

**Windmill, Porterstown, Clonsilla,
Dublin 15**

**Transport Statement & Mobility
Management Plan**

3 October 2019



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Extent of Inspections

Where this Report is in connection with an inspection, note that we did not examine parts of the property/site/building which were covered, unexposed or inaccessible and we are therefore unable to report that any such part is free from defect. It should be assumed that no opening-up works, sampling, testing of materials, testing of drains or other underground services was carried out, except as explicitly stated within this Report. Any inspection was therefore of a superficial nature only.

Third Parties

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Exclusions

This Report specifically excludes the following areas (unless explicitly noted otherwise herein):- Mechanical and Electrical Services, Architectural Matters (such as weathering, insulation, waterproofing, dpc, dpm etc.), Planning Issues, Fire Safety Issues, Asbestos, Health & Safety Issues, Property Valuations.

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1.0. INTRODUCTION

1.1. This Transport Statement & Mobility Management Plan has been prepared as an accompaniment to the residential development planning application for 211no. apartment units, a communal amenity space, access routes and all associated site development works at Windmill, Porterstown, Clonsilla, Dublin 15.

1.2. Site Location

The site is located within the unfinished residential development known as Windmill at Porterstown, Clonsilla, Dublin 15. The site is bound to the south by the Royal Canal, to the north by St. Mochta's Estate, to the east by Stationcourt Park residential development and to the west by Diswellstown Road.

1.3. Site Description

The site which is subject to development lies adjacent to 5no. completed and occupied apartment blocks and 6no. completed and occupied duplex blocks. A partially completed basement is located beneath some of the existing apartments and will also be located under part of the proposed development.

1.4. Proposed Development

The proposed development relates to the provision of 211no. apartments in four no. blocks (Block J, K, L and M), comprising of 10 no. studio units, 68no. 1 bed units and 133no. 2 bed units, above an existing basement. Block J is a six storey block, including a penthouse level, containing 46no. apartments. Block K is a six storey block, including a penthouse level, containing 46no. apartments. Block L and M is an interlinked L-Shaped part six and part eight storey block, including a penthouse level, containing 119no. apartments. A communal amenity space is proposed at ground floor level of Block L-M. The scheme includes public and communal open space, car and cycle parking, bin storage and all associated development on an application site area of c. 3.73 hectares.

For general arrangement layout please refer to 2HQ drawing no. 18-178-P001.

1.5. Background of Report

This report describes the traffic and transportation related matters for the development. An assessment of the impact of the proposed development on the existing road network has been submitted under separate cover.

This report assesses both the constructed and the proposed development in terms of accessibility by all modes of transport and makes recommendations that will affect travel behaviour and make it easier for residents and visitors to travel by public transport, cycling and walking, thereby reducing the need for car use.

1.6. Structure of Report

This Transport Statement & Mobility Management Plan provides a review of the existing and proposed transport options at the site of the proposed development. It is intended that this report will provide direction on ways to encourage greater use of public transport, walking and cycling.

This mobility management plan analyses the following principal sections:

- Existing transport infrastructure available near to the site;
- Proposed road, cycle and pedestrian infrastructure within the development;
- Recommendations for the Management Company to encourage greater use of more sustainable modes of transport to/from the development.

2.0. EXISTING TRANSPORTATION INFRASTRUCTURE

2.1. Road Network

The site is bound by the Clonsilla Road to the north, the Diswellstown Road to the west, the Royal Canal and Dublin - Maynooth Rail to the south and Stationcourt Way to the east. The area includes 3no. large residential developments - St Mochta's, Stationcourt and Windmill Square, with an overall total of approximately 500no. existing residential units within the area. The subject site remains the only undeveloped portion of these lands.

The location of the site relative to the larger area is shown on Figure 2.1 below.

Vehicular Access to / from the development shall be via Windmill Court and Stationcourt Way along the east side of the site. No new road sections are required external to the site. Stationcourt Way links onto the Clonsilla Road to the north east corner of the site and forms a 4-leg traffic-controlled junction with Clonsilla Road and the Coolmine Industrial Estate Road. A view of this junction is shown on Figure 2.2.

