Project

Residential Development, Sheriff Street Upper and East Road, Dublin 1

Report Title

PARKING STRATEGY

Client Glenveagh Living Limited





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1.0 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 This Parking Strategy document has been prepared by DBFL Consulting Engineers (DBFL) in support of a planning application for a proposed residential development on a site which forms part of the Castleforbes Business Park, located on the eastern edge of Dublin City Centre. The subject site is currently occupied by the Castleforbes Industrial Estate, TAB Tyres & Batteries and Vernon Catering, amongst other businesses, with vehicular access provided directly from Sheriff Street Upper.
- 1.1.2 The proposed development comprises the following:
 - 702 no. Build-To-Rent residential units
 - 100 no. studio units
 - 406 no. 1 bed units
 - 169 no. 2 bed units
 - 15 no. 3 bed units
 - 8 no. duplex units
 - 4 no. Live/Work units
 - Retail 1,154.2 m²
 - Creche 469.6 m²
 - Cultural 2,859.5 m²
 - Tenant Amenity 1,263.9 m²
- 1.1.3 Furthermore, 179 no. car parking spaces and 1,392 no. cycle parking spaces (1,010 no. long term bicycle parking spaces, 30 no. disabled / cargo bicycle parking spaces and 352 no. short stay spaces) will be provided at basement and surface levels, while 7 no. on-street car parking spaces are provided over the SHD site extents along Sheriff Street Upper and 1 no. set down/loading area will also be available at surface level.
- 1.1.4 This document presents the rationale behind the identification of the quantum of vehicle parking (including mobility impaired parking, motorcycle parking, service vehicle parking) and cycle parking that is being proposed as part of the subject site development proposals. The document also sets out the management

measures that will be deployed to allocate the use and control of parking provided at the proposed development site.

- 1.1.5 This document will set out the principles of the parking management strategy proposed at the Castleforbes Road residential development and should be read in conjunction with the following complementary reports:
 - Traffic & Transport Assessment (TTA)
 - Mobility Management Plan (MMP)
- 1.1.6 The TTA and MMP set out the excellent alternative modes of travel which will be available to residents of the proposed development as well as providing details on existing conditions surrounding the site.

1.2 POLICY CONTEXT AND RELEVANT STANDARDS

DUBLIN CITY COUNCIL DEVELOPMENT PLAN 2016-2022

1.2.1 For the purposes of parking control, the Dublin City Council Development Plan 2016-2016 has divided the administrative area into 3 parking zones/areas. The subject development site is located within the area designated as Parking Zone 2 as shown in **Figure 1.1**.

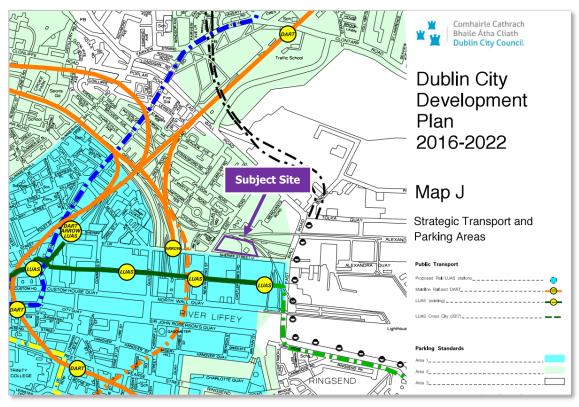


Figure 1.1: DCC Parking Standards Areas (extract Map J DCC Development Plan 2016-2022)

- 1.2.2 The development plan states 'Parking Zone 1 is generally within an inner city location where transport corridors intersect, or that has significant interchange potential. Parking Zone 2 occurs alongside transport corridors and the remainder of the city falls under Parking Zone 3.'
- 1.2.3 The proposed development is situated within DCC Parking Zone 2. With regards to the proposed development schedule the associated DCC Development Plan car parking requirements are outlined in **Table 1.1** below.

Land Use		DCC Develop (Zone		DHPLG Standards	
		Standards	Requirements		
	Apartments	1 space / unit	698	"minimised, substantially	
lai	Live/Work Units	1 space / unit ^A	4	reduced or wholly eliminated'	
Residential	Visitor Parking	None detailed ^B	-	" <i>it is necessary to ensure, where possible, the provision of an appropriate number of drop off, service, visitor parking spaces"</i>	
ercial	Retail	1 space / 100 m ²	12	N/A	
Commercial	Creche	1 per class	4	N/A	
		Total	718	-	
Sunn	ementary Notes				

Supplementary Notes;

A – Land use subcategory not specifically detailed in DCC Development Plan. Closest corresponding standard detailed.

B – The DCC Development Plan (2016-2022) does not currently state any specific standards for residential visitor parking however recent SHD practices have generally required that 10% of all on-site car parking is safeguarded for visitors.

