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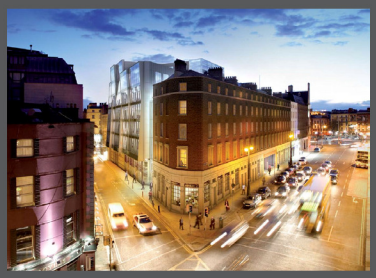




MOBILITY MANAGEMENT PLAN

PROPOSED MIXED-USE DEVELOPMENT AT THE FORMER GALLAHER'S SITE, AIRTON ROAD, TALLAGHT, DUBLIN 24

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PROJECT: **PROPOSED MIXED-USE DEVELOPMENT AT THE FORMER GALLAHER'S SITE, AIRTON ROAD, TALLAGHT, DUBLIN 24**

PROJECT NO. **19.136**

DOCUMENT TITLE: **MOBILITY MANAGEMENT PLAN**

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barrett mahony

MOBILITY MANAGEMENT PLAN
FOR
PROPOSED MIXED-USE DEVELOPMENT,
THE FORMER GALLAHER'S SITE,
AIRTON ROAD,
TALLAGHT,
DUBLIN 24

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1.0 INTRODUCTION

Barrett Mahony Consulting Engineers (BMCE) have been commissioned to prepare a Mobility Management Plan by Greenleaf Homes Limited for the proposed mixed-use development. The 2.79-hectare site is currently occupied by the disused factory/warehouse & associated hardstanding.

The proposed development will consist of 502no. residential apartment units in 6no. multi-storey blocks (A-F). Ground level car parking will be provided as an undercroft to blocks A-C and basement car parking will be provided below blocks E and F. The total number of car parking spaces provided is 202. 3no. retail units are with a combined total area of 482m² will be provided (187m², 161m² and 134m²). A 329m² crèche will be provided under the south eastern of Block C, within the site adjacent to the open space. The site will also include communal facilities, (gym, offices) of 704m². This is not a 'Build-to-Rent' (BTR) scheme.

- Apartments 502 no.
- Creche 329m²
- Communal Facilities 704m²
- Retail Area 482m²
- Car Parking Spaces 202
- Bicycle Parking Spaces 584

Apartment breakdown as follows;

- 1 Bedroom 197
- 2 Bedroom 257
- 3 Bedroom 48

The subject site is currently occupied by an abandoned industrial unit, the Former Gallaher's Cigarette production factory. The breakdown of the site is as follows:

- Industrial Unit footprint 0.7 ha
- Offices footprint 0.1 ha
- Roads/Hardstanding 0.85 ha
- Landscaping 0.85 ha

The site is bounded to the north by Airton Road and to the east by Greenhills road. The north west of the site is bounded by an entrance road to an industrial unit, the south west is bounded by the car park used for the industrial unit. The Poddle/Tymon stream runs along the south of the site and Tallaght University sports grounds are on the other side of the river. There will be two permanent road access points to the site, one along Airton road and another on Greenhills road. The development will have no through route, and each of these entrances will serve their respective apartment blocks, (blocks A-C on Airton and blocks D-F on Greenhills).

The purpose of the report is as follows:

- Propose a restricted car parking provision for the residential component of the development, and set out that the proposed provision is entirely sustainable given the current car ownership and modal splits for the journey to work for existing residents living close to the subject site, and
- Given this restricted parking provision, demonstrate the sustainability in transportation terms of residents utilising non-car-based forms of travel by demonstrating the high level of service that is provided by the transport infrastructure in place at the site with regards to, walking, cycling, public bus services, LUAS, national rail, and other Services (taxis, Car-club)
- Identify both physical elements and strategies to be incorporated within the proposed new development which will facilitate and create incentives for both residents of and visitors to the development to use the available modes of public transport along with walking and cycling in preference over private car use.

