

13.5.1.3 Architectural Heritage

As noted above in **Section 13.4.1.3**, it is not considered likely that the development, as proposed, will cause any direct impacts to any structures or garden/demesne features of architectural heritage interest. Consequently, no mitigation measures are considered necessary.

13.5.2 Operational Phase

As noted above in **Section 13.4.2**, there are no historical events or memorial structures, extant archaeological remains, structures or garden/demesne features of architectural heritage interest located within the extent of the proposed development lands or wider cultural heritage study area. Consequently, no visual impacts on any features of interest will occur and, accordingly, no mitigation measures are considered necessary.

13.6 Cumulative Impact

The proposed development has been considered in terms of other permitted and existing developments within the defined study area. There are no predicted impacts in terms of Cultural Heritage.

13.7 Residual Impact

The Cultural Heritage background to the site and environs is included above in **Section 13.3**; as discussed in **Section 13.4** it is determined that no impacts will occur with respect to any sites, features, structures or events of Cultural Heritage interest. Consequently, in terms of Cultural Heritage, it is considered that no Residual Impacts will occur.

13.8 Monitoring

Construction and Post-construction monitoring issues or reinstatement measures with respect to cultural heritage are not considered a requirement with respect to the subject development.

13.9 References

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14 LANDSCAPE AND VISUAL

14.1 Introduction

The landscape and visual impact assessment of the proposed development is a means of assessing the affect the proposed development would have on the receiving environment both visually and in terms of landscape character.

This chapter should be read in conjunction with the site layout plans for the proposed development and the project description provided in **Chapter 5** (Project Description) of Volume 2 of this EIAR. The purpose of this assessment is to analyse the existing landscape and to assess the likely potential visual impacts arising from the proposed development and overall masterplan on the existing landscape and any mitigation measures proposed. The criteria as set out in the current EPA Guidelines on Information to be contained in Environmental Impact Assessment Reports (Published May 2022) are used in the assessment of the likely impacts.

14.1.1 Author Information

This chapter was prepared by Matthew Mulvey, BSc (Hons) Land Arch, MILI, on behalf of Kevin Fitzpatrick Landscape Architecture. Matthew has 6 years of experience in both landscape design, from planning through to construction, and landscape and visual impact assessment. In specific regard to LVIA he has worked across a range of projects including residential developments, data centres and infrastructure projects.

14.2 Assessment Methodology

The criteria as set out in the current EPA Guidelines on Information to be contained in Environmental Impact Assessment Reports (Published May 2022) are used in the assessment of the likely impacts.

The assessment was carried out by visiting the site and its surroundings in October 2022 and by analysis of the relevant documents as listed below:

- Fingal County Development plan 2023-2029;
- Arboricultural Report, The Tree File Ltd, February 2023;
- Assessment of the accurately surveyed and modelled photomontages of the proposed development;
- Current and historic Aerial photographs; and
- Historic maps of the site and surrounds using the Ordnance Survey Ireland's National Historic Maps Archive.

Through analysis of the above, the subject lands were assessed in relation to their surrounding environment to identify a study area in which both visual and landscape character impacts would be perceivable. Important landscape features on subject lands and in the wider area were identified as part of this process.

The proposed viewpoints for the verified views were selected to represent points in the local landscape from which the development would potentially be visible and are relate to views from potential visual receptors. Various viewpoints have been selected to provide a well-rounded and realistic representation of how the development will look from different aspects and demonstrate views from sensitive receptors. Views are located, north, south, east and west of the subject lands, both at close-range and long-range, and have been selected from specific locations where more expansive views are possible.

The buildings roads and landscape are modelled in three-dimensional AutoCAD software by the CGI consultant (Archimedium Ltd). Two-dimensional AutoCAD drawings are provided by the design team for the CGI consultant to accurately model the external parts of the development. Liaison between the CGI consultant and the project Architect, Engineer and Landscape Architect on their respective designs informs the final appearance of the verified views.

14.2.1 Assessment Criteria

Table 14.1: Description of Effects used this chapter

Significance of Impact	Topic Specific Criteria
Imperceptible	An effect capable of measurement but without significant consequences
Not Significant	An effect which causes noticeable changes in the landscape character of the environment or noticeable changes to views of the landscape without significant consequences
Slight Effects	An effect which causes noticeable changes in the landscape character of the environment or noticeable changes to views of the landscape without affecting its sensitivities
Moderate Effects	An effect which causes noticeable changes in the landscape character of the environment or noticeable changes to views in a manner that is consistent with existing and emergent baseline trends
Significant Effects	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the landscape character or views of the landscape.
Very Significant Effects	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the landscape character or views of the landscape.
Profound Effects	An effect which obliterates sensitive characteristics or a sensitive view.

14.3 Baseline Scenario (Existing Environment)

14.3.1 Receiving Environment

14.3.1.1 Location

The application boundary for this proposed development includes a corridor to the north that is included to accommodate temporary construction access roads and construction compound and parking areas. The site as described in this Chapter refers to the central area of the subject lands on which the permanent development will be constructed.

The site is situated to the north of Ballymun and Santry within Northwood, the lands were formerly a part of Santry Demesne. The site is surrounded by development on three sides with an area under application for development to its immediate east. Cedarview housing estate is located to the immediate north. Other features of note to the north are the Santry River and associated River Walk and existing Bridgefield Apartments. To the south, along Northwood Avenue, there are two existing commercial buildings which were originally built as part of the Swift Square Office Park commercial development. On the southern side of Northwood Avenue, there are several residential developments, Carrington Park and Lymewood; Northwood Business Park and Santry Park. Immediately to the east is a continuation of the carpark which forms the current site along with a small area of scrubland and existing Sycamore trees which border Northwood Avenue. This area is the site of permitted development Ref. ABP-313317-22. Further east are Santry Sports Surgery and Parklands mixed-use development. There is a local access road to the west of the site which leads to Bridgefield Apartments and separates the site from Gulliver’s Retail Park and Blackwood Square, an existing development of apartment blocks which has been under construction in recent years and is now complete.

14.3.1.2 Site Description and Boundaries

The application boundary for this application includes a corridor to the north that is included to accommodate temporary construction access roads and construction compound and parking areas. The temporary compound area is currently a compound area used for adjoining construction sites and includes the access road to the retail units.

The main site is an irregular shaped area measuring approximately 120m on its longest north-south axis and approximately 153m on its longest east-west axis.

The majority of the site is an existing carpark, however some of the site is also defined by an existing plaza associated with Swift Square Office Park blocks. There is ornamental planting throughout the carpark and along the road to the west, including street tree planting, hedging shrubs and groundcovers.

The road to Cedarview housing estate forms the northern site boundary. There is no physical boundary to the south, the site boundary traverses the public plaza outside the Swift Square Office Park buildings. The eastern site boundary bisects the former construction site of Cedarview, there is no physical structure demarcating this boundary. To the west, the boundary is formed by the edge of the local access road to Bridgefield Apartments.

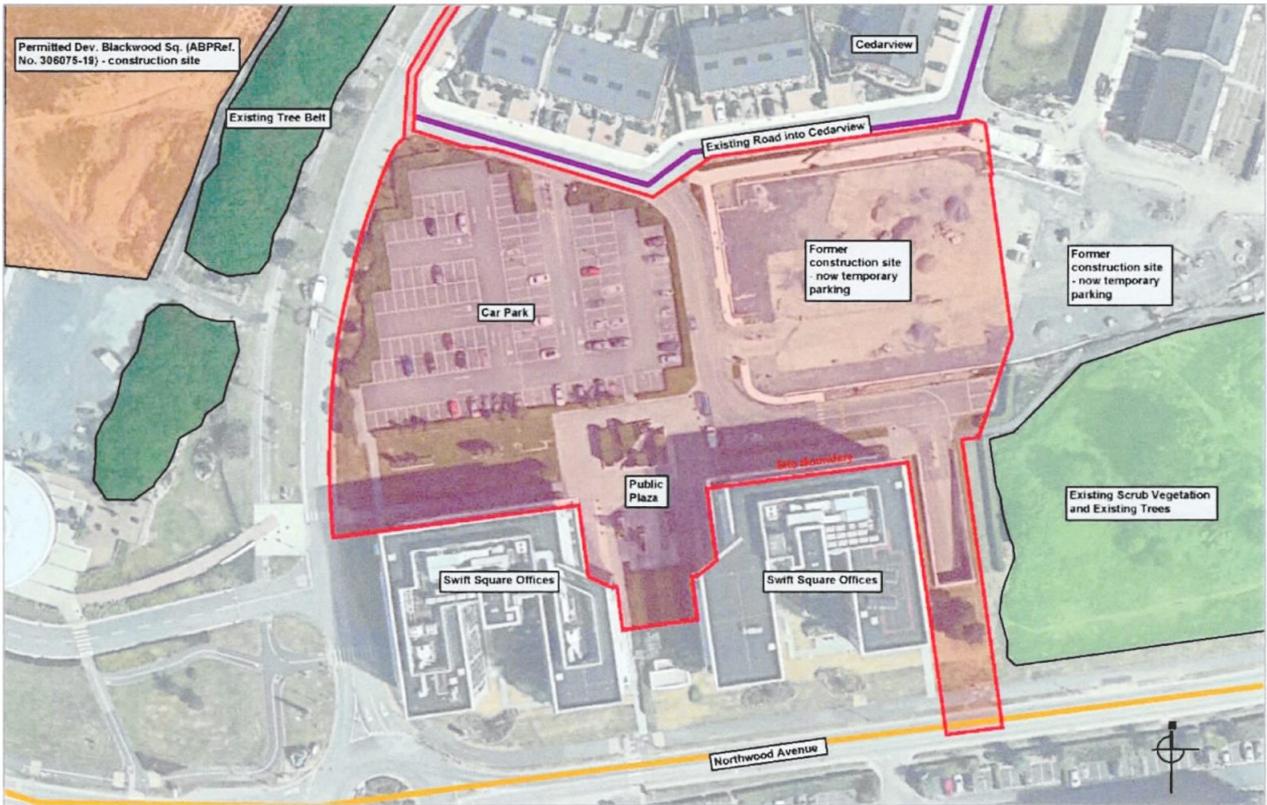


Figure 14-1: Site Features (subject site shaded red and full application area outlined in red)

Source: Produced by KFLA Ltd using image from Google maps



Figure 14-2: Site Context (subject site shaded red and full application area outlined in red)

Source: Produced by KFLA Ltd using image from Google maps

14.3.1.3 Topography

Due to the nature of the main site and its surrounding development, the site is generally flat. The site falls by approximately 0.5m from north-west to south-east over approximately 179m.