Table 1.1: Development Vehicle Parking Requirements

1.2.4 According to the DCC Development Plan, based upon the subject development schedule, a maximum of 718 vehicle parking spaces would be permitted.

SUSTAINABLE URBAN HOUSING: DESIGN STANDARDS FOR NEW APARTMENTS GUIDELINES FOR PLANNING AUTHORITIES

1.2.5 This guideline document was produced by the Department of Housing, Planning and Local Government (DHPLG) and was updated with the latest version in March 2018. The purpose of this document is to set out standards for apartment

development, mainly in response to circumstances that had arisen whereby some local authority standards were at odds with national guidance.

- 1.2.6 With the demand for housing increasing, this means that there is a need for an absolute minimum of 275,000 new homes in Ireland's cities by 2040. It is therefore critical to ensure that apartment living is an increasingly attractive and desirable housing option for a range of household types and tenures.
- 1.2.7 These Guidelines apply to all housing developments that include apartments which may be made available for sale, whether for owner occupation or for individual lease. They also apply to housing developments that include apartments that are built specifically for rental purposes, whether as 'build to rent' or as 'shared accommodation'.
- 1.2.8 The quantum of car parking or the requirement for any such provision for apartment developments will vary, having regard to the types of location in cities and towns that may be suitable for apartment development, broadly based on proximity and accessibility criteria.
- 1.2.9 For all types of locations, where it is sought to eliminate or reduce car parking provision, it is still necessary to ensure an appropriate number of drop off, service, visitor and mobility impaired spaces are provided where possible. Provision is also to be made for alternative mobility solutions including facilities for car sharing club vehicles, cycle parking and secure cycle storage.
- 1.2.10 DBFL believe the parking provision for the proposed development should be provided in accordance with the DHPLG guidance for developments sited in *Central and/or Accessible Urban Locations*. These are developments which are larger in scale and higher density developments that are well served by public transport with the default policy for car parking provision to be "*minimised, substantially reduced or wholly eliminated*" in certain circumstances.

2.0 VEHICLE PARKING

2.1 OVERVIEW

2.1.1 The development proposals include a total provision of 179 no. car parking spaces located within a basement facility. The layout of the off street basement car park is illustrated in **Figure 2.1** below.



Figure 2.1: Vehicle Parking Proposals

2.1.2 The provision of the 179 car parking spaces on-site have been allocated as follows:

	Car Park 1	Car Park 2	Total
Standard Spaces	81	89	170
Accessible Spaces	4	5	9
Total	85	94	179

Table 2.1: Proposed Vehicle Parking Provision

Disabled Parking

2.1.3 It is proposed to provide 9 no. accessible parking spaces in the first instance. The linear nature of the basement car park layouts provides flexibility for the future provision of additional disabled spaces should the demand arise. The provision of 9 dedicated disabled parking bays conforms with DCC development management standards.

Residents Car Parking

2.1.4 The Castleforbes Development proposes 179 no. off-street car parking spaces for the residential element of the site. These spaces will be managed as described in Section 6.0 of this report.

Commercial Parking

2.1.5 No car parking is proposed to be assigned to the commercial (non-residential) aspects of the scheme proposals which include retail activity. It is noted however, that 7 no. on-street spaces will be provided along the site frontage along Sheriff Street Upper. Whilst these cannot be allocated to individual uses on-site, they will be publicly available and subject to a Pay & Display enforcement regime.

Visitor Car Parking Spaces

2.1.6 No visitor parking spaces will be provided given the site's proximity to public transport and surrounding off-street parking facilities. However, residents will be able to apply for a short term visitor's car parking permit as described in Section 6.0 of this report.

Car Share Parking Spaces (GoCar)

2.1.7 The building management company will engage with potential car share or car club operators (such as GoCar). As **Figure 2.2** shows, there are already several GoCar bases in the immediate vicinity of the Castleforbes Development.