Figure 1.1 – SITE LOCATION

2.0 SUSTAINABILITY OF CAR PARKING PROVISION AT THE PROPOSED DEVELOPMENT

2.1 INTRODUCTION

This section of the report will detail the car and cycle parking requirements for the proposed development based on the South Dublin County Development Plan 2016-2022 and the Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities) was published by the Department of Housing, Planning and Local Government in March 2018.

The proposed car and cycle parking provision on site will then be detailed, highlighting the intended low level of provision in relation to car parking for the residential component of the proposed development.

The below comments will set out the reasons why proposed residential parking provision is entirely sustainable given the current car ownership and modal splits for the journey to work / college for existing residents living close to the subject site.

This low level of provision is also seen as being completely consistent with the mobility targets for South Dublin County Council as detailed within the Dublin City Transport Plan and also consistent both with minimising the traffic impact of nearby already congested junctions (as detailed within the accompanying traffic impact assessment) and with maximising patronage of the extensive public transport and soft mode options (as detailed within this mobility plan).

2.2 PARKING REQUIREMENTS AS PER SOUTH DUBLIN COUNTY COUNCIL DEVELOPMENT PLAN

2.2.1 Provision versus maximum requirements

Tables 2-1 and 2-2 below detail the maximum car and bicycle parking standards for South Dublin County Council based on the rates contained within their 2016 - 2022 Development Plan Written Statement for the residential and mixed use / commercial components of the proposed development respectively. For full breakdown of area to staff usage within the site please see Architectural Design Report submitted as part of this application.

Table 2.1 – Bicycle Parking Requirements per SDCC requirements.

Land Use	Area / Units	Long Term	Short Term	Total
Residential Apartment	502 units	1 per 5 Apartments	1 per 10 Apartments	101
Crèche	329 m²	1 per 5 Staff	1 per 10 Children	7
Communal Facilities (office)	704 m²	1 per 200 sqm GFA	1 per 200 sqm GFA	7
Retail Convenience		1 per 5 Staff	1 per 50 sqm GFA	14
Total Bike Parking Required				**192**

It is proposed to provide 584 no. bicycle parking locations within the site. This is greater than the SDCC requirement per the SDCC Development Plan guidelines, however the parking must also be viewed regarding the New Apartment Design Guidelines. The guidelines require that there is 1 no. parking spot per bedroom. This is generally accepted as being conservative and typically 1no. bicycle parking spot per residential unit, with a 10% addition for visitors, is accepted as the typical standard.

These bicycle parking locations will vary from secure, not freely accessible locations within the undercroft, to highly visible, open-access spaces. The undercroft parking will be designated for residents of the development and long-term employees of the commercial units. The open-access spaces will form part of the landscape plan for the site and will serve the short-term visitors to the site.

Table 2.2 – Car Parking Maximum per SDCC requirements

Land Use		Provided	Maximum	Total
Residential Apartment	1 Bed	197	0.75 Space	147.75
	2 Bed	257	1 Space	257
	3 Bed +	48	1.25 Space	60
Crèche		5no. Classrooms	0.5 per Classroom	2.5
Communal Facilities (Office)		701 m²	1 per 75 sqm GFA	9.4
Retail Convenience		481 m²	1 per 25 sqm GFA	19.24
Total Maximum Car Parking				**495.89**

The total no. of units is 502 and there is a total of 202 no. car parking spaces proposed for the site. As the site will be managed by a management company, the final breakdown of car-parking (visitor/resident) has not been finalised. This provision of car parking equates to a 0.40 ratio for car parking spaces to residential units.

The SDCC Development Plan dictates that the maximum no. of car parking spaces for the residential component of the development is 495, equating to a ratio of 0.41 for car parking spaces provide to car parking spaces required. This provision must also be viewed in relation to the New Apartment Guidelines. As mentioned previously, the site has been classified as *"Accessible"*, therefore the guidelines require that the parking is "minimised, substantially reduced or wholly eliminated". By providing approx. half of the overall requirement, the development aims to adhere to the New Apartment Guidelines.