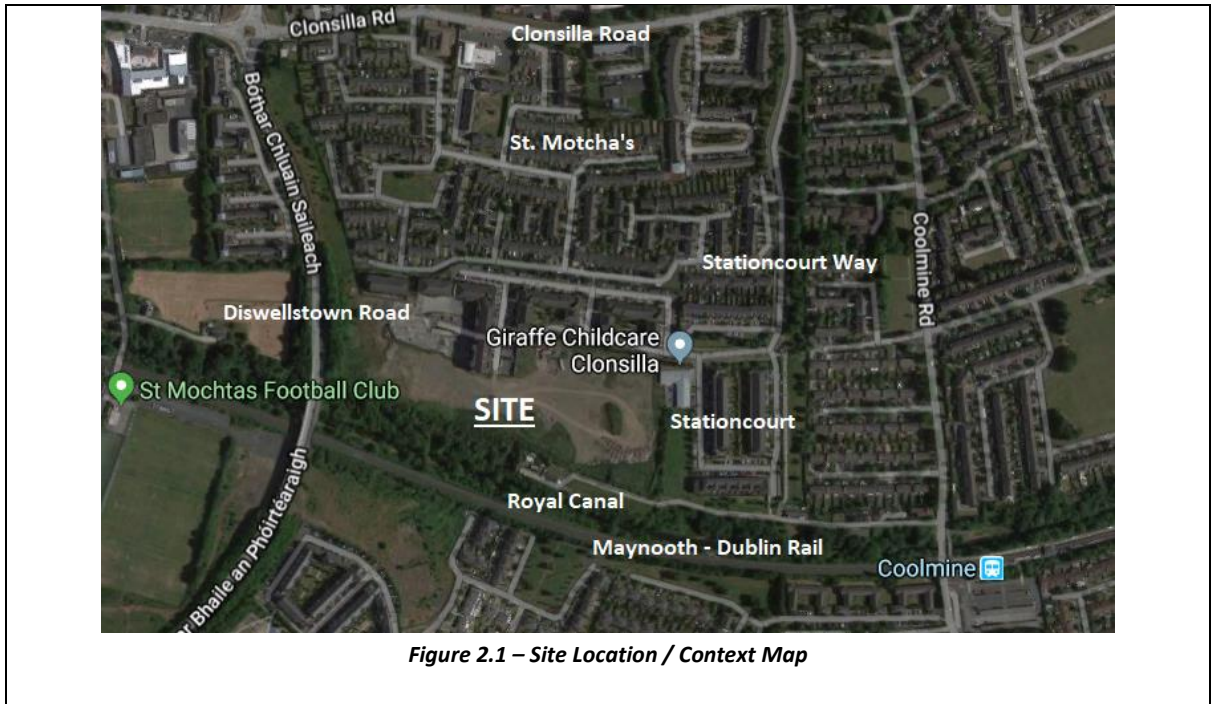


Figure 2.1 – Site Location / Context Map

Stationcourt Way is a well-designed Urban Link Road with no on-street development and which provides segregated facilities for pedestrians and cyclist. A view of the road is shown on Figure 2.3. Clonsilla Road runs in an east-west direction and provides linkage to Blanchardstown and the N3/M50 to the east and Clonsilla to the west. The road is a clearway with no on-site parking and includes provision for right turn lanes onto side roads.

The Coolmine Industrial Estate Road is another well designed Urban Link Road with no direct on-street development and segregated facilities for cyclists and pedestrians. The Clonsilla Road and Coolmine Industrial Estate Road offer linkage onto a number of Urban Arterial Roads including the N3 to the east, the Snugboro Road (R843) to the north and the Diswellstown Road and R121 to the west.



Figure 2.2 – View of Stationcourt Way (looking south from Clonsilla Road)





*Figure 2.3 – View of Clonsilla Road / Stationcourt Way / Coolmine Industrial Estate Junction
(westbound approach on Clonsilla Road)*

The site is therefore located within an area with a well-developed and integrated road infrastructure, with the grid configuration allowing for a quick dispersal of any generated traffic in all directions, without an over reliance on a single road link.

2.2. Pedestrian and Cyclist Accessibility

The proposed development will be fully accessible for pedestrians, cyclist and the mobility impaired and disabled. The internal layout of the site is set up to provide pedestrian and cyclist connectivity between apartment blocks, parking facilities, open spaces and key areas in the surrounds, such as the Coolmine Rail Station.

The surrounding roads have adequate footpath widths on both sides and suitable crossing facilities at junctions, providing decent pedestrian connectivity between the development site and the surrounds.

In terms of cyclist accessibility, a segregated cycle path is currently provided along Stationcourt Way. No cycle facilities are provided along Clonsilla Road or Coolmine Industrial Estate Road, however, planned upgrade works in the vicinity of the site include the construction of secondary level cycle routes along Clonsilla Road, along the north side of the Royal Canal to the immediate south-west of the subject site, and along the Coolmine Road.

2.3. Public Transport Accessibility

2.3.1 Rail Services

The Coolmine Rail Station is located c. 550m to the south east of the subject site and is currently accessible through Stationcourt Park residential development. There is a direct and long-established pedestrian route between the subject site and Coolmine Station via Sheepmoor Lane, which will be opened up as part of this scheme.

Coolmine Station is served by the Western Commuter Service. The service offers frequent peak hour services between Maynooth and Dublin City Centre, running at about 20-minute intervals in each direction in peak times. Coolmine Station was recently upgraded to accommodate the eight car trains now used on the Arrow Route.