14.3.1.4 Existing Trees and Vegetation

According to the Tree Survey and Report, prepared by The Tree File Ltd. (see **Appendix 14.1** of Volume 3 of this EIAR), the tree cover on site is young, all being under 20 years in age. As a result of this, all of the trees are under 6m in height and although healthy and sustainable, offer no screening value or visual presence in the wider landscape. Many of the trees on the site have been recently installed, likely as part of past developments in the area.

14.3.1.5 Wider Context

One of the main features north of the subject lands is the M50 Motorway, beyond this, is a mix of agricultural land which forms a green belt between Santry, Ballymun, Finglas, etc and Dublin Airport. To the North-East, there are many industrial developments including Airways Industrial Estate, Clonsaugh Business and Technology Park and Collinstown Business Park. In this vicinity, the M50 connects to the M1 Motorway. Santry is located to the south and south-east, beyond Santry Park, along with the eastern section of the M50. Development in this area is mostly residential. Similarly, to the south and west, development is predominantly residential, characterised by areas such as Finglas and Poppintree. In Finglas there is also some industrial development, notably Jamestown Business Park.

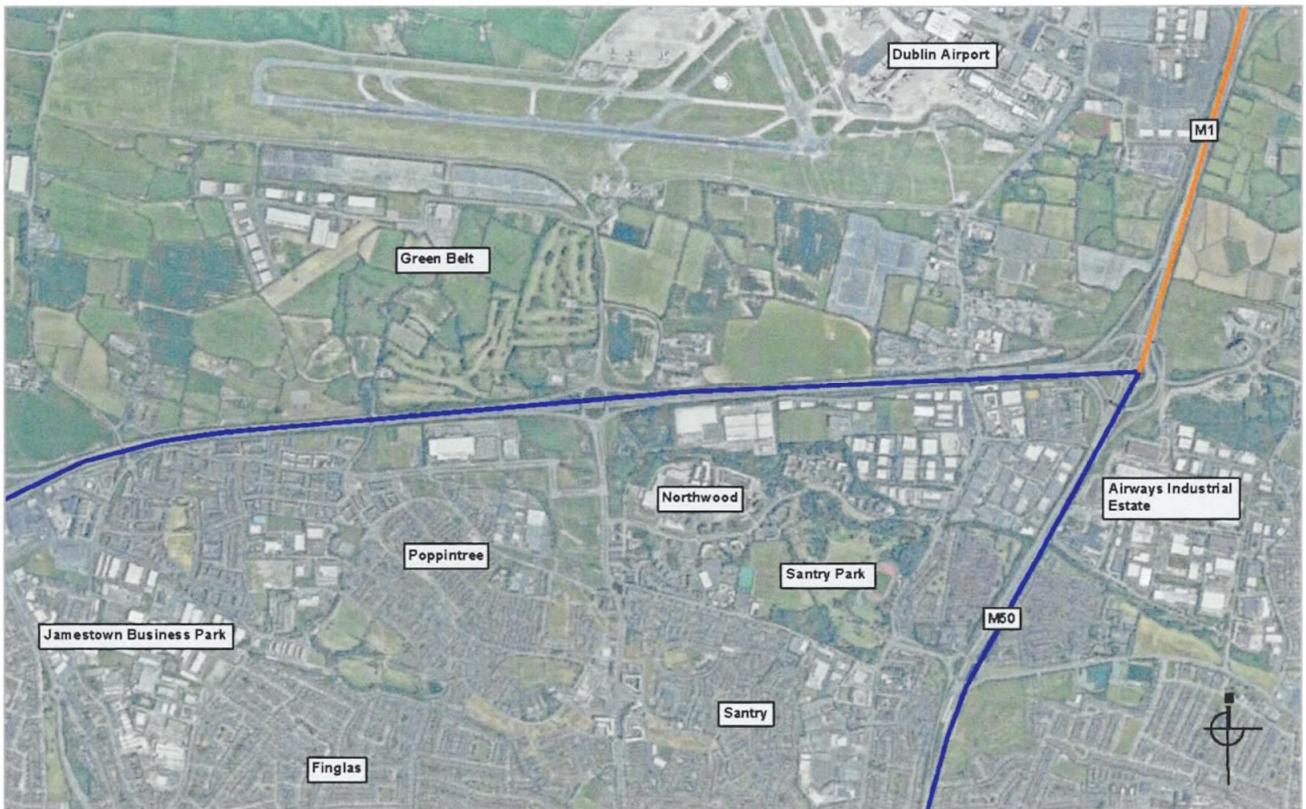


Figure 14-3: Wider Site Context

Source: Produced by KFLA Ltd using image from Google maps

14.3.2 Character of the site

The character of the main site and its environs has largely been determined by the following:

- Flat topography in the site and its surrounding environs;
- The existing carpark on the subject lands;
- The existing plaza on the subject lands along with a significant amount of public realm development on surrounding sites; street trees, ornamental planting, play spaces, seating areas, lawn, etc;
- A number of large, residential, industrial and commercial buildings in the local landscape;
- The proximity to parkland to the north and the dense mature tree cover within; and,
- The proximity to Santry Park to the south-east.

The land use of the subject lands is divided into two distinct sections. Most of the lands are dominated by an existing temporary car park which is defined by a tarmac surface with road markings along with several planting bays for ornamental planting and lawn. A small section of the subject lands subsume some of the existing plaza between the Swift Square Office Park blocks. This part of the site would have the character of a designed amenity space and has some aesthetic and recreational value.

The land use of the section to the north, connected by the site boundary corridor, would be considered a construction compound and temporary in nature.

As discussed in **Section 14.3.1.4**, the existing trees have limited visual presence or landscape value on the site due to their low height.

Through a comparison of the historical Ordnance Survey maps and aerial photography with the current site and through analysis by site visits it is evident that there has been little change to the study area until recent times. The subject lands were surrounded by woodland through both sets of historic maps, 6-inch maps (1837-1842) and 25-inch maps (1888-1913). This woodland occupied some of the subject lands with the rest of the subject lands being an agricultural field with traditional hedgerow boundaries. All of the woodland

would have been associated with the 'Santry Demesne'. The woodland to the west of the subject lands was known as 'Blackwood', while the woodland to the north was associated with the Santry River and the woodland to the South was part of the main estate lands. The general character of the subject lands and surrounding environment would have been defined by the 'Santry Demesne' and would have had many landscape features typical of large rural estates of the gentry at the time such as large areas of woodland, formal and walled gardens, parkland, lodge houses and ornamental features. The surrounding lands would have had a rural and agricultural landscape character.

A study of aerial photography from the 1990s through to the present day indicates that much of the original 'Blackwood' woodland has been cleared and a significant amount of built development, both commercial and residential, has taken place on the lands surrounding the site.

In the context of the surrounding landscape, landscape sensitivities and views, the lands would not be of any aesthetic value.

14.3.3 Existing Views and Visibility

The location from which the site is most visually prominent is from the local access road directly to the west of the lands. From this road the trees and ornamental planting on site are visually prominent and the full carpark is clearly visible. The lands are visible in views from the Gulliver's Retail Park further west of the lands.

Part of the lands are also visible from Cedarview to the North and Santry Sports Surgery to the east. Views of the lands from the South, along Northwood Avenue are mostly screened by built development and trees in the local landscape.

Furthermore, the site is not visible from locations in the wider landscape due to the flat nature of the topography, the scale of the local built development and the significant number of trees in the area.

14.3.4 Landscape Planning

The subject lands are described as within the Metropolitan area of the Dublin City and Suburbs in the *Fingal County Development Plan 2023-2029*. In terms of landscape character, the lands are placed within the "Low Lying Landscape" area. This is described as follows:

"Low Lying Character Type has an open character combined with large field patterns, few tree belts and low roadside hedges. The main settlements located within the area include Oldtown, Ballyboghil and Lusk and parts of Malahide and Donabate. Dublin Airport is located in this area. This low-lying area is dominated by agriculture and a number of settlements. The area is categorised as having a modest value. It contains pockets of important value areas requiring particular attention such as important archaeological monuments and demesnes and also the Feltrim Hill and Santry Demesne proposed Natural Heritage Areas".

The 'Low Lying Landscape' character area is classed as being of moderate landscape value and low landscape sensitivity.

Within the *Fingal County Development Plan 2023-2029*, there are no specific landscape objectives that apply to the subject lands. There are a number of general landscape objectives that are relevant to the subject lands and its surrounds

General Landscape Objectives

Objective GINHO21 – Integration of Green Infrastructure

"Avoid the fragmentation of green spaces in site design and to link green spaces /greening elements to existing adjacent Green Infrastructure / the public realm where feasible and to provide for ecological functions"

Objective GINHO3 – Biodiversity in Open Space

"Make provision for biodiversity within public open space and include water sensitive design and management measures (including SuDS) as part of a sustainable approach to open space design and management"

Landscape Character Assessment Objectives

Policy GINHP25 – Preservation of Landscape Types

“Ensure the preservation of the uniqueness of a landscape character type by having regard to the character, value and sensitivity of a landscape when determining a planning application”

There are no views or prospects that include the subject lands listed in the Fingal Development Plan.

14.4 Impact Assessment

14.4.1 Do Nothing Scenario

In the event of this scenario the site would continue to be left as it is currently for a period. The current carpark use would either continue, or the site would become unused and fall into disrepair. Areas of scrub and grassland would grow wild and eventually scrub vegetation would start to dominate. As the area has a specific zoning for development it is likely that the site would be developed in the future in a similar scale and type as is currently proposed.

14.4.2 Potential Impact of the Proposal

14.4.2.1 Construction Phase

The change of use of the site from its current state to that of a construction site has the potential to result in the following impacts:

- Visual impacts due to the introduction of new structures, access roads, machinery, materials storage, associated earthworks, car parking, lighting and hoarding.
- Change of character due to the change in use.
- Visual impacts due change in ground levels and earthworks.

14.4.2.2 Operational Phase

The proposed development has the potential to result in the following impacts:

- Visual impacts due to the introduction of new buildings and built structures.
- Visual impacts due to the introduction of new roads, parking, mechanical plant and lighting.
- Visual impacts due to the introduction of services and waste handling areas and litter.
- Change of character due to the change in use.
- Visual impact of landscape proposals – planting, lighting, hard surfaces etc.
- Landscape and visual impacts due to the installation of trees and vegetation.

14.4.3 Predicted Impact of the Proposal

14.4.3.1 Construction Phase

As described under Potential Impact of the proposal above, the initial construction operations created by the clearance of the site and the construction of the buildings and roads will give rise to temporary or short-term impacts on the landscape character, through the introduction of new structures, machinery etc. and the removal of a small amount of vegetation. The conversion the existing carpark to a building site will have little negative impact on the landscape character.