The number of parking for the retail and communal facilities of the development have not been finalised, however as these facilities will predominantly service the residents of the proposed development it is assumed that they will generate no additional parking requirements and a minimum number of car parking spaces will be provided.

It is the aim of the development to promote the use of sustainable modes of transport and therefore the additional bike parking provide on the site and lack of vehicular parking will promote the use of walking, cycling and buses to travel to the site. The development will be a fully managed site and therefore parking provisions within the site can be reviewed by the management company when the development is constructed and in use.

2.2.2 Provision of dedicated Car Club parking spaces

Use of private car is seen within this report as relating to its use for the journey to and from work during the morning and evening peaks. However, in many cases, residents require access to a parking space in order to have a car available to make non-work-related trips for shopping and leisure purposes. Such trips can be very infrequent, therefore, the provision of dedicated car parking spaces for such usage constitutes an inefficient use of such resources.

Therefore, an alternative approach is proposed in order to cater for the non-trip-to-work-related car demand of residents at the proposed development. It is proposed to initially provide **10 no. car club** vehicle spaces at ground floor level for communal use.

The demand will be monitored on an ongoing basis by those managing the development, and the number of spaces can be increased as required.

Car clubs typically operate with residents signing up to the service being able to reserve the use of the vehicle at certain times / days, paying a rental fee to do so, but saving the user the necessity of owning either a car or a parking space at the development.

Results of surveys carried out by Go Car indicate that use is predominantly for private rather than business use, with just less than 60% using the service to replace a private car. The average car is rented out for 1 hour per day. Shopping and leisure related trips were listed as top uses for Go Car.

The provision of 10 No. car club spaces will result in several benefits for residents at the proposed development:

- Elimination of the necessity to own a car (and the associated expense) where use of it will be relatively infrequent
- Access to car transport for those using a car infrequently

The provision of car club spaces is also consistent with section 4.23 of the 2018 Design Standards for New Apartments which states that '*for all types of location, where it is sought to eliminate or reduce car parking provision*,' … '*provision is to be made for alternative mobility solutions including facilities for car sharing club vehicles*.'

2.3 CAR PARKING REQUIREMENTS FOR THE RESIDENTIAL COMPONENT BASED ON NEW APPARTMENT GUIDELINES

Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities) was published by the Department of Housing, Planning and Local Government in March 2018.

Its recommendations can be summarised as follows:
The quantum of car parking is dependent primarily on the location of the subject site. Three categories of location are defined:

Central and/or Accessible Urban Locations:
Apartments in central locations that are well served by public transport, in which situation car parking provision to be wholly eliminated or substantially reduced. These locations are most likely to be in cities, within 15 minutes walking distance of city centres or centrally located employment locations. These locations include sites within 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.

Intermediate Urban Locations
This applies to apartments 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. For this category, planning authorities may consider a reduced overall car parking standard.

Peripheral and/or Less Accessible Urban Locations
Apartments in relatively peripheral or less accessible urban locations will require one car parking space per unit, together with an element of visitor parking, such as one space for every 3-4 apartments.

It is reasonable to assume that the subject site comes within the first category – a central and/or accessible urban location. Located adjacent to a third level institution, within walking distance of the LUAS Red Line (15 min walk), served by a high frequency bus route (no. 27 which is 50m away from the site on Greenhills Road) and with future proposal to be directly on a bus connects route, the sites designation within the first classification is entirely appropriate.

Based on this classification, and as per the car parking guidelines the default policy is to minimise the car parking provisions within the site.

2.4 CONCLUDING COMMENT

This section of the report demonstrates that, given the sites designation within the New Apartment Guidelines as an 'accessible area' within close proximity to a third level institution, on a within easy walking distance to a high frequency urban bus service and within reasonable walking distance to a high capacity urban public transport stop for the Luas, a parking provision of 0.4 car parking spaces for the site is sustainable. The allocation of 10 No. dedicated car club spaces will further aid the sustainability of this parking provision.

This low provision will have the effect of minimising the traffic impact of the proposal, an effect referred to in the Transport and Traffic Statement submitted as part of this application.