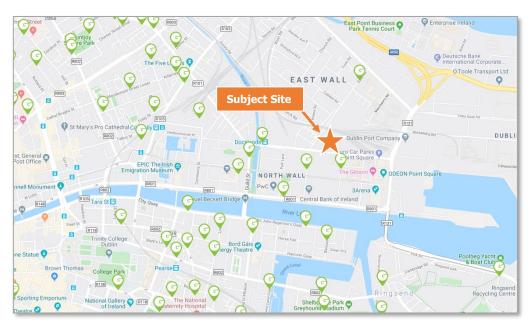


Figure 2.2: Existing GoCar On-Street Locations

- 2.1.8 Further provision of an additional base within the proposed development site will benefit residents of the Castleforbes Development in addition to enhancing access and availability of car sharing vehicles. A total of 3 no. dedicated car share parking spaces will be provided within the basement of the proposed development. These car share spaces will be located so as to ensure that they are highly accessible and visible to residents of the subject development.
- 2.1.9 The scheme will be managed by the appointed car sharing service, with all residents having the option to become members of the car share service. The proposed development's MMP will both encourage and facilitate residents to become members of this service.
- 2.1.10 On becoming members of schemes such as GoCar, residents can then book cars either online or via the app for as little as an hour, then unlock the vehicle with their phone. The keys are in the car, with fuel, insurance and city parking all included. The benefits of such car sharing services include:
 - reduction in the need to own a private motor vehicle;
 - the reduction of the number of cars on the road and therefore traffic congestion, noise and air pollution;
 - minimised demand for car parking and frees up land traditionally used for private parking spaces;
 - increased use of public transport, walking and cycling as the need for car ownership is reduced; and
 - car sharing allows those who cannot afford a car the opportunity to drive, thereby encouraging social inclusivity.
- 2.1.11 GoCar is Ireland's leading car sharing service with 40,000 members and over 600 cars and vans across 18 counties in Ireland. Each GoCar which is placed in a community has the potential to replace the journeys of up to 15 private cars. Accordingly, it could be argued that the provision of 3 dedicated on-site GoCar vehicles within the scheme's basement facility for the use of residents has the potential to negate the need for 45 private car parking spaces.

Electric Vehicle Parking

2.1.12 A total of 10% of the development's car parking provision will be fitted out with electric vehicle charging stations. This is equivalent to 18 No. spaces and is compliant with Dublin City Development Plan 2016-2022 Standards. The remaining on-site car parking will benefit from having the EV infrastructure implemented thereby enabling easy retro fitting of charge points in the future as and when they may be required.

Motorcycle Parking

2.1.13 The appropriate level of motorcycle parking provision for the proposed development will also be provided in accordance with Dublin City Council Development Plan requirements. The Development Plan States:-

'New developments shall include provision for motorcycle parking in designated, signposted areas at a rate of 4% of the number of car parking spaces provided.'

2.1.14 The subject development site provides 12 no. motorcycle parking spaces (3 no. in Car Park 1 and 9 no. in Car Park 2) and therefore exceeds the number (8 spaces) required under the Development Plan.

Service Vehicle Parking

- 2.1.15 In general, the commercial element of the development will generate greater servicing requirements. In order to facilitate these servicing activities, the development proposals include the provision of a loading bay on street on Sheriff Street Upper, located adjacent the proposed retail units.
- 2.1.16 Furthermore, access can be granted on a 'controlled' basis to the basement car park for servicing of the residential element of the development.

3.0 BUILD-TO-RENT RESIDENTIAL PARKING PROVISION

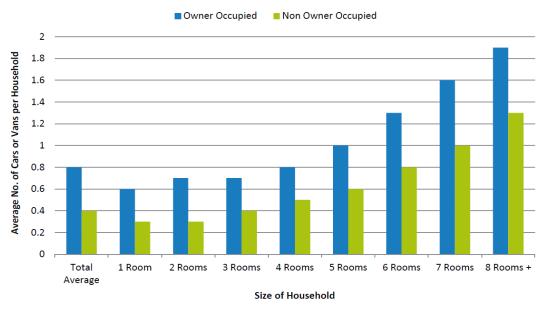
3.1 OVERVIEW

- 3.1.1 As mentioned in Section 1, DBFL believe the parking provision for the proposed residential element of the development should be provided in accordance with the Department of Housing, Planning and Local Government 'Sustainable Urban Housing: Design Standards for New Apartments' (SUHDS) guidance for developments situated in *Central and/or Accessible Urban Locations*. This is due to the excellent availability of travel alternatives such as public transport, walking and cycle links, and consequently the SUHDS guidance states that vehicle parking provided on site should be '*minimised, substantially reduced or wholly eliminated'*.
- 3.1.2 The proposed vehicle parking provision of 179 no. on-site car parking spaces for the residential units corresponds to an overall provision of 0.25 parking bays per each residential unit.
- 3.1.3 With the objective of establishing if this parking ratio (0.25/unit) would be appropriate to accommodate the likely demand generated for car parking at the subject Castleforbes Development site, DBFL have reviewed the following data sources with the objective of informing the identification of the proposed development parking strategy:-
 - Review of trends in BTR schemes in terms of demographics and car ownership;
 - Review of 2016 Census Data Car Ownership trends;
 - Review of 2016 Census Data Existing Modal Split trends;
 - Review of 2016 Census Data Property Rental trends;
 - Review of 2016 Census Data Age Demographics and Accommodation Type; and
 - Review of National Transport Authority– National Household Survey 2017.
- 3.1.4 It is an objective for this development to reduce the need for commuters to travel by car and instead to avail of more sustainable modes of travel in line with current and future travel requirements as set out in recent policy documents within Ireland.

It is noted that the concept for car parking reduction in apartments is relatively new in Ireland, and therefore, proposals to implement a more sustainable approach for car parking may take time.