The introduction of the elements described under Potential Impact of the proposed development will have an impact on the amenity value of the adjacent surrounding areas. The construction compounds, temporary car parking and storage facilities etc. will be located to avoid any visually sensitive areas. Furthermore, as the site is located within an area with recent built developments and developments under construction, the visual

elements associated with construction of this development would be considered part of the existing urban landscape and as consistent with local development trends.

With the above considered the negative visual impact on the landscape character during construction would be considered moderate in magnitude and short-term in its duration.

14.4.3.2 Operational Phase

As described under Potential Impact of the proposal above, the operational phase of this development will give rise to a noticeable change in the landscape character. The other main impact on the landscape character will be the transformation of the existing car park and associated landscaping to a built development. However as described in the 'Character of the Site' section of this document the landscape of the site would be considered of no aesthetic value.

The site is specifically zoned for this type of development and there have been recent built developments of a large scale in the local vicinity. Many of these built developments are dominant in views from the site. In this context the proposed development would be considered a continuation of existing development trends in the local area.

The landscape proposals include the creation of additional native trees and ecological corridors, a significant level of public realm design and usable amenity space. The proposed landscape treatment will contribute positively to the landscape character of the area.

With this considered the impact on the landscape character would be considered negative, slight in magnitude and long-term in duration.

14.4.4 Predicted Impact on Landscape Planning

As described in **Section 14.3.4**, within the Fingal Development Plan, there are no specific landscape objectives that apply to the subject lands.

Within the Fingal Development Plan, there are several general landscape objectives that apply to the subject lands, as described in **Section 14.3.4**. These general landscape objectives are mostly aimed and the promotion of biodiversity enhancement measures, access to open spaces for recreation and the protection of landscape character and sense of place. The proposed development will be in accordance with these policy objectives.

14.4.4.1 Visual Impact from Specific Locations

The extent of potential visual impact of the proposed development, during construction and operation, on the built environment from 9 representative view locations around the proposed development is discussed below.

The view locations assessed are representative of locations from which it was suggested by mapping analysis that development might be visible. Verified views, prepared by Archimedium Ltd. are included in **Appendix 14.2** of Volume 3 of this EIAR, as a separate A3 document.

- a. Locations from which the proposed development will not be visible
 - View 02 – From Santry Sports Surgery Clinic
 - View 03 – From central path in walled garden, Santry Park
 - View 05 – From footpath along Santry River Walk
- b. Locations from which the proposed development will be visible
 - View 01 – From roundabout to South of Swift Square Offices
 - View 04 – From open space in Cedarwood Housing Development
 - View 06 – From Carrington Park residential development
 - View 07 – From roundabout South of Gullivers Retail Park
 - View 08 – From public space outside Bridgefield Apartments

- View 09 – From Old Ballymun Rd./Northwood Avenue Junction

View 01 – From roundabout to South of Swift Square Offices

Existing View

This view looks northwards towards the existing office blocks at Swift Square, Gullivers Retail Park and recently constructed Blackwood Square Apartments, all of which are visible in some form in the view. The foreground of the view is dominated by roadside vegetation and signage. The western most office block in Swift Square is also dominant and deters views of the subject lands. On the left-hand side of the view signage associated with the retail park is visible along with the existing apartment blocks and construction cranes in Blackwood Square.

Visual impact of proposed development during construction

The Proposed Development will result in a visual impact on this view during construction. The construction process, machinery, storage of materials, built structures will result in a visual intrusion into this view. The level of this impact will be limited due to the construction works being located close to recently constructed large buildings where similar construction activities were recently and continue to be part of the visual landscape. The impact of the proposals during construction on the view from this location would be considered negative, moderate in magnitude, and temporary in duration.

Visual impact of proposed development during operation

The nature of the Proposed Development will result in an alteration to the existing view that would be considered negative in nature. The proposed building is visible in the middle background of the view, and it will alter the visual ridgeline. The Proposed Development is partially screened by the existing commercial buildings to its South. The level of the visual impact is mitigated due to the number of large buildings in the local landscape most notably the Swift Square Office Park in the foreground of this view and Blackwood Square in the background of the view. The landscape proposals are also visible in this view along Northwood Avenue. This development would therefore be considered as consistent with existing and emerging development trends in the area. The magnitude of the negative visual impact on this view would be considered moderate and long-term in duration.

View 04 – From open space in Cedarwood Housing Development

Existing View

This view looks south towards the subject lands and Northwood Avenue and is taken from the open space in the neighbouring housing development to the North. The most dominant feature in this view is the landscaped open space; its tree planting, ornamental grasses, shrubs and lawn. In the right middle-ground, the terrace-style housing is visible. The background of the view is dominated by Swift Square Office Park.

Visual impact of proposed development during construction

The Proposed Development will result in a visual impact on this view during construction. The construction process, machinery, storage of materials, built structures will result in a visual intrusion into this view. The level of this impact will be limited due to the construction works being located close to recently constructed large buildings where similar construction activities were recently and continue to be part of the visual landscape. The impact of the proposals during construction on the view from this location would be considered negative, moderate in magnitude, and temporary in duration.

Visual impact of proposed development during operation

The nature of the Proposed Development will result in an alteration to the existing view that would be considered negative in nature. The proposed buildings are visible in the centre middle-ground of the view, altering the visual ridgeline. The Proposed Development is partially screened by the existing houses on the right hand side of the view. The level of the visual impact is mitigated due to the number of large buildings in the local landscape most notably the Swift Square Office Park in the background of this view. This development would therefore be considered as consistent with existing and emerging development trends in the area. The magnitude of the negative visual impact on this view would be considered moderate and long-term in duration.

View 06 – From Carrington Park residential development

Existing View

This view which looks north-west across Northwood Avenue towards the subject lands is dominated by existing infrastructure, built development and existing trees. It shows the extent of existing built development around the subject lands. The right half of the view is dominated by the Sports Surgery Clinic, while in the background of the view Swift Square Office Park, Blackwood Square and various other developments are visible. The most notable feature in the middle-ground of the view is the stand of existing Sycamore trees which are located on lands adjacent to the subject lands. Roadside hedging and a grass verge along Northwood Avenue are visible in the foreground of the view. Another important element to note is the construction activity present in the background of the view, indicated by a number of cranes.

Visual impact of proposed development during construction

The Proposed Development will result in a visual impact on this view during construction. The construction process, machinery, storage of materials, built structures will result in a visual intrusion into this view. The level of this impact will be limited due to the construction works being located close to recently constructed large buildings where similar construction activities were recently part of the visual landscape. The impact of the proposals during construction on the view from this location would be considered negative, moderate in magnitude, and temporary in duration.

Visual impact of proposed development during operation

The Proposed Development is visible in this view and will cause a negative visual impact. The proposed building is partially visible in the centre background of the view. The Proposed Development is partially screened by Santry Sports Surgery Clinic in the right foreground. The level of the visual impact is mitigated due to the number of large buildings in the local landscape. This development would therefore be considered as consistent with existing and emerging development trends in the area. The magnitude of the negative visual impact on this view would be considered slight and long-term in duration.

View 07 – From roundabout South of Gullivers Retail Park

Existing View

This view looks West across the existing Gullivers Retail Park towards the subject lands. It is dominated by the low-rise building in the retail park, located in the centre middle-ground of the view. Blackwood Square and Swift Square Office Park are both visible in the background, while the foreground is dominated by Northwood Avenue and associated grass verges and street tree planting.

Visual impact of proposed development during construction

The proposed development will result in a visual impact on this view during construction. The construction process, machinery, storage of materials, built structures will result in a visual intrusion into this view. The level of this impact will be limited due to the construction works being located close to recently constructed large buildings where similar construction activities were recently part of the visual landscape. The impact of the proposals during construction on the view from this location would be considered negative, moderate in magnitude, and short-term in duration.

Visual impact of proposed development during operation

The Proposed Development is clearly visible in this view, the visual impact would be considered negative. The upper sections of the proposed apartments are visible in the centre middle-ground of the view, altering the visual ridgeline. The Proposed Development is partially screened building in the retail park. The development would be considered as consistent with existing and emerging development trends in the area. The magnitude of the negative visual impact on this view would be considered moderate and long-term in duration.

View 08 – From public space outside Bridgefield Apartments

Existing View

This view looks south towards the subject lands. The most dominant features are the landscape elements within the public realm space associated with Bridgefield Apartments, including a significant amount of new tree planting, ornamental hedging and shrubs, lawn and paved footpaths. Existing trees are also clearly visible in the left hand side of the view. In the background, Cedarwood Housing Development is partially visible through the trees.

Visual impact of proposed development during construction

The Proposed Development will result in a visual impact on this view during construction. The construction process, machinery, storage of materials, built structures will result in a visual intrusion into this view. The level of this impact will be limited due to the construction works being located close to recently constructed large buildings where similar construction activities were recently part of the visual landscape. The distance of the Proposed Development from this viewpoint will cause the construction activities to read as part of a wider landscape in which there is already a significant amount of construction activity ongoing. Furthermore, the negative impact will be reduced. The impact of the proposals during construction on the view from this location would be considered negative, slight in magnitude, and temporary in duration.

Visual impact of proposed development during operation

The Proposed Development will cause a negative visual impact from this viewpoint. The Proposed Development is partially visible in the background of this view, with the upper sections of the apartments being dominant. The development would be considered as consistent with existing and emerging development trends in the area. The magnitude of the negative visual impact on this view would be considered moderate and long-term in duration.

View 09 – From Old Ballymun Rd./Northwood Avenue Junction

Existing View

This view looks east towards the subject lands and offers an expansive view over the existing urban landscape. It is dominated by various commercial and residential built developments. The level of infrastructure is also notable in this view, with wide roads and a dedicated entrance into 'Northwood'.

Visual impact of proposed development during construction

The Proposed Development will result in a visual impact on this view during construction. The construction process, machinery, storage of materials, built structures will result in a visual intrusion into this view. The level of this impact will be limited due to the construction works being located close to recently constructed large buildings where similar construction activities were recently part of the visual landscape. The distance of the Proposed Development from this viewpoint will cause the construction activities to read as part of a wider landscape in which there is already a significant amount of construction activity ongoing. Furthermore, the negative impact will be reduced. The impact of the proposals during construction on the view from this location would be considered negative, slight in magnitude, and temporary in duration.