However, providing a limited number of car parking spaces places an onus on the applicant to demonstrate that the site is configured in such a manner that enables all residents at the proposed development to commute to work by means of a sustainable mode of travel other than the private car.

The remaining sections of this document seek to demonstrate that such is the case for the proposal at the Airton Road Residential Development.

3.0 MOBILITY MANAGEMENT PLAN

3.1 INTRODUCTION

A Mobility Management Plan (MMP) is a long-term management strategy covering a selected location with the aim to promote and deliver sustainable transport objectives. A Mobility Management Plan consists of a package of measures put in place by an applicant in order to encourage and support more sustainable travel patterns among both residents and visitors at the proposed development.

The package usually includes measures to promote and improve attractiveness of using public transport, cycling, walking, car-sharing / car clubs. It should be considered a dynamic process where a package of measures is identified, piloted and monitored on an ongoing basis.

An MMP prepared at planning stage, before the development is built and occupied, can only highlight potential issues to be included in a subsequent MMP to be prepared once the development has obtained a grant of planning permission and is built and occupied.

The environmental and congestion impacts of car-based transport has resulted in policy changes where the priority of more sustainable forms of travel has increased. The MMP helps to encourage use of modes of travel other than the private car.

The proposed development at Airton Road both benefits and suffers from its location on the major traffic artery of the Greenhills Road which carries heavy traffic volumes and a proposed bus connects route bus corridor. This Mobility Management Plan is to encourage as much movement as possible by public transport, cycling and walking.

MMP's are intended to bring the following benefits:

- Greater accessibility of the site.
- Encouraging safe and viable alternatives for accessing the site.
- Pragmatic initiatives based on appraisal of residents' and visitors travel patterns.
- Reduced overall vehicle mileage and trip volumes.

The proposed development, when opened, will be overseen by an on-site management company. The advantage of this is that the apartments will be managed on site and the availability and the use of car alternatives can be more easily highlighted to residents and visitors alike. A member of staff can be appointed as mobility managers to encourage residents and visitors away from car usage and towards sustainable transport alternatives.

3.2 GUIDANCE AND POLICY DOCUMENTS

This report was developed with guidance from the documents listed below;

3.2.1.1 NATIONAL POLICY

- **Smarter Travel A Sustainable Transport Future 2009 – 2020**

- The governments transport policy for the future which targets transportation. It promotes greater integration between spatial planning and transport policy. The aim is to reduce car-based commuting from 65% to 45% by 2020.

- **National Cycle Policy Framework 2009**

- The National Cycle Policy Framework NCPF sets out a national policy for cycling to create a stronger cycling culture and a friendlier environment for cyclists.

- **Regional Planning Guidelines for the Greater Dublin Area**

- Transport policy and prioritised infrastructure investment are critical to the success of the Greater Dublin Area in terms of connectivity to international and indigenous markets, the movement of people and

goods and providing a range of transport modes to ensure efficient and sustainable travel patterns and which provide value for money.

3.2.1.2 LOCAL POLICY

- **South Dublin County Council Development Plan 2016-2022**
- **Greater Dublin Area Draft Transport Strategy 2011 - 2030 : 2030 Vision**

- The goal of the strategy is to support the greater Dublin area in meeting its potential as a competitive, sustainable city region with a good quality of life for all.

- **Cycling Policy**

- The Council Cycling Policy, adopted in June 2010, provides local guidelines on the delivery of the aims and objectives of the National Cycle Policy Framework 2009-2020.

- **National Transport Authority's Transport Strategy for the Greater Dublin Area 2016–2035**

- This sets out the integrated long-term strategy for the area and includes new proposals such as DART and LUAS extensions.