3.2 BUILD TO RENT (BTR) SCHEMES

- 3.2.1 Although considered a relatively new feature within Ireland and the UK property market the Build to Rent (BTR) scheme is being increasingly recognised as an exciting opportunity for investors, local authorities and developers. Significant research has been undertaken, in particular within the UK, with regard to this emerging concept. The research affirms the value of BTR to the property industry as it seeks to accelerate new developments to help address the housing crisis whilst also delivering broader social and economic benefits to local communities.
- 3.2.2 By delivering high quality and well managed homes and creating new, sustainable communities, BTR will enhance the overall quality of housing and become woven into the residential landscape.
- 3.2.3 From a number of surveys undertaken in the UK regarding BTR schemes, the surveys suggest that the main age demographic interested in the BTR schemes are the 25 35 year age bracket. This is likely due to a number of factors including the difficulty of procuring a mortgage and getting on to the property ladder in this current property climate. Also a consideration for this is that renting properties tends to suit this age demographic as many people of this age may wish to move around and travel and may not wish to buy at that time.
- 3.2.4 The UK reference document 'Unlocking the Benefits and Potential of Build to Rent' identifies a link, from the UK Census 2011, between car ownership and the tenure of a residence, i.e. whether a resident is renting in the public domain or privately owns their residence. The graph in **Figure 3.1** shows that residents who own their residence are more likely to own a car than residents who rent their property. It shows that the total average of car ownership for privately owned residences is 0.8 cars per residential unit, this is compared with a car ownership of just 0.4 cars per residential unit for residences that are publicly rented. This suggests that car parking demand for the rental market may well be lower than traditional build to sell schemes.





3.3 CAR OWNERSHIP & USAGE

- 3.3.1 In order to determine an appropriate parking provision for the subject development the current demand for car parking within the surrounding area of the proposed development site was researched using the 2016 CSO data and in particular the level of current car ownership by reviewing the CSO small area maps.
- 3.3.2 Within the vicinity of the proposed development, there are several existing apartment blocks which are considered reflective of the type of development proposed in terms of accessibility to sustainable modes including the Luas Red Line. Therefore, an analysis was undertaken comparing travel patterns and car ownership levels for those apartment blocks similar to that of the proposed development. A total of 15 small areas were assessed, as detailed in **Figure 3.2**.

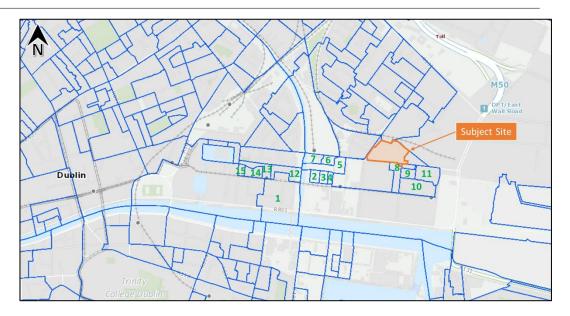


Figure 3.2: 2016 CSO Small Areas containing apartments close to proposed site

3.3.3 A total of 1,448 units were included in this assessment, with CSO data for households not owning a car in each of these areas presented in **Table 3.1** below.

Small Area	No. Apts	No. Houses	No. Households with No Car	% of Households with No Car	Equivalent Rate of Parking Required (Space/Unit)
1	141	-	93	66%	0.34
2	65	-	36	55%	0.45
3	70	-	40	57%	0.43
4	41	-	22	54%	0.46
5	85	-	52	61%	0.39
6	73	-	43	59%	0.41
7	80	-	41	51%	0.49
8	120	2	59	49%	0.51
9	108	-	55	51%	0.49
10	190	3	77	41%	0.59
11	86	-	46	53%	0.47
12	151	-	95	63%	0.37
13	100	-	55	55%	0.45
14	82	-	54	66%	0.34
15	51	-	29	57%	0.43
			Average	56%	0.44

Table 3.1: 2016 CSO Car Ownership Data

3.3.4 **Table 3.1** highlights that the level of households that do not own a car within each small area varies between 41% in Area 10 up to 66% in both Area 1 and Area 14. The level of car parking required within these locations would be, on average, 0.44 spaces per unit.

- 3.3.5 It should also be considered that whilst some households own a car, they may not avail of their car for commuting purposes and may use their vehicle infrequently. Using a vehicle for commuting purposes could also be hindered by a commuter's destination, for example, if their place of work has restricted car parking allocation in force.
- 3.3.6 Therefore, in order to assess the level of daily use for commuters who drive their vehicle to work, the 2016 CSO data was again reviewed for the modal split for people travelling to work, school or college. This was assessed for the same 15 small areas as previously analysed. The results of this assessment are detailed in Table 3.2.