Visual impact of proposed development during operation

The Proposed Development will cause a negative visual impact from this viewpoint. The Proposed Development is only partially visible in the background of this view. The extent of existing development between the viewpoint and the subject lands screens the majority of the Proposed Development from view. The upper storeys of the proposed apartment buildings are slightly visible over Gullivers retail Park. The development causes no significant impact in this view and reads as part of the existing urban form, furthermore the development would be considered as consistent with existing and emerging development trends in the area. The magnitude of the negative visual impact on this view would be considered slight and long-term in duration.

14.5 Mitigation Measures

14.5.1 Construction Phase

The following measures will be taken during the construction process to mitigate negative landscape and visual impacts

- Development of a construction management plan as an integral part of the design process, with control of construction activity, traffic, materials storage and lighting with due consideration for neighbouring residences and surrounding area
- Construction compounds, materials storage, car parking, lighting and hoarding will be designed and located sensitively to limit negative visual impacts on the surrounding lands

14.5.2 Operational Phase

The following measures will be taken during the construction process to mitigate negative landscape and visual impacts

- The architectural design of the building aims to reduce the visual mass through its form and choice of materials.
- The landscape proposals include green links, trees and woodland, seating and play features. These elements will assist the visual integration of the building into the landscape and mitigate the visual impact.
- The implementation of a Landscape Management Plan for the full defects liability period will ensure that the trees and planting will grow to its full potential and areas of hardworks will be maintained suitably.

14.6 Cumulative Impact

The cumulative impact of the development has been considered through assessing the combined effects of the proposed development along with any permitted, existing and under construction development in the study area.

The development would be considered an infill development in that it is surrounded by built developments on all sides. The massing scale and form of the proposed development would be similar to recently completed and under construction schemes to the North and East of the subject lands. The landscape scheme is designed to integrate this scheme with the surrounding landscape and serves to link together some of the currently unconnected circulation routes and landscape links.

Of particular note is the permitted 'Whitehaven' Housing development to the immediate east of the proposed development site Ref. ABP-313317-22. The suite of verified views submitted with this application illustrate the proposed development in context with the future permitted development. Although in many of the views, neither developments are visible, the similar scale of the permitted development can be seen by the red and blue lines showing the building outlines. The permitted development is also of a similar typology as the proposed, furthermore when viewed together from certain aspects, the developments appear as a continuous mass of development. This is further aided by the existing built development in the wider study area, causing both the proposed and permitted developments to read as part of a wider built residential and commercial landscape. They can both therefore be considered as consistent with development trends on the surrounding lands. Additionally, the permitted residential development will deter some views of the proposed development, notably from the East and South-East, this is illustrated in Viewpoint 6.

While the scheme will alter the views and visual amenity in the area it would be consistent with existing and emerging development trends in the area and in line with the current development plan. Therefore, the cumulative impact of this scheme and the surrounding recent developments would not significantly affect the fabric of the landscape or the existing landscape type.

14.7 Residual Impact

As described under Potential Impact of the Proposal above, the operational phase of this development will give rise to a noticeable change in the landscape character. The main impact on the landscape character will be the transformation of the area to a construction compound. However as described in the 'Character of the Site' section of this document the landscape of this section the site would be considered of no aesthetic value and the wider environment would be considered a transitional landscape. As the proposed landscape scheme matures the new landscape spaces will become more appreciated by the users for their inherent values. This will reduce the magnitude of negative impact felt from the initial construction activities and initial visual impact of the built mass during the operational phase.

The landscape proposals include the installation of native trees, hedgerows and ecological corridors. The proposed landscape treatment combined with the architectural treatment of the building will reduce the visual mass of the development and mitigate its visual impact. As the new trees mature the magnitude of the visual impacts will be reduced further. Furthermore, a significant level of public realm, amenity and parkland spaces will be introduced providing recreational value and reducing the impact on landscape character in the area.

14.8 References

- Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report (European Commission, 2017)
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (Department of Housing, Planning & Local Government, 2018)
- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports – Draft (EPA, 2017)
- Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (Landscape Inst. + IEMA 2013)
- Fingal County Council, Fingal Development Plan 2023-2029
- Arboricultural Report and accompanying drawings, Proposed Development at Whitehaven by The Tree File Ltd., Consulting Arborists

15 MATERIAL ASSETS: TRAFFIC AND TRANSPORT

15.1 Introduction

Chapter 15 (Material Assets: Traffic and Transport) of this EIAR has been prepared by J.B. Barry & Partners Ltd. and addresses all traffic and transport and related sustainability issues including means of vehicular access, pedestrian, cyclist and local public transport connections.

The principal objective of this chapter is to quantify any level of impact across the local road network and subsequently ascertain the operational performance of the local road network.

This chapter should be read in conjunction with the site layout plans for the Site and project description provided in **Chapter 5** (Project Description) of Volume 2 of this EIAR.

The proposed development will consist of the following:

- Site clearance, including the removal of all structures on site part of existing surface car parking;
- Relocation of existing surface car parking spaces catering for Swift Square Office Park personnel to the new basement accessible via a new ramp off the local road from Northwood Avenue, and the new undercroft parking area with access at street level off the local road to the north of the site;
- Construction of 3 no. apartment blocks (1, 2 and 3) over a partially shared podium structure, with heights ranging from 4 to 9 storeys, comprising 192 no. apartment units (4 no. 1-bedroom units and 188 no. 2-bedroom units), ancillary residential uses and associated car and bicycle parking;
- Provision of public and communal open spaces, public realm, boundary treatments, landscaping and lighting; refuse storage, associated drainage, attenuation and services; temporary car parking area and construction access; and all associated site development works.

A full description of the proposed development is set out in **Chapter 5** (Project Description) of Volume 2 of this EIAR.

15.1.1 Author Information

Kwok Chuen Lam is a Senior Engineer with 16 years' experience specialising in the field of Traffic and Transport Engineering. He holds a degree in civil and structural engineering from the Hong Kong University of Science and Technology (2004). He became a chartered member of the Institution of Civil Engineers, U.K. in 2011 and the Hong Kong Institution of Engineer in 2012. He has been engaged as team member on a variety of Transportation and Traffic projects. His experience includes the design and management of road improvement projects, preparation of mobility management plans and traffic impact assessments.

15.1.2 Scoping

Scoping of the proposal identified the following issues for consideration in the EIA Report:

This chapter of the EIAR provides an assessment of the potential traffic impacts associated with the proposed development. In this regard, the assessment aims to:

- Identify the existing environment in terms of traffic, existing transport infrastructure and emerging transport developments;
- Quantify the likely vehicle traffic flows to and from the development onto the surrounding road network;
- Identify and quantify the likely traffic impacts on the surrounding road network resulting from the development;
- Identify any potential safety issues, in particular impacts on vulnerable road users in the study area;
- Produce a car and bicycle parking strategy; and
- Identify suitable measures to mitigate traffic and transportation impacts, if any, associated directly with the development.

The assessment is based on the findings of site visits, traffic observations, on-site traffic counts, architectural plans, discussions with the Design Team and consultation with Fingal County Council (FCC).

15.2 Assessment Methodology

This chapter is based on the findings and results of the Traffic and Transport Assessment prepared by J.B. Barry & Partners Ltd. which is submitted with this EIAR (**Appendix 8.3** of Volume 3) in support of this application. The methodology adopted for this section is based on, but not limited to the following published guidance;

- Traffic and Transport Assessment Guidelines (2014) as published by the former National Roads Authority (NRA) now Transport Infrastructure Ireland (TII);
- Traffic Management Guidelines (2019) as published by the Department of Transport, Tourism and Sport;
- TII PE-PAG-02017 - Project Appraisal Guidelines for National Roads Unit 5.3 - Travel Demand Projections (2021) as published by the former NRA now TII;
- Design Manual for Urban Roads and Streets (DMURS) (2013 and updated in 2022) as published by the Department of Transport;
- Fingal Development Plan 2023-2029 as published by Fingal County Council;
- Design Standards for New Apartments, Guidelines for Planning Authorities (2015 and updated in 2020) as published by the Department of Housing, Local Government and Heritage;
- Guidelines on the information to be contained in Environmental Impact Assessment Reports (2022) as published by the Environmental Protection Agency (EPA);
- Sustainable Mobility Policy Action Plan 2022 – 2025 as published by the Department of Transport;
- Greater Dublin Area (GDA) Transport Strategy 2022 – 2042 as published by the National Transport Authority (NTA);
- Greater Dublin Area Cycle Network Plan (2013) as published by the NTA; and
- Sustainable Urban Housing: Design Standards for New Apartments (2020) as published by the Department of Housing, Local Government and Heritage.

The methodology incorporated a number of key inter-related stages, which are outlined below;

- A site audit was undertaken to quantify existing road network issues and identify local infrastructure characteristics, in addition to establishing the level of accessibility to the Site in terms of walking, cycling and public transport;
- Reference was made to site layout drawings;
- Existing and proposed access arrangements for the proposed development onto Northwood Avenue were considered;
- Historical traffic surveys were obtained (from Tuesday, 12th February 2019), at the junctions most likely to be impacted by the proposed development;
- A trip generation exercise has been carried out to establish the potential level of vehicle trips generated by the proposed development;
- In accordance with the Traffic and Transport Assessment Guidelines (2014), the specific level of influence generated by the proposed development upon the surrounding local road network was ascertained and the junctions which required assessment in greater detail were identified; and
- The junctions considered most likely to be impacted upon by traffic movements associated with the development were assessed in terms of capacity.

15.3 Baseline Environment

15.3.1 Land Use and Location

The existing Site is currently used as surface car parking area associated with the Swift Square Park Office buildings and temporary parking facilitating construction workers at Blackwood Square Strategic Housing Development (SHD) (Ref. ABP-306075-19) to the west of the subject Site. Vehicular access is currently connected to a sideroad Cedarview and vehicles can travel to Northwood Avenue from the existing carpark

via Cedarview and the local access road to the west of the Site. The Site is bounded by Swift Square Office Park development to the south, Cedarview residential development to the north, a local access road and Gulliver's Retail Park to the west, and the Whitehaven SHD to the south-east.

The land uses surrounding the development site are a mix of commercial, healthcare and residential (comprising both individual dwellings and larger residential apartment blocks), all of which benefit from access to / from Northwood Avenue.

15.3.2 Existing Transport Infrastructure

15.3.2.1 Introduction

An audit of the existing and proposed facilities and nearby transport was undertaken for the development site in the course of developing this *Traffic and Transport Assessment* which is attached to this EIAR (**Appendix 8.3** of Volume 3). The proposed development is located approximately 600 metres to the south of the M50, allowing easy access to and from the area by car from outer areas. The Site of the proposed development is located close to a number of bus routes and a number of emerging transport developments. The audit considered the quality and availability of the existing facilities and public transport services. The audit found that the subject Site and surrounding lands are currently very well serviced by public transport.