3.3 AIRTON ROAD DEVELOPMENT MOBILITY STRATEGY

3.3.1 INTRODUCTION

With regard to the guidance documents list above in section 3.2, the following list of measures, which are discussed in detail below, have been incorporated into the proposed development;

- Several access and egress points into and through the development for pedestrians and bicycles.
- Provision of extensive landscaping throughout the development, including the full length of the Airton and Greenhills Roads elevation.
- Provision of 584 no. secure bicycle parking spaces dispersed throughout the site, including the undercroft and basement car park, including the provision for shared bike club stands.
- Provision of 202no. resident car parking spaces.
- 10no. club Car spaces for communal use.

3.3.2 ROAD SAFETY AUDIT

A road safety audit was undertaken by ILTP Consulting to ensure that the proposals encapsulated in this submission adhered to policies. This stage 1 Road Safety Audit specifically examines the road safety aspects of the proposed development. The road safety audit produced by ILTP had several recommendations and comments on the proposal for the vehicular and pedestrian movement in and around the site.

The proposals by ILTP have been addressed and taken on board during the finalised design process for the development. The ITLP report is attached in Appendix 4 of this report.

3.3.3 WALKING MOBILITY

3.3.3.1 Existing

There is no permissible existing pedestrian movement through the site. The site is surrounded by an impermeable fencing, which is a function of the land usage as an industrial warehouse (now dis-used).

Figure 3.1 below indicates the existing lack of pedestrian permeability and the new proposed landscaped permeable pathways through the site.

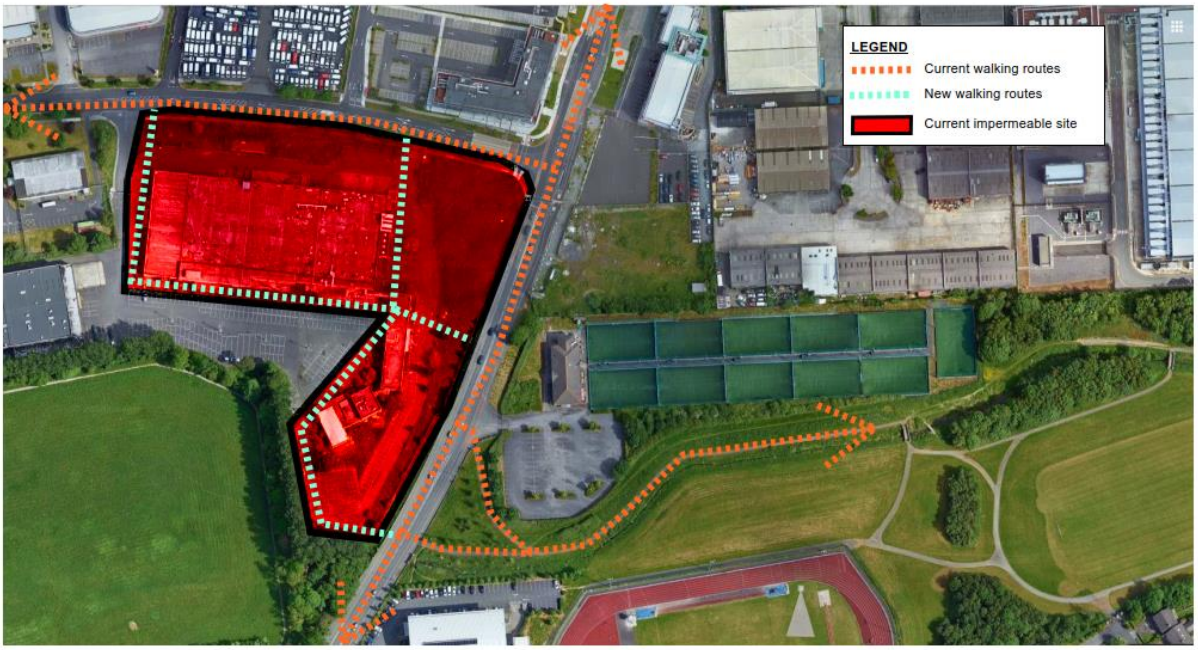

Figure 3.1 – Site Permeability

There are no welcoming pedestrian routes or areas in proximity to the site. Land usage in the area has been predominantly industrial and therefore there are no permeable paths or congregation zones for pedestrians in the area.