A cornerstone project of the NTA Transport Strategy for the Greater Dublin Area 2016-2035 is the DART expansion programme which will see the DART system expanded, providing fast, high-frequency electrified services to Maynooth.

The DART Expansion Programme also incorporates the removal of existing level crossings and the DART Underground Project, which is an underground rail link through the City Centre, enabling passengers to connect with DART services on the other three rail lines and facilitating a Maynooth – Bray dart route. This project shall place Coolmine Station on a high frequency electrified service to/from the city centre.

A further rail proposal is the Light Rail Corridor. The identified corridor for this line runs to the immediate west of the subject site and the Fingal Development Plan 2017-2023 reserves these lands for the purpose of a future light rail line. It is noted that the preliminary proposal provides for 2no. stations located in close proximity to the subject site (Porterstown and Millennium Park). The proposed development has been designed to ensure the light rail corridor is reserved to the west of the proposed scheme.

2.3.2 Bus Services

The following bus services are in operation within the vicinity of the site:

- Clonsilla Road, to the north of the site, is serviced by the No. 39 Dublin Bus service which travels between Ranelagh and Ongar via the city centre. Services are approximately every 20 minutes in the AM and PM.
- Clonsilla Road is also serviced by the No. 220 Dublin Bus service which travels between Ballymun and Lady's Well Road, Mulhuddart. Services are infrequent.
- Diswellstown Road to the west of the site is serviced by the No. 37 Dublin Bus service which travels between Ranelagh and Blanchardstown via the city centre. A new pathway to the north-west of the site will directly connect the development to Diswellstown Road. Services are approximately every 20 minutes in the PM and AM.
- Coolmine Station is served by the No. 239 Dublin Bus Service which travels between the Blanchardstown and Liffey Valley Shopping Centres via Clonsilla Road. Services are hourly.

The NTA Transport Strategy for the Greater Dublin Area 2016-2035 includes wide ranging proposals to improve the bus service and form the Core Bus Network for the region including:

- 10no. core radial bus corridors forming the Core Bus Network for the region

- 6no. orbital routes around the GDA
- 2no. cross city Bus Rapid Transport (BRT)

The subject site shall be, on completion of these works, within range of and benefit from the following key bus infrastructure routes:

- Blanchardstown – Cabra – Stoneybatter core radial route
- Tallaght – Blanchardstown orbital bus route
- Blanchardstown – Kilbarrack orbital bus route
- Blanchardstown – UCD BRT

A comprehensive linkages plan responding to the transportation and recreational needs of the development is shown on the 2HQ drawing no. 18-178-P014.

3.0. PROPOSED TRANSPORTATION INFRASTRUCTURE

3.1. Proposed Road Network Infrastructure

The subject site will be accessed through the existing vehicular access route located to the east of the proposed apartment blocks.

It is proposed to complete the apartment complex as indicated and provide for two internal courtyard areas with surface level car and cycle parking, surrounded by existing blocks A, B, C, E and G to the east and north, and the proposed blocks J, K, L and M to the east and south. Access through to the western courtyard will be under block L at surface level, while access to the eastern courtyard will be under the existing blocks A/G at surface level.

In addition to the existing 217no. car parking spaces located at surface level, to the north and east of the existing blocks, further 58no. surface level car parking spaces within the two internal courtyards are proposed as part of this application. The underground car park and the access ramp have been constructed but is not currently utilised by the existing residential units. The proposed scheme provides for the reconfiguration of the internal layout of the basement to provide car and cycle parking and bin storage for the proposed development.

Of the total of 243no. proposed car parking spaces, 12no. will be to disabled parking standards and 24no. will have charging equipment for electric vehicles.

3.2. Proposed Cycle and Pedestrian Network Infrastructure

Pedestrian and cyclists will have alternative access points from the paths along the Royal Canal and through the open space. A number of pedestrian routes around the development will ensure that the complex remains well connected to the existing urban environment.

Under the NTA Greater Dublin Area Cycle Network Plan, it is proposed to treble the existing cycle network within the urban area. Planned upgrade works in the vicinity of the site include the construction of secondary level cycle routes along Clonsilla Road, along the north side of the Royal Canal to the immediate west of the subject site, and along the Coolmine Road. A section of the proposed Royal Canal Urban Greenway cycle route would traverse the open space park within the Windmill development. These routes shall feed into other secondary and primary routes providing safe and direct routes throughout the city.

A network of paths will be provided in this scheme, linking the development with the open space. Refer to the Landscape Architect's drawings for further details of the open space. The cycle and pedestrian paths through the proposed parklands, including the section of the proposed Greenway cycle route, link to the Coolmine Rail Station approximately 550m to the east of the development, via Sheepmoore Lane. A new pedestrian pathway to the north-west of the site will directly connect the development to Diswellstown Road.