Small Area	No. Commuters	% Households with No Car	No. Commuters that Drive	% Commuters that Drive
1	385	66%	13	3%
2	109	55%	11	10%
3	117	57%	8	7%
4	70	54%	10	14%
5	134	61%	9	7%
6	128	59%	13	10%
7	133	51%	11	8%
8	240	49%	23	10%
9	187	51%	17	9%
10	347	41%	36	10%
11	163	53%	11	7%
12	258	63%	21	8%
13	192	55%	14	7%
14	145	66%	4	3%
15	83	57%	10	12%
			Average	8%

Table 3.2: 2016 CSO Data – Percentage of Commuters that use their Vehicle.

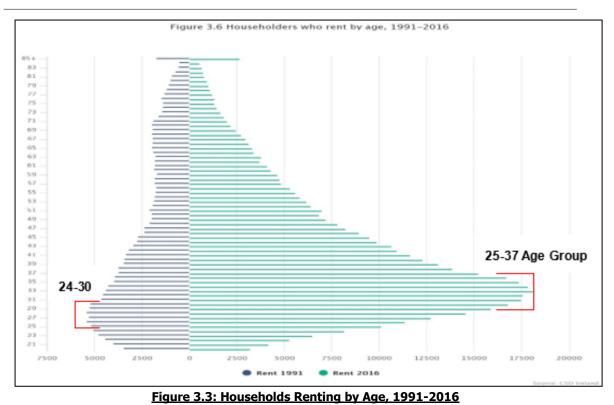
- 3.3.7 Table 3.2 outlines that although car ownership across these small areas is at an average 56%, the percentage of commuters that use their vehicle to drive to work, college or school is significantly lower at an average of 8% over all areas assessed. This indicates that although commuters may own vehicles within these areas, a very high proportion of them avail of other, more sustainable, modes of travel for commuting purposes.
- 3.3.8 In summary, existing levels of car ownership and usage indicate a very strong trend towards the use of sustainable travel modes by residents of surrounding apartment developments in the area. The site's excellent public transport accessibility levels mean that there are viable sustainable travel alternatives

provided for residents. Consequently, the demand for using private cars is significantly reduced and the corresponding requirement for car parking demand is also substantially minimised.

3.3.9 The use of sustainable modes of transport at the subject Castleforbes Development will be further encouraged and supported through the measures and initiatives set out in the Mobility Management Plan (MMP) which has been produced for the development and should be read in conjunction with this report.

3.4 PROPERTY RENTAL TREND

- 3.4.1 The Census of Population 2016- Profile 1 Housing in Ireland shows that Rented accommodation has continued its upward trend with 497,111 households renting. This is approaching the half million mark which is an increase of 4.7% from the 2011 Census.
- 3.4.2 This is likely due to a number of factors including the difficulty of procuring a mortgage and getting on to the property ladder in this current property climate. Also, it is considered that renting properties tends to suit a younger age demographic as many people of this age may wish to move around and travel and may not wish to buy at that time. **Figure 3.3** below illustrates Census data of Householders who rent by age dating from 1991-2016.



3.4.3 The main age demographic of households renting in Ireland in 2016 was 25-37. This is compared with the 1991 age demographics of 24-30 year old demographic renting.

3.5 PROPERTY OWNERSHIP TREND

- 3.5.1 The Central Statistics Office (CSO) data was reviewed to establish home ownership by age group. **Figure 3.4** below is CSO "*Tenure Status by Age of Householder, 2016*" which illustrates the changing tenure status according to the age of the head of household in 2016.
- 3.5.2 CSO data shows that home ownership rises quickly among householders from age 32 onwards and continues to climb at a steady pace until reaching a plateau of close to 90 per cent near age 70. The point at which two-thirds of householders owned their own homes (with or without a loan) occurred at age 41 in 2016. This home ownership trend has coincided with a significant increase in the young age population who are in rented accommodation in 2016. There is a large demand for housing, an absolute minimum of 275,000 new homes in Ireland's cities are required by 2040 (as per SUHDS 2018).

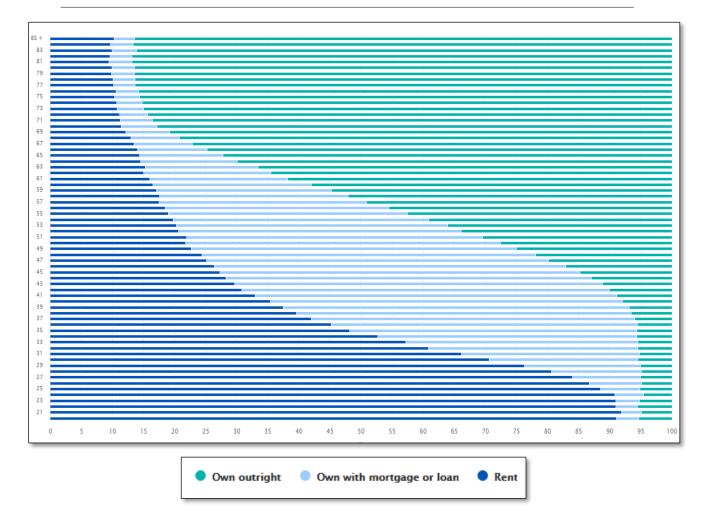


Figure 3.4: Tenure Status by Age of Householder, 2016 (Source: CSO Ireland)