The footpath along Greenhills Road has no barriers between the pedestrians and the traffic on the road, and the footpath surface is shared with cyclists. This road has a high frequency of traffic usage and is used by HGV's and Dublin bus routes, particularly at peak times.

Figure 3.2 – Greenhills Road Pedestrian Footpaths (looking northwards)

The Airton Road and Greenhills Road junction is a busy junction with heavy traffic usage. Pedestrians and cyclists who wish to progress from a southern direction and travel west must traverse around the entire site perimeter along this busy junction which has limited pedestrian defences.

Figure 3.3 – Greenhills Road / Airton Road Junction

3.3.3.2 Proposed

As part of the development, 2no. new pedestrian crossings and a new landscaped route through the site and along Greenhills Road (which will be set-back from the road) are proposed.

There will be a new pedestrian crossing to the south of the site, along Greenhills Road, which will provide a link across the busy road to the new green route in Bancroft Park. This new green route forms part of the green strategy for the area which is set out in the Tallaght Draft LAP document. By allowing pedestrians to gain safe and easy access to Bancroft Park, it promotes the permeability of the site.

The second pedestrian crossing will be on Airton Road, along the northern part of the site. As part of the proposed development an existing uncontrolled pedestrian crossing was required to be removed to allow vehicular access to the undercroft parking within the site. This uncontrolled pedestrian crossing will be reinstated.

All pedestrian crossings will be designed in accordance with Design Manual for Urban Roads and Streets (DMURS), the National Roads Authority (NRA) and the National Transport Authority (NTA) guidelines and documents.

To increase permeability and reduce the number of pedestrians who must traverse around the full perimeter of the site in order to travel west along Airton Road, 2no. new site entrances have been proposed along the Greenhills Road elevation. There is provision within the site masterplan to link both routes with future developments along Airton Road.

- The first point of entry is at the southernmost point of the site. This new site entrance will allow pedestrians who wish to travel through the site to move away from the busy road and progress up to the landscaped podium and further on into the site.
- The second point of entry is further north along the Greenhills Road elevation. This new site entrance will allow access to pedestrians and cyclists who wish to travel west to move away from the busy road. This ground level access point will welcome users through the landscaped route within the site.

The current hard-fenced site perimeter at the Airton Road / Greenhills road junction will now be replaced by a designated courtyard for pedestrians. The buildings within the development in this area have been designated for retail units ideally suited for a small coffee shop or similar commercial unit.

The proposed bus connects route runs along the Greenhills Road elevation. The site has been designed to function with or without the bus connects plans going ahead. If the bus connects route does progress, it will only increase the walking mobility adjacent to the site as part of the bus connects proposal involves protected pedestrian routes. A bus connects description of their proposal can be seen in Appendix 3, which illustrates the new pedestrian pathway.

The existing Airton Road pedestrian footpath has a set-back from the road and is already tree-lined.

For further information please see the landscaping and architectural drawings which have been submitted as part of this application.

3.3.4 CYCLING MOBILITY

3.3.4.1 Existing

South Dublin County Council has an overall target of increasing journeys by bicycle in the city by 25% by the year 2020. Permeability and direct safe routes are therefore critical in achieving this goal. As previously stated, the majority of infrastructure for cyclists exist along major strategic roads where cyclists must share their space with buses and large volumes of traffic.

The existing cycle route adjacent to the site is a shared pedestrian space with no protection from the heavy vehicular traffic which uses the road space, as seen in Figure 3.2 above. When cyclists reach the junction of Greenhills Road, they must then join the traffic on the road surface. Cyclists progressing up this road who wish to turn left at this junction have no other choice but to join the road traffic turning left, Figure 3.4. This can increase the likelihood of an accident occurring on the road and prevent people from cycling along the road.