The existing public transport facilities and emerging transport developments in the area surrounding the Northwood area are detailed following.

15.3.2.2 Pedestrian and Cycle Infrastructure

As a modern development, the pedestrian and cycle facilities within the Northwood area are of a good quality. All pedestrian routes leading to / from the development benefit from the provision of street lighting in addition to good quality pedestrian footways. There are numerous pedestrian crossing facilities available along Northwood Avenue just south of the development. Additionally, off road cycle tracks are provided throughout the Northwood area and on the external road network. Ballymun Road has an off-road cycle track while Swords Road has an On-Road cycle track. **Figure 15-1** below illustrates the existing cycle network in the area and **Figure 15-2** illustrates the proposed improvements from the NTA's "Greater Dublin Area Cycle Network Plan (2013)". The off-road cycle lane along Northwood Avenue branches out at numerous locations along the route providing additional cycle facilities throughout the Northwood area. For the Proposed Cycle Network (**Figure 15-2**), it is noted that much of the alignment for the Santry River Greenway is already in place throughout the Northwood area.

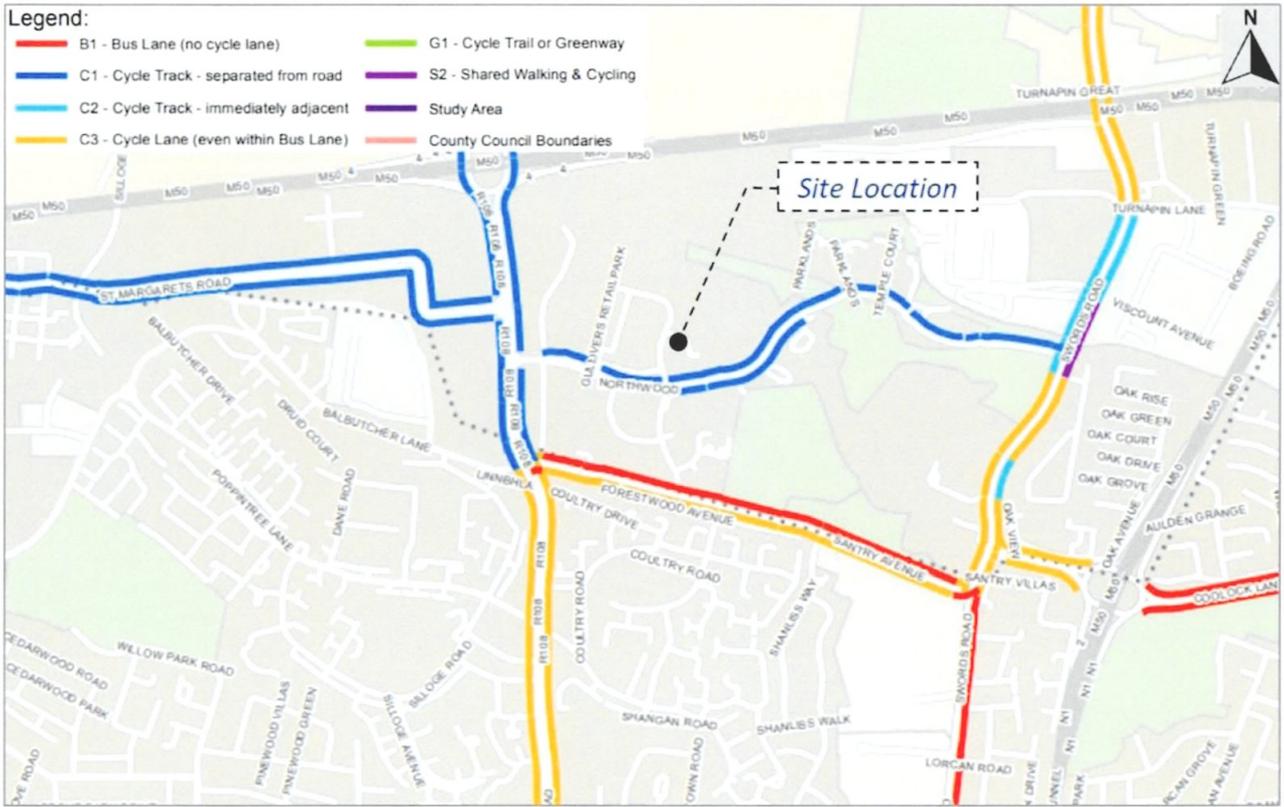


Figure 15-1: Existing Cycle Facilities - Greater Dublin Area Cycle Network Plan

Source: Greater Dublin Area Cycle Network Plan (2013)



Figure 15-2: Proposed Cycle Facilities - Greater Dublin Area Cycle Network Plan

Source: Greater Dublin Area Cycle Network Plan (2013)

15.3.2.3 Existing Public Transport

Bus Services

The Site is ideally situated to benefit from a comprehensive range of Dublin Bus and Transport for Ireland (TFI) Go Ahead bus services. Furthermore, the range and proximity of a number of emerging public transport interchanges further enhances the sustainability characteristics of the Site.

Dublin Bus and Go Ahead operate numerous routes along Swords Road, Ballymun Road and Santry Avenue. These Dublin Bus operated bus services operate on a daily basis and offer relatively frequent schedules as summarised in **Table 15.1** below.

Table 15.1: Dublin Bus Service Frequency* - No. of Services (www.dublinbus.ie)

Route No.	Route	Mon - Fri	Sat	Sun	Stop Location
16	Dublin Airport to Ballinteer	87	81	63	Swords Road
27b	Eden Quay to Harristown	53	51	31	Swords Road
33 (TFI)	Lower Abbey St. to Balbriggan	21	14	12	Swords Road
41	Lwr. Abbey St. to Swords Manor	50	44	29	Swords Road
41b	Lwr. Abbey St. to Rolestown	5	4	3	Swords Road
41c	Lwr. Abbey St. to Swords Manor	45	41	28	Swords Road
4	Harristown to Monkstown Avenue	80	64	47	R108
155	Ikea (Ballymun) to Bray Rail Station	5	53	47	R108
13	Harristown to Grange Castle	75	63	46	R108
42d	DCU to Portmarnock	1	No service	No service	R108
N6	Naomh Barrog GAA – Fingles Village	107	93	57	Santry Avenue (R104)
17a (TFI)	Kilbarrack to Blanchardstown	57	52	42	Santry Avenue (R104)

* Bus frequencies may vary during Covid-19 restrictions and lockdowns.

Train Services

The closest train station to the proposed development is Drumcondra Station which is located approx. 6km away from the development. The train services provided at Drumcondra Station are shown in **Table 15.2** below:

Table 15.2: Train Service (www.irishrail.ie)

Train Serviced*	Timetable**		
	Mon - Fri	Sat	Sun
Dublin (Connolly) - Sligo	06:55 – 20:50	09:05 – 19:15	09:05 – 19:05
Dublin (Connolly / Grand Canal Dock) – M3 Parkway – Longford	05:25 – 23:22	05:58 – 23:16	08:45 – 23:00
Dublin (Grand Canal Dock) – Kildare - Portlaoise	07:26 – 23:22	07:26 – 23:22	-

* The rail fares and tickets details can be referred to <https://www.irishrail.ie/en-ie/rail-fares-and-tickets/fares-info/dart-and-short-hop-zone>.

** The train timeable can be referred to <https://www.irishrail.ie/en-ie/station/drumcondra>.

Taxi Services

Taxi is also a common form of transport in Ireland. Currently, passengers can order / book taxi services in advance via online / phone / apps (i.e. Free Now, Lynk, Taxy, etc.). By using these software, the passengers can order their nearest taxi so as to reduce the waiting time.

Car Clubs and Car Sharing

Car clubs or car sharing is a model of car rental where people rent cars for short periods of time, often by the hour. It differs from traditional car rental in that the owners of the cars are often private individuals themselves, and the carsharing facilitator is generally distinct from the car owners. Carsharing is part of a larger trend of shared mobility.

15.3.3 Emerging Transport Developments

15.3.3.1 Public Transport Developments

15.3.3.1.1 BusConnects

BusConnects proposes 16 No. Core Bus Corridors extending radially from Dublin City Centre to the surrounding suburbs. Dublin BusConnects proposes to introduce numerous new bus routes in close proximity to the development. **Figure 15-3** taken from the latest BusConnects proposal illustrates proposed new routes in the vicinity of the proposed development such as the “E1 and E2 Bus Routes”, which are the Ballymun to City Centre Core Bus Corridor. The “E Spine” Core Bus Corridor will operate every 5 minutes or better. It would travel from the city centre along the R108/Ballymun Road and would split into branches, the E1 continuing north along the R108, terminating to the west of the development and the E2 would travel west towards Charlestown Shopping Centre. Each branch would operate every 10 minutes. The E1 would also operate to Bray and the E2 to Dun Laoghaire. Additionally, the A2 branch of the A Core Bus Corridor from the Airport to Tallaght, and the A4 Branch of the A Core Bus Corridor between Swords to Rathfarnham will all be frequent services. The N6 of the N Core Bus Corridor from Charlestown Shopping Centre to Howth Junction passes to the south of the proposed development on Santry Avenue. This route became operational on 29th May 2022 and operates at a frequency of 10 minutes on weekdays and Saturdays, and 15-20 minutes on Sundays.



Figure 15-3: Proposed BusConnects Routes beside Northwood

Source: www.busconnects.ie

15.3.3.1.2 MetroLink

An objective of the MetroLink project is to provide a sustainable, safe, efficient, integrated and accessible public transport service between Swords, Dublin Airport and Dublin City Centre. MetroLink will comprise a high-capacity, high-frequency, modern and efficient metro railway between Estuary Station and the Park and Ride Facility, north of Swords, via Dublin Airport to Charlemont Station which lies south of Dublin City Centre. The proposed MetroLink will be approximately 18.8 kilometres in length.

The Northwood Station of the proposed MetroLink, which is approximately 450 metres away the proposed development, is currently proposed under the carriageway of the Ballymun Road (R108) with access from the east and west side of the carriageway. The surrounding area includes a range of commercial, residential and retail uses including Gulliver’s Retail Park, Musgraves head offices and Ikea. The development will benefit from connectivity to a new pedestrian walkway through Gulliver’s Retail Park, which is being constructed with the ongoing Blackwood Square development and is designed to provide direct access to the MetroLink stop. See **Figure 15-4** and **Figure 15-5** illustrate the location and image gallery of the Northwood Station on the Ballymun Road (R108).