3.6 AGE DEMOGRAPHIC AND TYPE OF ACCOMMODATION

- 3.6.1 Considering the type of development proposed, i.e. a Build to Rent scheme, as well as the type of demand that these developments tend to attract (25- 35 years old tenants), it was considered necessary to establish the general age demographic for rental properties within the area surrounding the proposed development site.
- 3.6.2 The overall age profile for the same 15 CSO Small Areas as previously discussed, were assessed and are outlined in the **Figure 3.5** below. The results indicate that there is a young age demographic within these areas with the highest number of residents within the 25-29 age bracket followed by the 30-34 age profile.



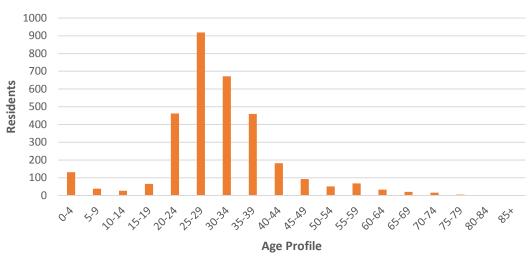
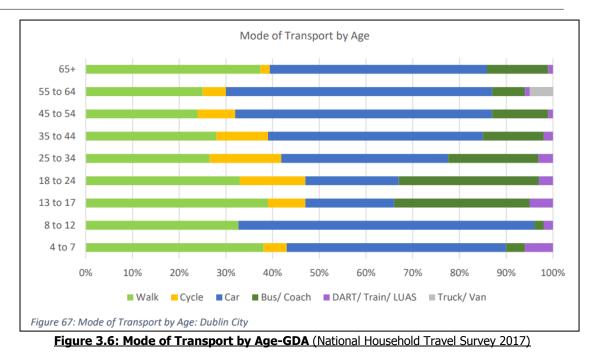


Figure 3.5: CSO 2016 Age Profile for Small Areas

3.7 NATIONAL HOUSEHOLD SURVEY 2017

- 3.7.1 The National Transport Authority (NTA) has undertaken National Household Travel Survey (2017) which is a representative study of Ireland's travel habits. The main aim of this study is to obtain accurate data describing the typical travel habits of the representative sample of the Irish population throughout the week, across all regions of the country and including number of trips made daily, the mode and time of travel, the distance travelled and the journey purpose.
- 3.7.2 This intensive study reveals that within the Dublin City region, there is an upsurge in cycling for the 18-34-year age group which indicates that cycling is a more popular mode of transport for this age group with approximately 15% modal share. Walking is also popular mode of transport for the same age group with approximately 30% modal share. The study also reveals that travel by car is about 0.34 for the 25-34-year age group. This has a strong correlation with the CSO data analysis for car usage and age demographics which indicated that the main age group in the Castleforbes area is 25-34.
- 3.7.3 **Figure 3.6** below illustrates Mode of Transport by Age within Dublin City Region.



3.7.4 Similarly, the proposed parking of 0.25 per BTR unit, is deemed appropriate considering access to sustainable modes of travel in the area. Further, provisions made in this subject development such as an excess in the provision of cycle parking, GoCar availability within the subject site, Parking Management and an MMP to govern the development when operated, all contribute to the suitability of the 0.25 per BTR unit parking proposal.

4.0 CYCLE PARKING

4.1 OVERVIEW

4.1.1 The appropriate level of cycle parking provision for the proposed development will be provided in reference to both (i) the Dublin City Council requirements; and (ii) the DHPLG guidelines. The DCC cycle parking standards and resulting requirements are detailed in **Table 4.1** and **Table 4.2** below:

	Land Use	DCC St	DCC Standards		DHPLG Standards	
	Lanu Ose	Short Term Long Term		Short Term Long Ter		
Residential	Apartments	-	1 / unit	1 / 2 units	1 / bed	
Resid	Live/Work Units	-	1 / unit	1 / 2 units	i / beu	
iercial	Retail	-	1 / 150 m²	N/A	NI/A	
Commercial	Creche	-	1 / 3 children	N/A	N/A	