The current cycle parking facilities consist of two indoor storage units located at surface level, to the north and east of the existing blocks.

Further 51no. cycle parking spaces are proposed at surface level, at convenient locations within the two internal courtyards and adjacent to the playground, and 284no. cycle parking spaces are proposed within the underground car park. Access to the basement is proposed via lifts located in each stair core, that have been purposely designed to accommodate cyclists.

We have engaged with the Transport Department of the Fingal County Council in relation to the Royal Canal Greenway design and we are advised as follows:

"The proposed width of the route required for the RC greenway would be 4.0m and the tie-in locations would be in the general area that you have shown previously on your drawings. A minimum of 4 ducts in general (1 PL, 1 CCTV & 2 for Waterways). The continuation of ducting through this area in order to achieve a continuous route would be required. I would recommend 6 ducts through this area to provide for future services.

The construction materials would be standard cycle way construction details of black top on subbase.

There are details that would need to be addressed by way of condition if permission was being considered."

Figure 3.1 – Correspondence from the Transport Section of the Fingal County Council, received on 29 August 2019

The proposed greenway design reflects the latest information available at the time of lodgement. Also, we are happy to conform to conditions if permission is being considered.

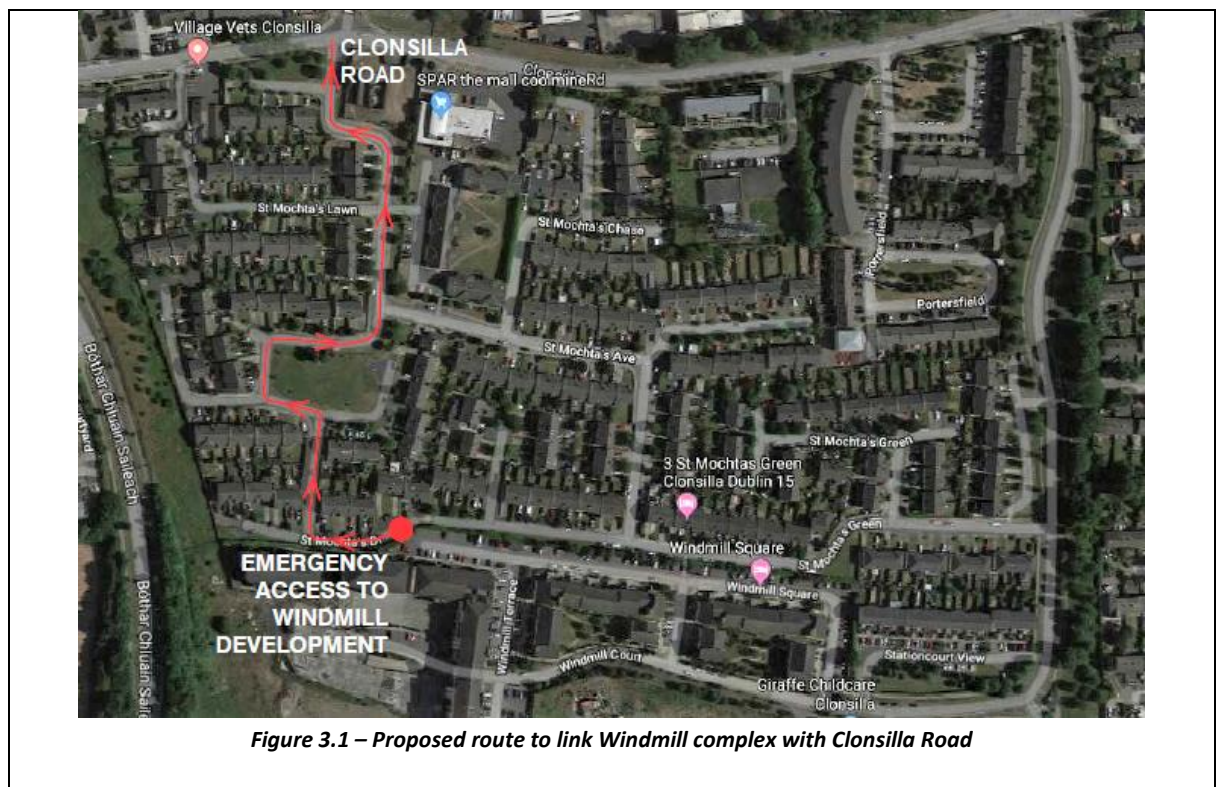
The connection and construction details for the access paths through the parklands, including the Royal Canal Greenway, are indicated on the 2HQ road details drawing nos. 18-178-P009 and 18-178-P010.

3.3. Emergency Access

At the request of the Transport Department of the Fingal County Council, this proposal also makes provision for an emergency access into the Windmill apartment complex. The proposed emergency access gate would be located to the north of the site, out onto St. Mocha’s Drive.