Figure 15-4: Proposed Alignment of MetroLink and Location of Northwood Station

Source: www.metrolink.ie, annotation by J.B. Barry & Partners



Figure 15-5: Image Gallery of Proposed Northwood Station on Ballymun Road (R108)

Source: www.metrolink.ie

15.3.3.2 Junction Upgrades

During consultation with FCC on a previous application in the area, it is noted that Fingal plan to upgrade Junction 2) Ballymun Road (R108) / Northwood Avenue. Additionally, it is noted that Fingal plan to upgrade Junction 3) Northwood Avenue / Old Ballymun Road to incorporate SCATS. Upgrading this junction to SCATS will allow the junction to control the traffic arriving from Northwood to the Ballymun Road. The above-mentioned junction upgrading works will bring benefits to junction performance.

15.3.4 Car Ownership Levels

Census 2016 Small Area Population Statistics were analysed in order to determine existing car ownership levels for households in the Northwood area. For the purposes of this analysis, 13 No. locations, which are characterised as being predominately apartment complexes were utilised. These locations mirror closely the proposed development and are illustrated in **Figure 15-6** below. Small Area populations which comprised mainly office blocks, hotels or industrial areas were excluded from this analysis.



Figure 15-6: Census 2016 Data Locations

Source: Central Statistics Office

Table 15.3 outlines the total car ownership levels per household of all these areas. Additionally, the table demonstrates the number of car parking spaces required if the proposed development followed the same pattern of car ownership per household as the surrounding area.

Table 15.3: Car Ownership Summary

No. of Motor Cars	No. of Households	%	Spaces Required in the Proposed Development (@ 192 apartments)
No motor car	307	24.1%	0
One motor car	770	60.4%	116
Two motor cars	182	14.3%	55
Three motor cars	12	0.9%	5
Four or more motor cars	3	0.2%	2
(Not stated)	(141)		
Total	1407		178

Table 15.3 demonstrates that the average car ownership is just under one car per household. Utilising the same car ownership patterns for the proposed development, it is estimated that approximately 178 residential car parking spaces would be required to satisfy demand. This equates to a provision rate of 0.93 spaces per residential unit, which is greater than the recommended car parking supply of 0.5 spaces per one & two bedroom units (i.e. 96 car parking spaces) as required in the Fingal Development Plan 2023-2029.

15.3.5 Road Safety Authority (RSA) Collision History

The Road Safety Authority (RSA) database of road collision information was interrogated to establish if the surrounding road network in the vicinity of the proposed development access holds records relating to historical collision occurrence (Figure 15-7 below). Collisions from 2005 to 2016 only are available.

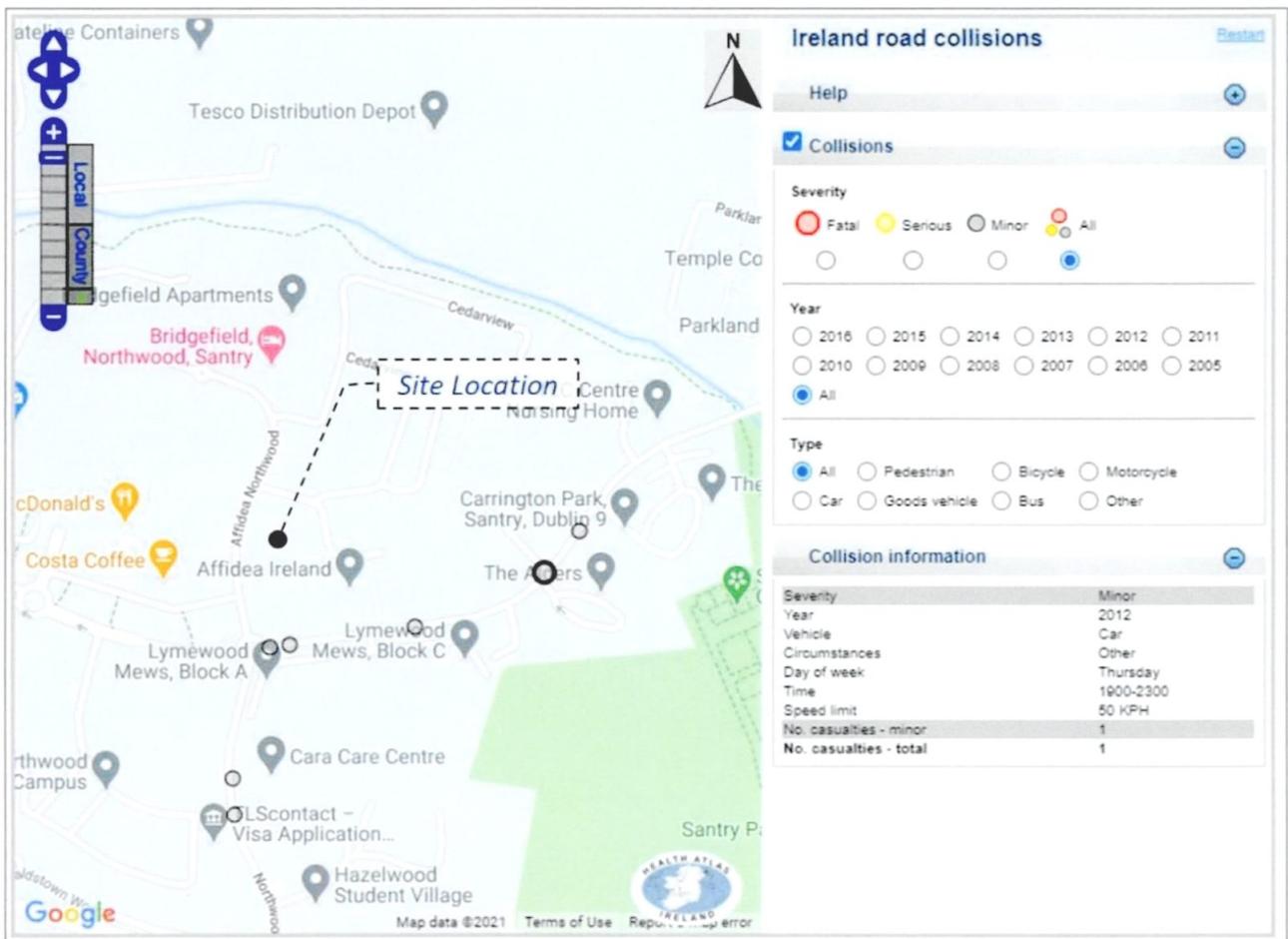


Figure 15-7: Historic Collisions 2005 – 2016

(Source: RSA Database, annotation by J.B. Barry & Partners)

This exercise revealed that there has been one minor collision at the entry of the Site on Northwood Avenue, in 2012. Four minor collisions have also taken place on the Northwood Avenue. One single vehicle collision, two vehicle collisions with a pedestrian and one vehicle collision with a bicycle. Due to the isolated nature and low frequency of these collisions a pattern of collisions is not identifiable. It is not considered that the proposed develop would result in any traffic safety implications.

15.4 Characteristics of the Proposed Scheme

15.4.1 Overview

The proposed development comprises a large-scale residential (LRD) development on a site off Northwood Avenue, Santry, Dublin 9, generally incorporating the existing surface car parking area associated with Swift Square Office Park and adjacent lands.

In summary, the proposed development will consist of the following:

- Site clearance, including the removal of all structures on site part of existing surface car parking;
- Relocation of existing surface car parking spaces catering for Swift Square Office Park personnel to the new basement accessible via a new ramp off the local road from Northwood Avenue, and the new undercroft parking area with access at street level off the local road to the north of the site;

- Construction of 3 no. apartment blocks (1, 2 and 3) over a partially shared podium structure, with heights ranging from 4 to 9 storeys, comprising 192 no. apartment units (4 no. 1-bedroom units and 188 no. 2-bedroom units), ancillary residential uses and associated car and bicycle parking;
- Provision of public and communal open spaces, public realm, boundary treatments, landscaping and lighting; refuse storage, associated drainage, attenuation and services; temporary car parking area and construction access; and all associated site development works.

A full description of the proposed development is set out in **Chapter 5** (Project Description) of Volume 2 of this EIAR and the statutory public notices part of this application. A suite of supporting documentation and drawings is also enclosed with this LRD application and should be read in conjunction with this report.

15.4.2 Site Access

Access to the proposed development will be provided from two locations. One vehicular access will connect between the local access road to the west of the proposed development and the basement car park area. Another vehicular and cyclist access will connect between Cedarview and undercroft car park area. See **Figure 15-8** for a sketch illustrating the proposed access points to the Site.

The local access road to the west of the proposed development and Cedarview are private roads which have a 30kph speed limit. Sightlines in excess of 23 metres are provided in accordance with the Design Manual for Urban Roads and Streets for 30kph speed limit roads at the vehicular accesses to the basement car park area and the undercroft car park area on both the local access road to the west of proposed development and Cedarview.

Figure 15-8 illustrates five pedestrian accesses which will be provided to the proposed development as following:

- West side of the proposed development connecting to local access road;
- North side of the proposed development connecting to Cedarview;
- North-east side of the proposed development connecting to Cedarview;
- South-east side of the proposed development connecting to Northwood Avenue; and
- South side of the proposed development connecting to Northwood Avenue.

To give priority to pedestrian and cyclist, appropriate measures (i.e. road markings, signages, ramp, courtesy crossing, etc.) will be considered in later detailed design stage to ensure safety of road users.



Figure 15-8: Proposed Access Arrangement Side Road Northwood Avenue (indicative subject Site outline in red)

Source: Google Maps, annotation by J.B. Barry & Partners

15.4.3 Parking Arrangements

15.4.3.1 Overview

A sustainable approach to parking would be incorporated into the development. The parking strategy utilised is derived from “Sustainable Urban Housing: Design Standards for New Apartments (2020)”, which places a strong emphasis on bicycle parking. As per the standards, cycling is a:

“flexible, efficient and attractive transport option for urban living and these guidelines require that this transport mode is fully integrated into the design and operation of all new apartment development schemes.”

The proposed development is well situated next to high-quality off-road cycling infrastructure and there is an opportunity to maximise the benefit deriving from appropriate cycle parking provision. The proposed development is an integrated area adjacent to existing employment, retail and community facilities. The proposed development is also well situated next to high-quality existing public transport services, as well as planned future public transport upgrades. Additionally, the development is in an “Intermediate Urban Location” as per the “Sustainable Urban Housing: Design Standards for New Apartments (2020)” and therefore car parking should be reduced:

“In suburban/urban locations served by public transport or close to town centres or employment areas and particularly for housing schemes with more than 45 dwellings per hectare net (18 per acre), planning authorities must consider a reduced overall car parking standard and apply an appropriate maximum car parking standard.”