Table 4.1: Cycle Parking Standards

Lanu Use			tandards	Stan	dards	Bicycle	osed Parking
Land Use		Short Term	Long Term	Short Term	Long Term	Short Term	Long Term
Apartments	698	-	698	254	011		
Live/Work Units	4	-	4	351	911		
Retail	1154m ²	-	8			352	1040
Creche	469.6m ²	-	20	-			
Sub Total			730	351	911	352	1040
	7	'30	1,	262	1,3	92	
	Live/Work Units Retail Creche	Live/Work Units 4 Retail 1154m ² Creche 469.6m ² UTotal	Apartments698-Live/Work Units4-Retail1154m²-Creche469.6m²-Lib Total-Total7	Apartments698-698Live/Work Units4-4Retail1154m²-8Creche469.6m²-20Total-730	Apartments 698 \cdot 698 $_{351}$ Live/Work Units 4 $ 4$ $-$ Retail $1154m^2$ $ 8$ $_{-}$ Creche $469.6m^2$ $ 20$ $-$ Total $ 730$ 351	Apartments 698 \cdot 698 $_{351}$ $_{911}$ Live/Work Units 4 \cdot 4 4 911 Retail $1154m^2$ \cdot 88 $_{-}$ $_{-}$ Creche $469.6m^2$ \cdot 20 $ -$ Total $ 730$ 351 911	Apartments 698 \cdot 698 $_{351}$ $_{911}$ $_{41}$ Live/Work Units 4 \cdot 4 2 2 2 2 2 3

Table 4.2: Cycle Parking Requirements Provision

4.1.2 In reference to **Table 4.2** above, the proposals include the provision of a total of 1010 no. long term bicycle parking spaces and 30 no. disabled / cargo bicycle parking spaces at basement level and 352 no. short stay visitor spaces at surface level within the subject Castleforbes Development.

- 4.1.3 The DCC bicycle parking standards (2018) are considered to be 'minimum' standards, whereas the DHPLG requirements are considered to be the preferred level of provision in situations where on-site car parking has been substantially or completely removed as permitted in certain situations by the corresponding DHPLG car parking guidance.
- 4.1.4 The level of bicycle parking proposed on-site for the apartment units has been provided in the context that the development car parking proposals are 75% below that required by the DCC Development Plan standards (e.g. 179 spaces opposed to 718 spaces).
- 4.1.5 Accordingly, the design approach in regard to the provision of bicycle parking onsite has been developed with consideration of the site's accessibility characteristics (including the significantly reduced car parking provision), to provide what is considered to be an appropriate number of bicycle parking opportunities on-site which is above both the DCC cycle parking standards and the '*maximum*' DHPLG requirements.
- 4.1.6 Consequently, the proposed on-site bicycle parking provision of 1,392 spaces (including short and long-term parking spaces) is approximately 90% more than the 730 bicycle parking spaces required by the DCC development management standards. The locations of the basement cycle parking spaces are shown in Figure 4.1 and the surface level bicycle parking spaces in Figure 4.2.

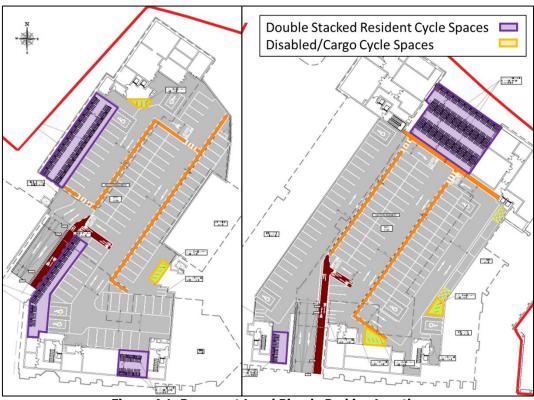


Figure 4.1: Basement Level Bicycle Parking Locations

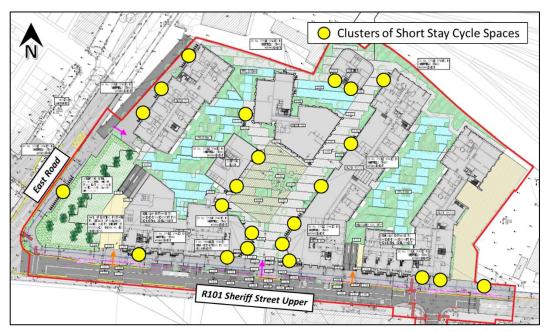


Figure 4.2: Surface Level Bicycle Parking Locations

5.0 INITIATIVES FOR SUSTAINABLE TRAVEL

5.1 OVERVIEW

- 5.1.1 It is acknowledged that residents may require a vehicle of some sort for purposes other than commuting on an everyday basis and simply reducing car parking would not be realistic without implementing alternative measures to accommodate residents and visitors alike. Therefore, the following alternative arrangements are proposed in support of the reduced car parking and car ownership levels within the development:
 - Car Club (GoCar);
 - Mobility Management Plan (MMP);
 - Increased Cycle Parking (Including Initiatives such a Bleeper Bike); and
 - Parking Management.

Car Club

5.1.2 As noted previously in Section 2.0, it is proposed to provide 3 no. dedicated car share parking spaces. A car club will provide residents with quick and easy access to a vehicle for short term hire. Well-established and successful car club operators, such as GoCar, are recommended in recent developments where car parking is reduced. A recent survey undertaken by GoCar indicated that the main uses of the service was for day trips, family trips and big shopping trips. The survey also highlighted that the average use of a car was for 1 hour a day.