The proposed emergency access shall be gated with a large steel palisade gate, as palisade fencing is provided along the entire northern perimeter of the development, and would be kept locked. 2HQ drawing no. 18-178-P011 is a detailed drawing of the proposed emergency access.

The route through St Mocha’s development out onto the Clonsilla Road is shown in Figure 3.1 below.



3.4. Compliance with Transportation Policies & Objectives

The subject site is located within an area well serviced by public transport (rail and bus) and cycle facilities. Definitive proposed improvements to the public transport infrastructure and cycle infrastructure as detailed in *The Transport Strategy for the Greater Dublin Area 2016-2035* (NTA) shall further benefit this area of Dublin including the subject site.

The proposed development complies with the following Strategic Planning Principles set out in *The Transport Strategy for the Greater Dublin Area 2016-2035*:



- Residential development located proximate to high capacity public transport should be prioritised over development in less accessible locations in the GDA.
- To the extent practicable, residential development should be carried out sequentially, whereby lands which are, or will be, most accessible by walking, cycling and public transport – including infill and brownfield sites – are prioritised.

With the proposed link to the north-west of the site that will directly connect the Windmill development to Diswellstown Road, and to the south-west and south-east within the open space area, the proposal meets Objective CLONSILLA 6 of the Fingal Development Plan 2017-2023:

- Objective CLONSILLA 6: Create a network of pedestrian and cycle routes between Clonsilla, the Royal Canal and the adjacent railway stations; and a connection from the ‘Windmill’ residential development to Dr. Troy Bridge and a new Light Rail Corridor stop.

The proposed development also fully meets Objective MT05 of the Fingal Development Plan 2017-2023:

- Objective MT05: Integrate land use with transportation by allowing higher density development along higher capacity public transport corridors.

4.0. PROPOSED PARKING PROVISION

4.1. Car Parking Provision

4.1.1. Background to Existing Development

The existing units and associated development were constructed under Reg. Ref. F02A/0358, as amended under Reg. Ref.: F05A/0583, with construction commencing in 2005. An extension of duration of the original permission was granted up to 2008 and subsequently 2009.

There were also a number of subsequent applications for other aspects of the development, which relate to the existing development implemented on site, which include F07A/0805- Permission granted for retention of ramp location and realignment of access road to the basement and F08A/0970- Permission for variations to and retention of car parking provision on site, including an enlarged basement.

All of the above referenced permissions have now lapsed and therefore the applicant is seeking a new planning permission to complete the Windmill development. The 2015 permission, FW15A/0143, has not been commenced.

A summary of the (partially) implemented permissions is below.

- F02A/0358- Fingal County Council granted permission in October 2002 for a residential development of 76 no. two & three bed duplex units and 217 no. one, two- and three-bedroom apartments in a 3/4/5 storey development on a 6.96 hectare site, with vehicular access from Clonsilla Road via adjoining lands.
- F05A/0583- Fingal County Council granted permission for variations to previously permitted development Reg. Ref.: F02A/0358, consisting of moving blocks B, A & G, 3 metres south and west of Blocks A, G, H, F, D & E, with an additional 165 car parking spaces and landscaped area and with the omission of the southern part of the previously permitted basement car park with 99 car park spaces at this 6.96 hectare (17.2 acres) site. Permission was granted by the Council on the 29th of August 2005. This scheme did not propose any increase or decrease in the 293 no. residential units approved under Reg. Ref.: F02A/0358.
- F07A/0805- Retention permission granted on the 18/4/08 for variations to previously permitted developments (Reg. Ref.: F02A/0358 and F05A/0583) consisting of retention of new location for ramp to permitted basement with omission of permitted ramp and realignment of access road to side of ramp to the west of Blocks A and G.
- F08A/0970- Fingal County Council issued a final grant of permission on 1st April 2009 for variations to and retention of the car parking provision on the site, including enlarged basement car park and the provision of 30 no. surface car park spaces (in lieu of the currently permitted 65 no.) in a revised site layout to the west of Blocks D and F which makes provision for a future residential site of 0.25 ha made available by the omission from the 2005-2011 CDP of the rail reservation in this area of the site. We understand this was the relevant permission which the existing basement was constructed under.

Based on the above, permission was granted for 206no. car parking spaces at basement level (F08A/0970 being the most recent permission). Also, c.270no. surface spaces were granted with 217no. implemented / existing on site based on current site arrangements.

The proposed scheme does not seek to increase the size of the constructed basement, however, it proposes the reorganisation of the parking spaces.