Due to the close proximity of the proposed development to high-quality off-road cycling infrastructure, as well as numerous existing and future high frequency and high capacity public transport services, the parking strategy for the proposed development is based upon the principles of “Sustainable Urban Housing: Design Standards for New Apartments (2020)” in order to further promote sustainable transport modes thus minimising the need for additional car parking.

15.4.3.2 Car Parking, including Electric Vehicle Charging

Table 15.4 summarises the car parking and cycle parking provided within the development. The majority of car/cycle parking will be provided in the basement and undercroft level. The car parking strategy will also include relocation of 254 existing surface car spaces currently used by the Swift Square Office Park development to the newly constructed car parking spaces within the proposed development at the basement and undercroft car park areas.

The proposed development will provide 446 car parking spaces, of which 74 car parking spaces located at undercroft car park area, 360 car parking spaces located at basement car park area and 12 car parking spaces located on-street, which are newly constructed by the proposed development. The 360 basement car parking spaces will comprise 214 relocated car parking spaces from the existing surface car parking area catering for Swift Square Office Park personnel and 146 car parking spaces for the residential units. The 74 undercroft car parking spaces will comprise 40 relocated car parking spaces from the existing surface car parking area catering for Swift Square Office Park personnel and 34 car parking spaces for the residential units. The 180 residential car parking spaces equates to 0.94 car parking space per residential unit, which is greater than the recommended car parking supply of 0.5 spaces per one & two bedroom units (i.e. 96 car parking spaces) as required in the Fingal Development Plan 2023-2029 and is considered commensurate with the car parking requirements estimated in **Section 15.3.4**. Additionally, visitors utilising the residential development will also be able to use the 12 on-street car parking spaces, which are newly constructed by the proposed development.

To satisfy the extra demand of car usage by residents, 2 car sharing spaces would be provided at on-street, which are newly constructed by the proposed development, for a private car sharing company. As such, residents can use the car, provided by a private car sharing company, to satisfy their travel needs by car. If any more car parking spaces were introduced, it may encourage an overreliance on single occupancy vehicles, resulting in a negative effect on traffic in the surrounding area. Furthermore, going forward it is

projected that car ownership levels will not increase in the Northwood Area (and throughout the city) due to the increased investment in public transport infrastructure such as BusConnects and MetroLink.

Table 15.4: Car Parking and Bicycle Parking

	Land Use	Parking Provided	Ratio
Car Parking	Residential Units	180 Car Parking Spaces at Undercroft and Basement Car Park Areas <i>(of which 2 will be Disabled Parking Spaces)</i>	~0.94 spaces per residential unit
		33 Motorbike Parking Spaces at Undercroft and Basement Car Park Areas	n/a
	Swift Square Office Park Buildings	254 Relocated Parking Spaces at Undercroft and Basement Car Park Areas	n/a
	Visitor Spaces	12 On-street Car Parking Spaces <i>(of which 1 will be Disabled Parking Spaces and 2 will be Car Sharing Parking Spaces)</i>	~1 space per 16 residential units
Cycle Parking	Residential Units	392 Cycle Parking Spaces at Undercroft Level	~1.03 space per residential bedroom
		100 Visitor Cycle Parking Spaces on surface, across the public areas	~1 visitor space per 1.92 residential units
	Swift Square Office Park Buildings	30 Relocated Cycle Parking Spaces between the Swift Square Office Park buildings	n/a

Electric Vehicle (EV) Charging

A Multiple Occupancy Building Car Charging Strategy, prepared by M Elligott Consulting Engineers, has been submitted outlining that electric vehicle customers could register with ‘Prepaygo’ to avail of the charging points. Any resident that wishes to have a car charging point installed at their car parking space could apply for the Sustainable Energy Authority of Ireland (SEAI) grant which would be passed onto the management company who would install the charging point.

Provision will be made within development for the fitting of car charging points to all proposed car spaces (those in undercroft and basement car park areas). A minimum of 20% of the residential parking space should have EV charging points from completion of the proposed development with all ducting and services provided as part of the proposed development to facilitate non-disruptive retro fitting of EV charging points for all of the remaining residential parking spaces. The developer will provide 40 parking spaces with functioning EV charging points from completion of the proposed development, which is greater than the recommended EV charging points (i.e., 36 parking spaces) as required in the Fingal Development Plan 2023-2029.

15.4.3.3 Bicycle Parking

The cycle parking strategy equates to 1.03 bicycle parking space per bedroom, totalling 392 spaces, all contained in communal locked cage enclosures in the undercroft level area. There will also be 100 visitor bicycle parking spaces, which can also be used by office staff, on surface, across the public areas. No bicycle parking space will be provided at the basement level area. All bicycle parking stands will be “Sheffield” or of similar design in order to secure bicycles. Provision of electric bicycle parking will be considered in later detailed design stage. Additionally, 30 bicycle parking spaces will be provided between the Swift Square Office Park buildings for relocation of existing bicycle parking spaces catering for Swift Square Office Park personnel.

15.4.3.4 Motorcycle Parking

33 motorcycle parking spaces will be available in the undercroft car park area (with 28 spaces) and basement car park area (with 5 spaces).

15.4.3.5 Car Sharing

Further to the car parking provision, an additional 2 no. car parking spaces will be assigned on-street for a car share facility. The benefits of such car sharing services include:

- the reduction of the number of cars on the road and therefore traffic congestion, noise and air pollution;
- frees up land traditionally used for private parking spaces but which may not be used;
- increases 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, encouraging social inclusivity.

15.5 Impact Assessment

The traffic and transport effects are assessed in the following sections for the construction and operation phases of the proposed development.

This assessment of impacts follows guidelines established by the TII in the “*Traffic & Transportation Assessment Guidelines*” (2014).

The significance of impacts on specific junctions are considered in terms of the magnitude of the effect/impact of an element of the project on a junction and the importance of that junction.

15.6 Do Nothing

The ‘do nothing’ alternative describes the scenario where no development occurs. The impacts of the development will be compared against this do-nothing scenario referred to as “without” the development in the following sections.

15.7 Potential Impact of the Proposed Development

15.7.1 Construction Phase

During the construction works, there will be additional HGV movements to/from the Site. Traffic will be generated by the disposal of surplus subsoil from the Site, deliveries of construction materials and equipment and of course private vehicles owned and driven by construction workers and staff.

It should be noted that construction traffic generated during the Construction Phase tends to be outside of peak hours. (Staff and deliveries arrive before 07:00 and generally depart after 19:00). The traffic generated by the construction phase will not be higher than the peak hour predicted volumes for the Operational Phase. Any specific recommendations/requirements with regard to construction traffic management made by FCC will be adhered to during this phase.

To facilitate the construction works of the proposed development, a temporary carpark will be constructed in a designated area northeast of the adjacent Gulliver’s Retail Park as shown in **Figure 15-11**.

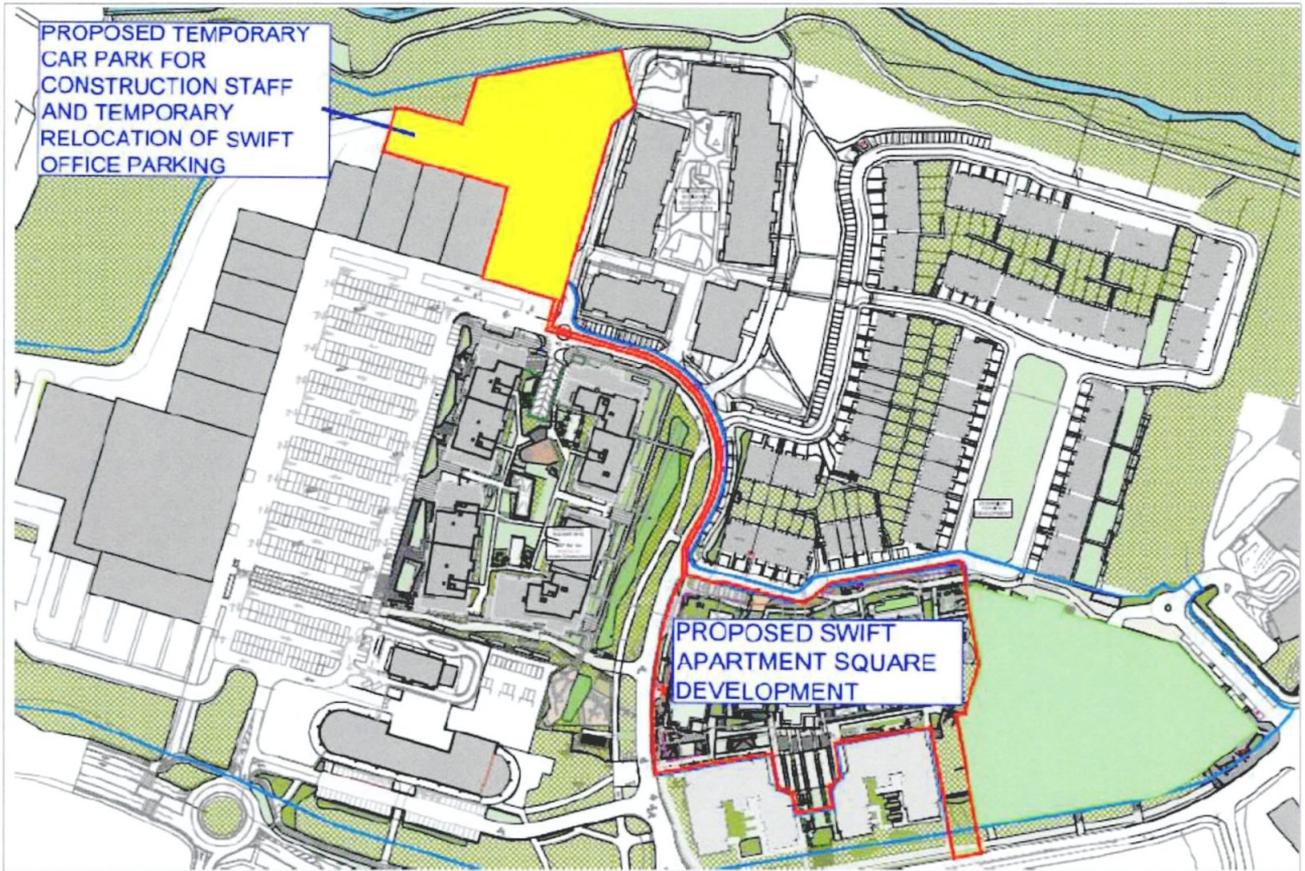


Figure 15-9: Proposed Location for Temporary Car Parking for Swift Square Office Park Personnel and Construction Staff (indicative subject Site outline in red)

Following construction of this temporary carpark, all existing basement car parking catering for Swift Square Office Park personnel will be temporarily relocated to the new temporary carpark. After that, the existing vehicular ramp access to basement carpark will be removed and a new temporary ramp will be constructed to facilitate temporary access to the basement carpark from Northwood Avenue as shown in **Figure 15-10**.

