaza and pavilion, sitting areas, expansive lawns and a water feature.

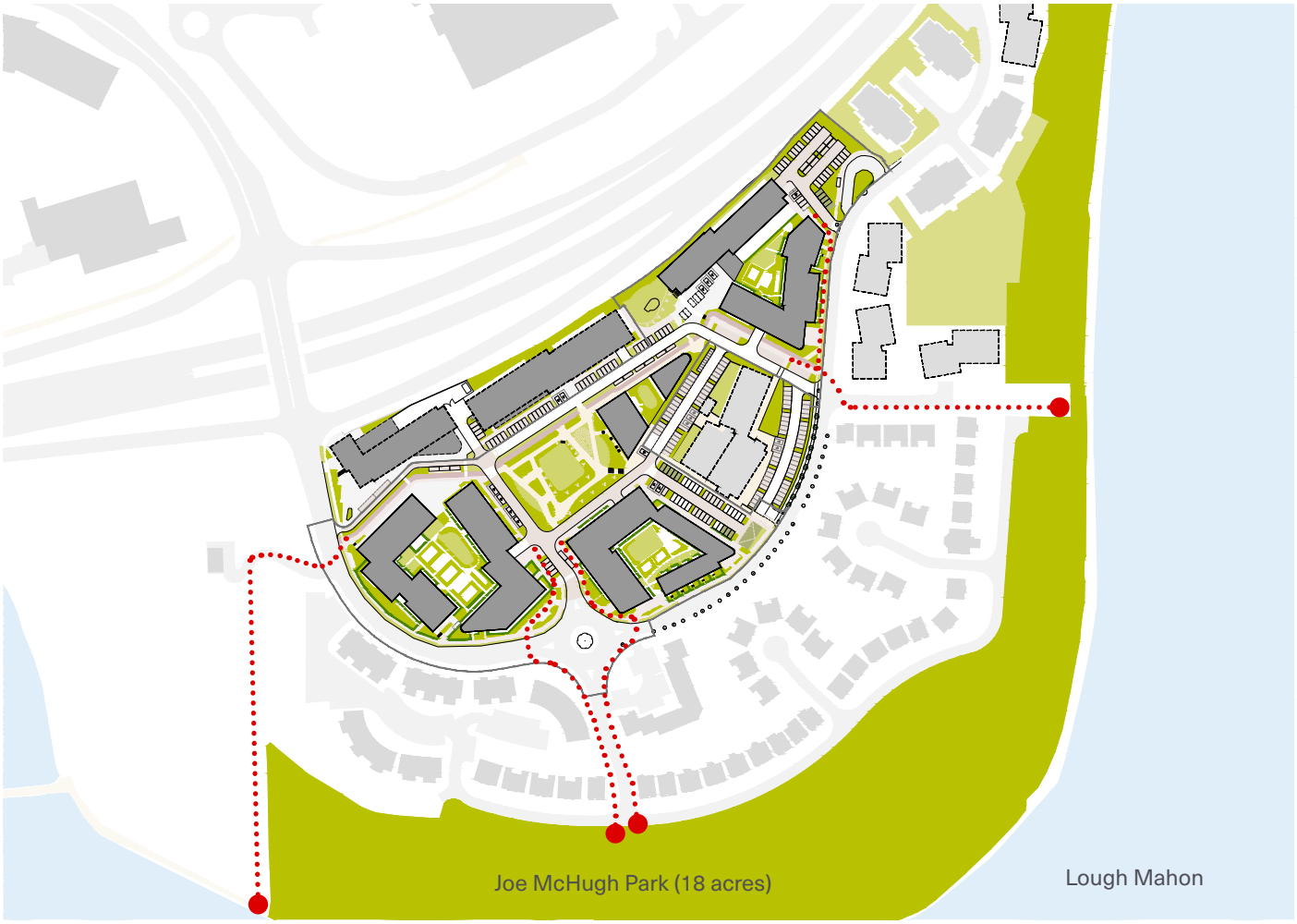

Diagram 7:
The subject scheme is within a 2-3 minute walk of Joe McHugh Park, a significant waterfront amenity

COMPENSATORY FACTORS: UNIT BY UNIT

ARC Architectural Consultants have tested the performance of a sample of the units in the subject scheme to the ISEN 17073 standard. Some of the tested units with the study sample do not meet the recommendations of IS EN 17073, and we have indicated in the table below the types of compensatory measures that apply to those units. Similar compensatory measures would apply to any units that are not within the study sample, which may not meet the recommendations of IS EN 17073.