4.1.2. Proposed Development

The Fingal County Council Development Plan 2017-2013 car parking standards are as follows:

Land Use	Order	Criterion	Proposed	Notes	Category	Norm or Max
House - urban/suburban 1 or 2 bedrooms	1	Unit	1-2	Within curtilage	Residential	Norm
House - urban/suburban 3 or more bedrooms	2	Unit	2	Within curtilage	Residential	Norm
House - rural	3	Unit	2-3	Within curtilage	Residential	Norm
Apartment, townhouse 1 bedroom	4	Unit	1	Plus 1 visitor space per 5 units	Residential	Norm
Apartment, townhouse 2 bedrooms	5	Unit	1.5	Plus 1 visitor space per 5 units	Residential	Norm
Apartment, townhouse 3+ bedrooms	6	Unit	2	Plus 1 visitor space per 5 units	Residential	Norm
Sheltered housing	7	Unit	0.5	Plus 1 visitor space per 5 units	Residential	Norm

Figure 4.1 - Excerpt from Fingal County Council Development Plan 2017-2013 (Table 12.8, Chapter 12)

The site is located within an area well serviced by public transport (rail and bus) and cycle facilities – refer to Section 2.3 of this report for details. The subject site is considered to be a ‘Central and / or Accessible Urban Locations’ as defined under Section 2.4 of the Apartment Guidelines 2018. The car parking provision requirement for accessible urban locations, as described in the Sustainable Urban Housing: Design Standards for New Apartments guideline, is reproduced below.

“Central and/or Accessible Urban Locations:

In larger scale and higher density developments, comprising wholly of apartments in more central locations that are well served by public transport, the default policy is for car parking provision to be minimised, substantially reduced or wholly eliminated in certain circumstances. The policies above would be particularly applicable in highly accessible areas such as in or adjoining city cores or at a confluence of public transport systems such rail and bus stations located in close proximity.

These locations are most likely to be in cities, especially in or adjacent to (i.e. within 15 minutes walking distance of) city centres or centrally located employment locations. This includes 10 minutes walking distance of DART, commuter rail or Luas stops or within 5 minutes walking distance of high frequency (min 10-minute peak hour frequency) bus services.”

Figure 4.2 - Excerpt from Sustainable Urban Housing: Design Standards for New Apartments guideline



The proposed development parking requirements based on the above is summarised below.

Proposed Development Residential Unit Type	No. of Units	FCC Development Plan car parking standard	Design Standards for New Apartments guideline	No. of spaces required based on FCC Development Plan requirements
Studio	10	1 space per unit plus 1 visitor space per 5 units	The policy is to reduce/minimise parking in highly accessible areas	12 spaces (i.e. 10 for residents and 2 for visitors)
Apartment 1 bed	68	1 space per unit plus 1 visitor space per 5 units	As above	80 spaces
Apartment 2 bed	133	1.5 space per unit plus 1 visitor space per 5 units	As above	228 spaces
Apartment 3 bed	nil	2 spaces per unit plus 1 visitor space per 5 units	As above	0
Total (based on FCC requirements)				320 spaces

Table 4.1.1 - Summary of Parking Provision Requirements for Proposed Development

4.1.3. Existing & Proposed Development

Existing Development Parking

There are 194no. existing residential units within the Windmill development, located to the north and east of the proposed blocks, and 217no. existing car parking spaces located at surface level, to the north and east of the existing units.

The current parking facilities are utilised by the existing residential units, which equates to 1no. space per unit and 23no. spaces designated to visitors. Following discussions with the Management Company of the complex and further site review, it is evident that the current level of provision is satisfactory.

It is also our opinion that the existing parking provision is satisfactory and appropriate based on current standards.

Existing & Proposed Development Parking Calculation

The proposed additional parking to service the 211no. proposed residential units will be located within the underground basement (185no. spaces) and at surface level parking (58no. spaces).

Therefore, the proposed car parking provision for the existing development, the proposed development and the existing and proposed combined is summarised as follows:



No. of Residential Units	Allocated parking spaces	Visitors parking spaces	Allocated spaces ratio	Visitors spaces ratio
Existing development (194 units)	194	23	1:1	0.11
Proposed development (211 units)	211	32	1:1	0.15
Existing and Proposed (405 units)	405	55	1:1	0.14

Table 4.1.2 – Car parking provision for the Existing & Proposed Development

The table above demonstrates that the existing and proposed car parking allocation results in a parking provision of 1 space per unit and additional visitor parking. This parking provision is considered appropriate for this location in the context of the Sustainable Urban Housing: Design Standards for New Apartments.

On the basis of site location and also the availability of travel alternatives such as public transport, walking and cycling links, a reduced quantum of vehicle parking provision is more suitable. Therefore, a provision of 460no. car parking spaces to a total of 405no. residential units is considered appropriate. 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.

If one is to consider the existing 217no. spaces provided within the existing development (for the existing 194no. units), combined with the Fingal County Council Development Plan requirement of 320no. spaces (see Table 4.1 above) for the proposed development, the requirement would be 537no. spaces overall. It is proposed to provide a total of 460no. car parking spaces, which fulfils the objective to reduce/minimise parking, as set out in the Sustainable Urban Housing: Design Standards for New Apartments.