Mobility Management Plan

5.1.3 An outline Mobility Management Plan (MMP) has been prepared, within a separate document, and should be read in conjunction with this document. The MMP will be developed further at the operational stage by the development management company.

Increased Cycle Parking

5.1.4 Increasing cycle parking is an alternative measure when reducing car parking spaces. A total of 1,010 no. long stay cycle parking spaces are proposed for this development, in addition to 30 no. disabled / cargo cycle parking spaces. With 702 Build-To-Rent residential units being proposed, this equates to approximately 1.48 cycle spaces per unit. This provision is in excess of both the Dublin City

Council requirement of 702 spaces (1 space per residential unit) and the DHPLG guidelines of 911 spaces (1 space per bed).

5.1.5 Although a sufficient level of cycle parking is being proposed within the development, additional bicycle parking will be considered for the use of the relatively new 'BLEEPER bike' scheme. This scheme allows for a stationless bike sharing and does not require custom built docking bays. The scheme uses a phone application, where bikes can be picked up and left anywhere that traditional bike parking is permitted.

Parking Management Strategy

5.1.6 A key component in the continued efficiency of on-site car parking is an active and enforced parking management strategy. This strategy will be managed by the development management company and specific details of these proposals are provided in Section 6.0 of this report.

6.0 MANAGEMENT OF ON-SITE PARKING FACILITIES

6.1 INTRODUCTION

- 6.1.1 A key component in the effective operation of on–site car parking is an active and enforced parking management strategy. This strategy will be implemented by the management company who will be responsible for the control of parking and access within the internal basement parking area as well as the allocation of the parking spaces.
- 6.1.2 It is intended that the proposed development will be 'Car-Lite'. Consequently, all marketing material for the development will make it clear that the Castleforbes Development operates 'Car-Lite' approach to parking and that the ownership or signing of a rental agreement for a residential apartment will <u>NOT</u> include access to a designated on-site parking space.
- 6.1.3 Accordingly, the proposed developments on-site car parking spaces will remain within the control of the appointed management company. A management regime will be implemented by the development's management company to control access to these on-site apartment car parking bays thereby actively managing the availability of on-site car parking for each of the following user profiles;
 - Residents of the proposed development,
 - Staff based at the proposed development (retail, creche etc), and
 - Visitors / customers to the residential and non-residential activities on site.

6.2 CAR PARKING ALLOCATION

- 6.2.1 As introduced above, all prospective residents will be notified that the proposed scheme is a 'low car allocation' or 'Car Lite' development with **no guarantee of** access to the on-site residents' car parking provision.
- 6.2.2 Nevertheless, all residents of the proposed residential development apartment scheme will have the opportunity to apply to the on-site management company for both a:
 - Residents car parking permit (updated weekly, fortnightly, monthly, quarterly or annually) and subsequently access to a dedicated (assigned) on-site basement car park space or

- (ii) A visitor's car parking permit for a short period of time.
- 6.2.3 The building management team will be responsible for the day-to-day management of car parking operations. Residents who request a private car parking space will be allocated on a 'first come, first served' basis.
- 6.2.4 A charge will be applied to obtain a permit with the objective of covering the associated management costs, discouraging long term usage of the car parking space and encouraging travel by sustainable modes of travels.
- 6.2.5 This relatively short monthly rental period (which can be continued as a rolling contract) and the limited number of spaces will ensure that residents are only assigned a space when one becomes available from time to time, thereby underpinning the 'Car Lite' ethos of the development.

6.3 CAR PARKING ACCESS

- 6.3.1 Access to the basement parking area will be controlled by a combination of barriers and shutters to ensure unpermitted vehicles cannot gain entry. The barrier will be located on the basement ramp, set back a sufficient distance to ensure queued vehicles do not obstruct either the footpath or carriageway.
- 6.3.2 Access for this area will be facilitated by coded entry and/or Automatic Number Plate Recognition (ANPR) system which will permit only registered vehicles to enter. A clamping enforcement regime will also be in place within the site to ensure that parking restrictions are adhered to.

6.4 ON-STREET PARKING

- 6.4.1 On-street parking enforcement will continue to be managed by Dublin City Council's parking enforcement system. The car parking management regime in place at the Castleforbes Development will ensure that the risk of any overspill car parking on the surrounding streets is minimised.
- 6.4.2 On-street parking will continue to be subject to a Pay & Display system (with hourly charges) as is currently the case. This will seek to discourage parking of more than 3 hours duration during the day thereby ensuring the spaces remain available for the intended user and also discourage commuter parking by either staff based on-site or other individuals working at nearby locations.

7.0 CONCLUSION

7.1.1 Based upon the information detailed within this Parking Strategy Report it is considered that the car parking provision at the Castleforbes development is sufficient given the ample number of cycle parking spaces available at the development and the development's BTR nature. The subject site is ideally located for the use of sustainable modes of transport, with various high frequency services operating in the vicinity of the proposed development.