Sunight & Daylight Compensatory Measures

				Compensatory Measure									
Unit address	Unit GIA (m^2)	ARC Report Zones	Unit floor area in excess of minimum standard	Private amenity area in excess of minimum standard	Unit has direct access to communal open space	Unit overlooks communal open space	Unit overlooks public open space	Own door access option	Floor to floor height in excess of 3.15m	View through to Lough Mahon	Dual Aspect Room	Dual Aspect Unit
B11 A G1 01	76.0	ZONE 6 & ZONE 7	/	/				/				
B11 B G1 01	60.0	ZONE 5	/	/				/			/	
B11 B G1 02	66.9	ZONE 3 & ZONE 4	/	/				/		/		
B11 B G1 03	54.4	ZONE 2	/	/				/				/
B11 C G2 01	76.0	ZONE 8	/	/								
B11 B G2 03	50.0	ZONE 10	/	/								
B11 B G2 05	50.0	ZONE 14	/	/								
B11 B G2 06	48.6	ZONE 12	/	/						/		
B11 A G2 02	50.0	ZONE 16	/	/								
B11 A G2 03	76.0	ZONE 15	/	/								
B11 C 01 02	76.0	ZONE 17	/	/								
B11 B 01 03	50.0	ZONE 20	/	/								
B11 B 01 09	48.6	ZONE 21	/	/						/		
B11 A 01 03	76.0	ZONE 24	/	/								
B11 A 01 04	81.0	ZONE 23 & ZONE 26	/	/	/	/						/
B11 B 01 04	81.6	ZONE 30 & ZONE 31	/	/		/						/
B11 B 01 05	58.5	ZONE 28 & ZONE 29	/	/	/	/						
B11 B 01 06	48.6	ZONE 27	/	/	/	/						
B13 A G3 03	77.6	ZONE 3	/	/			/					
B13 A G3 01	81.9	ZONE 6	/	/	/	/					/	
B14 A G1 01	81.1	ZONE 9	/	/				/	/		/	/
B14 D G1 01	45.3	ZONE 14	/	/				/	/			
B14 D G1 02	77.6	ZONE 12 & ZONE 13	/	/			/	/	/			
B14 D G1 03	79.5	ZONE 10 & ZONE 11	/	/			/	/	/			
B14 C G1 02	58.1	ZONE 16	/	/				/	/			
B14 A 01 05	80.9	ZONE 26	/	/			/					
B14 D 01 01	82.3	ZONE 30	/	/		/						/
B14 D 01 02	63.5	ZONE 28	/	/								
B14 C 01 06	80.8	ZONE 31	/	/	/	/	/					/
B14 A 02 04	80.9	ZONE 33	/	/		/	/					/
B15 C G2 01	48.6	ZONE 4	/	/				/	/			
B15 C G2 03	48.6	ZONE 1 & ZONE 2	/	/				/	/			
B15 B G2 01	50.0	ZONE 12	/	/				/				
B15 B G2 03	50.0	ZONE 9	/	/				/				
B15 B G2 04	77.6	ZONE 8	/	/				/				
B15 B G3 7	77.6	ZONE 13	/	/	/	/		/				/
B15 B G3 02	57.6	ZONE 17 & 18	/	/			/					
B15 B G3 03	50.0	ZONE 16	/	/			/					
B15 B G3 06	50.0	ZONE 14	/	/								
B15 B G3 04	50.0	ZONE 15	/	/								
B15 A G3 04	77.6	ZONE 20	/	/			/					
B15 A G3 05	58.4	ZONE 19	/	/			/					
B15 A G3 01	48.6	ZONE 22	/	/	/	/		/				
B15 A G3 08	76.1	ZONE 23	/	/	/	/		/				
B15 A G3 07	77.6	ZONE 24 & ZONE 25	/	/	/	/		/				
B15 B G3 11	79.6	ZONE 26 & ZONE 27	/	/	/	/		/				/
B15 B G3 10	77.6	ZONE 28	/	/	/	/		/				
B15 B G3 09	88.1	ZONE 29	/	/	/	/						/
B15 C G3 06	54.4	ZONE 31	/	/	/	/		/				
B15 D G3 02	53.6	ZONE 32 & ZONE 33	/	/	/	/		/				
B15 D G3 01	75.2	ZONE 34	/	/	/	/		/				/
B15 C G3 05	84.0	ZONE 36 & ZONE 37	/	/	/	/		/				/
B15 B 01 06	50.0	ZONE 40	/	/								
B15 B 01 04	50.0	ZONE 41	/	/								
B15 B 01 03	50.0	ZONE 42	/	/			/					
B15 A 01 04	77.6	ZONE 43	/	/			/					
B15 B 01 11	79.6	ZONE 44	/	/		/						/
B15 B 01 10	77.6	ZONE 45	/	/		/						
B15 D 01 01	71.7	ZONE 46	/	/		/						
B15 D 01 06	77.6	ZONE 47	/	/								