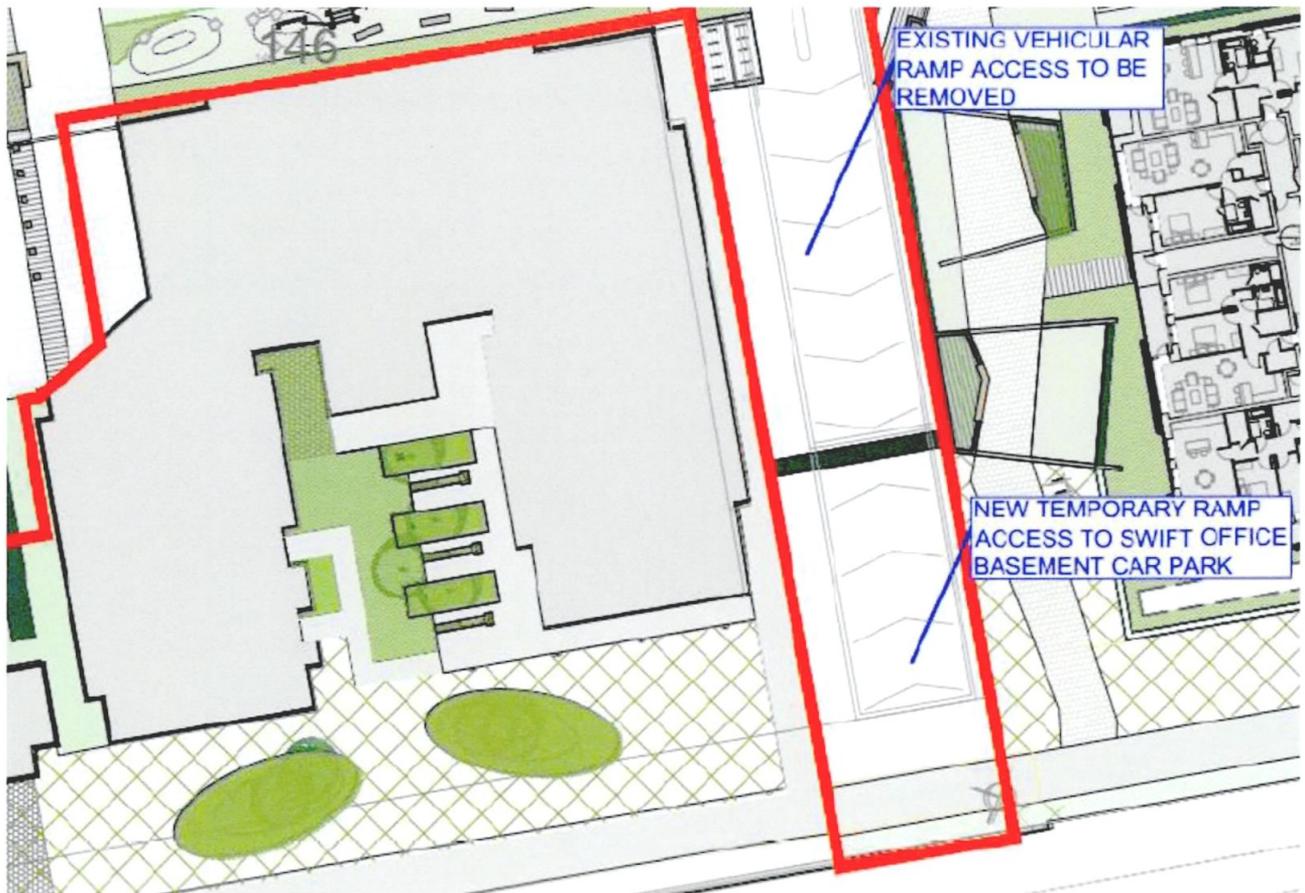


Figure 15-10: Temporary Ramp Access to Existing Basement Carpark catering for Swift Square Office Park Personnel from Northwood Avenue (indicative subject Site outline in red)

Following completion of this new temporary ramp from Northwood Avenue, the existing basement carpark catering for Swift Square Office Park personnel will be restored and the new temporary carpark as shown in **Figure 15-11** will be used for the relocation of the existing surface car parking area catering for Swift Square Office Park personnel to facilitate the main excavation works. Additionally, temporary car parking spaces for construction staff will be also provided at the above-mentioned temporary carpark.

Following practical completion of the proposed Swift Apartment basement structure, a temporary access to the existing basement carpark catering for Swift Square Office Park personnel through a new basement ramp access will be constructed as shown in **Figure 15-11**.



Figure 15-11: A Ramp Access to Existing Basement Carpark catering for Swift Square Office Park Personnel from the Local Access Road (indicative subject Site outline in red)

At this stage, the temporary access from Northwood Avenue as shown in **Figure 15-10** will be decommissioned and the podium level structure and landscaping will be completed in this area. The new permanent access route to the basement carpark catering for Swift Square Office Park personnel through the new Swift Apartment basement will then be completed and commissioned as shown in **Figure 15-12**.

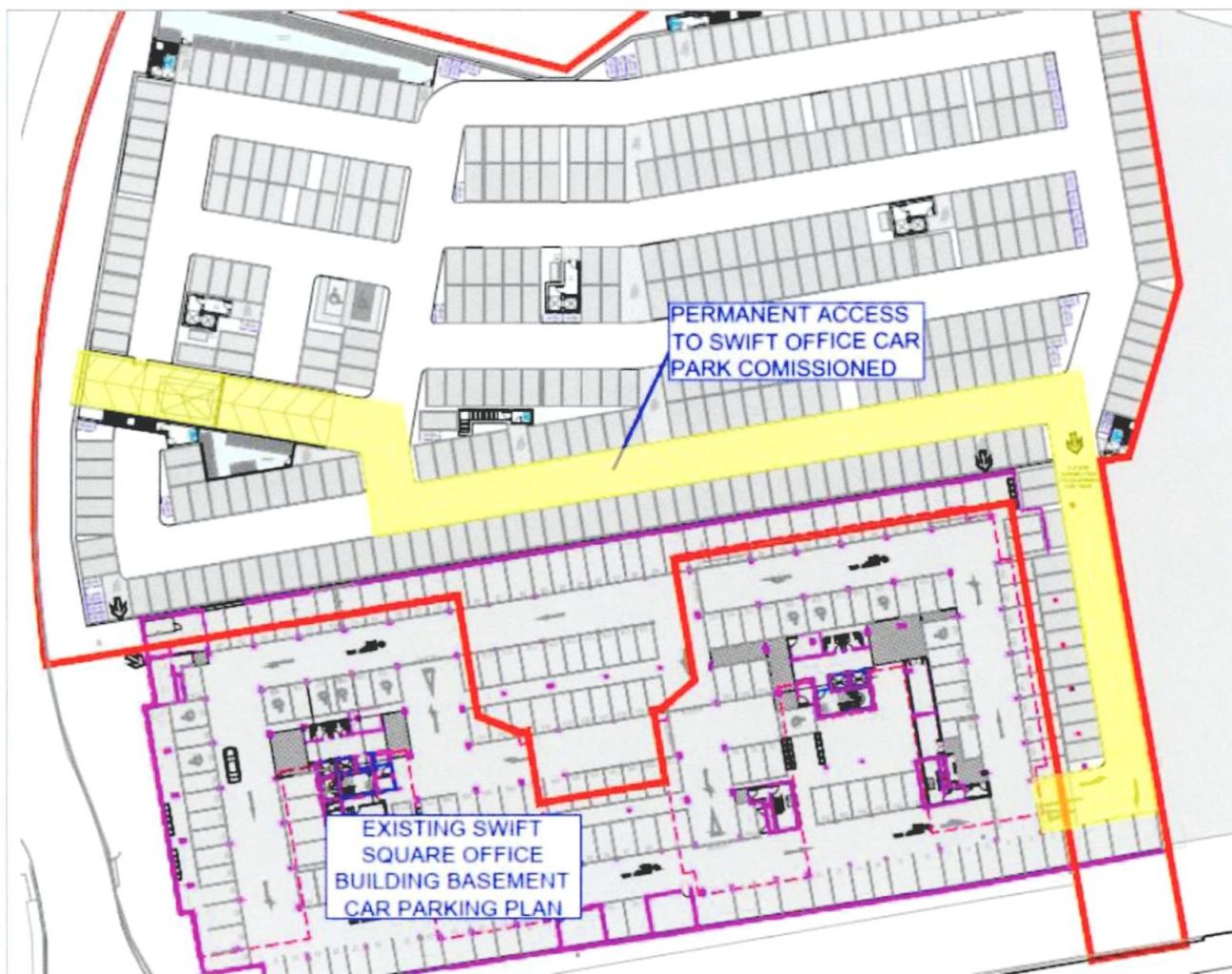


Figure 15-12: Completion of Permanent Access to the Swift Square Office Park Buildings Basement Carpark with the Whitehaven SHD Development (indicative subject Site outline in red)

If the estimated trips associated with the proposed development represents a tiny proportion of existing traffic flows on the surrounding road network and less than the thresholds for traffic impact assessment stated in the Table 2.1 of TII Traffic and Transport Assessment Guidelines (i.e. 10% of the traffic flow on the existing road network and 5% in sensitive environments or where congestion exists), a full traffic impact assessment is not required for the affected junctions. Following analysis of the surrounding area, it is anticipated that the above-mentioned construction works would not increase the traffic flows to the key junctions (i.e. Junction of Northwood Avenue / Northwood Road) in the vicinity of the subject Site in the peak hours during construction. Thus, it is not proposed to undertake any traffic capacity assessments of existing junctions in this study during construction phase.

15.7.2 Operational Phase: Base Year 2022

15.7.2.1 Traffic Survey

To determine current traffic behaviour in the vicinity of the subject Site, a vehicle turning movement survey was obtained at seven junctions around Northwood (See **Figure 15-13**). To provide a robust assessment, FCC were informed that historical traffic counts were obtained for each junction. The historical traffic counts were undertaken in 2019 for a previous application for Blackwood Square, a development located c.100m west of the subject Site;

- Site 1- Junction 1) Ballymun Road (R108) / St. Margaret’s Road;
- Site 2- Junction 2) Ballymun Road (R108) / Northwood Avenue;