The proposed vehicle parking provision of 460no. car parking spaces corresponds to an overall provision of 1 space per each residential unit and 0.14 spaces per unit for visitors. The car parking spaces assigned to each block are generally located at convenient locations at surface level and in the underground carpark, while the visitor parking spaces are distributed throughout the site at surface level. The provisional parking allocation is indicated on 2HQ drawing nos. 18-178-P012 and P013, however the Management Company shall manage the allocation of parking spaces to particular units.

A total of 12no. disabled parking spaces are distributed throughout the proposed development and at key locations such as adjacent to open space, in accordance with the Fingal Development Plan standards. A total of 24no. parking spaces dedicated to electric vehicles, with the appropriate signage and equipment, are provided within the parking areas at surface level and in the underground carpark, as indicated on 2HQ drawing nos. 18-178-P012 and P013.

4.2. Cycle Parking Provision

4.2.1. Background to Existing Development

Please refer to the planning history set out above in section 4.1.1. There is no specific reference to cycle parking provision included in the previous planning permissions and we understand there was no specific cycle parking standard in the Development Plan at the time.

4.2.2. Existing Cycle Parking Provision

The current cycle parking facilities consist of two indoor storage units located at surface level, that accommodate 56no. bicycle parking stands. Following discussions with the Management Company of the complex and further site review, it has been concluded that the current level of provision is satisfactory at present or even underutilised.

4.2.3. Proposed Cycle Parking Provision

The appropriate level of cycle parking provision for the proposed development will be provided in reference to both the Fingal Development Plan and the Sustainable Urban Housing: Design Standards for New Apartments Guidelines.

The Fingal County Council cycle parking standards are set out in Table 12.9 of Chapter 12 of the Fingal County Council Development Plan, as follows:

- Studio 1 bike/unit + 1 visitor space/5 units
- Apartment 1 bed 1 bike/unit + 1 visitor space/5 units
- Apartment 2 bed 1 bike/unit + 1 visitor space/5 units

The recommendations of the Sustainable Urban Housing: Design Standards for New Apartments guideline include 1 cycle parking space per bedroom and 1 cycle parking space per 2 residential units for visitors, although it is acknowledged that a lower provision can be agreed with the Planning Authority.

The number of cycle parking spaces required for the proposed development based on the Fingal County Council Development Plan would be 253no. spaces.

The number bicycle of spaces required for the proposed development based on the Sustainable Urban Housing: Design Standards for New Apartments guideline would be 451no. spaces.

It is noted that, as things stand, we are advised by the Management Company that the existing bicycle parking provision on site is underutilised. The proposal is therefore to provide additional bicycle parking in line with the Fingal County Council Development Plan, yet design future expansion potential into the bicycle stores in the event that demand increases in the future.



The proposal is to provide an additional 335no. bicycle parking stands, as outlined below. The volume of bicycle parking spaces being provided is in excess of the Fingal County Council requirement of 253no. spaces. This would bring the total bicycle parking provision across the entire development to 391no. spaces.

Bicycle Parking schedule	Residents	Visitors	Total
Proposed surface parking spaces	0	51	51
Proposed basement parking spaces	284	0	284
Total Additional Spaces Proposed			335

Table 4.2.1 – Proposed cycle parking provision for the Proposed Development

Although a sufficient level of cycle parking is being proposed within the development, an approach of potential future expansion of the bicycle parking has been considered, should future demand exceed provision. The existing indoor storage units currently accommodate 28no. parking spaces each, however the total capacity is for 44no. spaces in each shed. In addition, the installation of a two-tier parking system would double the available parking spaces in the same space as the regular one tier parking facility.

The two-tier rack parking system allows users to place bicycles on the second level effortlessly and can accommodate all types of bicycles, which can be chained or D-locked on to the rack for added security. The system can be easily adopted in this case, as the space requirements are met. In this context, the total number of cycle parking spaces would become 846no. spaces. This can be implemented by the Management Company in the future should the need arise.

The proposed layout and details of the cycle parking provision are shown on 2HQ drawing nos. 18-178-P012 and P013.

5.0. MOBILITY MANAGEMENT PLAN

5.1. This Mobility Management Plan outlines a series of recommendations to help set, achieve and maintain sustainable travel objectives and how to encourage travel by walking, cycling and public transport and thereby minimise the traffic impact of the development.

5.2. Mobility Plan Administration

A successful Mobility Management Plan requires constant management and supervision. The Management Company of the development shall ensure the effective operation of the Mobility Management Plan by appointing a Mobility Management Plan Coordinator to administer, implement and monitor the mobility plan. The Mobility Management Plan Coordinator will be the direct point of contact for residents and visitors of the development. They will develop and promote all aspects of



the Plan within the site and will liaise with the Local Authority and public transport operators when required.