CONCLUSIONS

As per national planning policy, the local authority and/or An Bord Pleanala should apply their discretion, having regard to local factors including specific site constraints and the balancing of that assessment against the desirability of achieving wider planning objectives. Such objectives might include securing comprehensive urban regeneration and/or an effective urban design and streetscape solution:

- National Planning Framework : The scheme delivers on the key drivers of national policy – "compact urban development, on zoned, accessible lands".
- Urban Design and Building Height Guidelines: Paragraph 1.20 of the Urban Design and Building Height Guidelines states that: *"A key objective of the NPF is therefore to see that greatly increased levels of residential development in our urban centres and significant increases in the building heights and overall density of development is not only facilitated but actively sought out and brought forward by our planning processes and particularly so at local authority and An Bord Pleanála levels".*
- 2020 Design Standards for New Apartments : Paragraph 1.9 of the 2020 Design Standards for New Apartments states that: *"While a range of factors are key to increasing housing output generally and apartments specifically, such as securing development finance for residential development generally and a pipeline of ready to go sites at accessible prices, including brownfield sites, the purpose of this update of Guidance is to strike an effective regulatory balance in setting out planning guidance to achieve both high quality apartment development and a significantly increased overall level of apartment output".*
- IS EN 17037: The IS EN 17037 standards represent a 200% and 300% increase in the target levels of daylighting within living rooms and bedrooms respectively, when compared to the BR209 (BRE) standard . This is inconsistent with its contemporary sister document in the UK, and the impact of these increased standards has a material and significant impact on the potential densities achievable in developments and is thereby inconsistent with various national policies as noted above.

- **In terms of daylight access within the proposed development, the pass rate for BRE Guide 2011 (ADF) is 100% (of sample / whole scheme), and for BRE Guide 2022 (DF) is 95% for the sample and likely 99% for the whole scheme. As this study notes, full compliance with the IS EN 17073 standard would require significant changes to the design approach for single aspect units, which would be at the cost of both density and building economics, and would be in conflict with the various national policy documents listed above.**
- **The scheme is of excellent quality, and also includes compensatory design solutions, as referred to in this document. The design of the scheme integrates into the broader emerging residential neighbourhood in Jacobs Island and uses established urban design principles to create a hierarchy of avenues, streets, courts and lanes defined by urban blocks of varied massing and height, all contributing to a sense of place and assisting wayfinding.**

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