5.3. Mobility Plan Details

There are several measures that can be undertaken to help reduce car travel, as set out below.

5.3.1 Travel Database

In order to optimise efficiency from the Mobility Management Plan, an assessment of travel behaviour should be undertaken to determine the travel patterns exhibited by residents the proposed development. It is envisaged that the Plan Coordinator would produce and maintain a travel database of the residents. The survey would typically provide details of the following:

- Mode of travel to/from Windmill development;
- Car occupancy rate;
- Distance travelled;
- Estimates of public transport cost;
- Alternative modes of transport available for travel;
- Interest in car sharing;
- Reasons for using public transport, cycling or walking;
- Measures that would encourage the use of public transport, cycling or walking.

The availability of this data will assist in more accurately defining travel requirements for the development, and in defining the specific measures that would maximise the success of the Plan.

5.3.2 Travel Awareness

The Plan Coordinator shall be responsible to make all residents aware of the environmental consequences of their travel choices and the health benefits associated with choices such as walking and cycling.

It is recommended that an information point (i.e. a travel notice board) be provided to dispense information to residents of the apartment complex in relation to walking, cycling and public transport. The Transport Linkages Plan (2HQ drawing no. 18-178-P014) submitted as an accompaniment to this planning application could also be displayed at the information point.

The Plan Coordinator could develop an events calendar linking to existing local and national events that promote sustainable transport, such as *National Bike Week*, *National Cycle to Work Day*, *10 Minute Cycle Challenge* etc.

5.3.3 Cycling

Cycling is cost-effective, non-polluting, reduces congestion in urban areas, fosters improved health, and is accessible to everybody. It is considered reasonable that a cyclist will be prepared to travel up



to 5km to work along normal roads and streets but will be prepared to travel up to 10km along a cycle network.

The Plan Coordinator shall encourage residents to cycle to/from Windmill development by raising awareness of the health benefits of cycling. Information on cycling distances, journey times and optimal routes should be displayed on the travel notice board.

5.3.4 Walking

Walking is beneficial for the environment, healthy and a cost-effective mode of transport. People will typically be prepared to walk for up to 30 minutes to work, which means that walking could be an option from all home locations within 3km of the development.

The proposed network of paths within the development provide continuous footpaths, safe to use and lit. The cycle and pedestrian paths through the proposed open space also link to the Coolmine Rail Station approximately 550m to the east of the development, via Sheepmoore Lane.

In a similar manner to cycling, the Plan coordinator shall encourage more residents to walk to/from Windmill development. Information on walking distances, journey times and optimal routes should be displayed on the travel notice board.

5.3.5 Public Transport

The Mobility Management Plan Coordinator shall work to promote a public transport culture amongst the residents of the development. Poor or insufficient access to information can be a major barrier to public transport use.

In order to promote greater use of public transport, the relevant public transport timetables and information must be readily available and as accurate as possible. It will therefore be the responsibility of the Plan Coordinator to regularly liaise with public transport operators to ensure that residents are provided with up to date public transport information. This includes timetable information, fares, bus stop location, train stop locations and route planning. This information shall be on display on the travel notice board.

5.3.6 Car Sharing

Car sharing involves two or more people sharing a lift. One of the people travelling is usually the owner of the vehicle and the other(s) usually contribute towards fuel costs. The numerous benefits of car sharing for individuals are:

- reduced fuel cost and usage;
- vastly reducing the number of single occupancy vehicles commuting every day;



- fewer private vehicles on the road means less car emissions, noise, fossil energy consumption and pressures on the environment resulting in a better quality of life.

The Mobility Management Plan Coordinator should promote car-pooling as a method of reducing the traffic volume generated by the proposed development. Using the information in the travel database, the Plan Coordinator can investigate the feasibility of setting up a car sharing scheme within the site.

5.4. Conclusions

This Mobility Management Plan has assessed the proposed residential development at Windmill Park, in terms of its accessibility by all modes of transport and includes recommendations that will encourage and make it easier for residents and visitors to travel by public transport, walking and cycling, thereby reducing the need for car use.

The success of the proposed Mobility Management Plan will be contingent on effecting and maintaining sustainable transport patterns among residents of the apartments on site.

The site has good walking, cycling and public transport connectivity. This plan should encourage the use of these modes.

This Mobility Management Plan identifies measures to enable the increase in commuting by active travel means to be achieved and sustained. A Mobility Management Plan Coordinator will be required to administer and implement the measures outlined. It will be the responsibility of the Plan Coordinator to make all residents aware of the environmental consequences of their travel choices and the health benefits associated with choices such as walking and cycling.

In summary, the mobility management measures outlined in this report will ensure that the proposed development will be sustainable and progressive in terms of transportation. This report provides direction to the Management Company on the best methods to encourage greater use of public transport, cycling and walking and thereby minimising the traffic impact of the development.