Figure 3.4 – Shared Cycle Lane on Greenhills Road Northbound

3.3.4.2 Proposed

The "Cycle Network Plan for the Greater Dublin" area has produced an overall plan for providing safe cycle routes in and out of the city which can be seen Appendix 2. The document highlights the new proposed Route 8-B which will run along Greenhills Road adjacent to the site.

Route 8 will be a primary network and per The Cycle Network Plan, the route "*…is a much better alternative to the existing route via the very busy and intimidating Walkinstown Roundabout and the narrow section of Greenhills Road along the edge of Ballymount Industrial area".*

The new green route proposed as part of the Tallaght Draft LAP in Bancroft Park has great potential for cyclists to utilise when travelling into the city centre. The new pedestrian crossing, mentioned above, will be a "Toucan" crossing. This will allow the safe usage of the crossing by cyclists and similarly promote the usage of the new green route.

As discussed, there will be increased permeability through the site. The new site entrance, along Greenhills road, will allow cyclists who wish to head west to navigate through the safe and welcoming landscaped pathway within the site. Cyclists will now not need to join the heavy traffic which regularly uses the Greenhills Road and this will then increase and promote the use of bicycles within the surrounding site area.

To accommodate this proposed usage of bicycles to travel in and out of the city centre, 584no. bicycle parking locations have been provided at a variety of easily accessible locations throughout the site.

3.3.5 PUBLIC TRANSPORT MOBILITY

The role of public transport in accommodating the movement requirements of the area now and into the future is crucial. Buses have the greatest potential to increase public transport capacity and decrease the number of private vehicles on the road. The focus of the Mobility Management Plan is to improve connectivity to existing public transport services and promote the usage sustainable transport services.

The site area is currently connected by public transport services such as Dublin Bus adjacent to the site and the Luas Red Line 1.3km away. These services are predominantly radial in nature however, providing good links between the city centre and the west but not to other areas of the city. The full array of public transport and times can be seen in Table 3.2.

3.3.5.1 BUS SERVICES

The Dublin Bus services in the area provide direct linkage to the city from the subject site. The frequency of each bus can be seen in Table 3-1, with an approximate 10-minute waiting time between the most frequent bus at peak frequency. There is an inbound Route 27 stop situated within a 2-minute walk of the site and accessing the stop is easy with a pedestrian junction allowing progression across Airton Road.

Table 3.1 – Dublin Bus Route Frequencies

Route	Origin	Destination	Frequency (08:00 – 09:00)
Route 27	Jobstown	Clare Hall	6 per hour
Route 76	Tallaght (the Square)	Chapelizod	3 per hour
Route 54a	Kiltipper Way	Pearse Street	3 per hour

Future bus plans involve the “Bus Connects” initiative, which is an attempt to overhaul the current bus system in the Dublin region by developing new bus corridors, new bus routes, increasing services and new buses.

The site will be serviced by the new Route 9, with the route and site location displayed in Appendix 3. The proposed development will link up perfectly with the proposed green routes in this area which will enable the residents to avail of this new high-level bus service. Preparing the site for this new bus service is an important part of designing the proposed development for the future. The site has been fully designed with the bus connects proposal in place and therefore access to this route has been a priority within the design. The access point along Greenhills Road will allow pedestrians to avail of this route.

3.3.5.2 LUAS SERVICE

The Luas Red Line service is a form of public transport which travels from the city centre to Citywest and is both a reliable and sustainable transport option. The frequency of service is a carriage every 5/6 minutes, which is twice the regularity of the bus service in the area. The nearest Luas stop to the site is approx. 15 minutes’ walk away. This walk is due to the lack of permeability in adjacent sites, due to their industrial uses. This walking distance will be reduced when the other sites within the proximity of the site area are further developed into residential units with an increased level of permeability.

3.3.6 TRAVEL DISTANCE

These travel distances were taken at 08:00am starting from the junction of Airton Road and Greenhills Road and travelling to The Spire on O’Connell street used to represent the City Centre. The modes of transport which have been listed above where calculated using google maps. Modes of transport include walking distances (i.e.

walking to and from the Luas stop). These times have been added to the overall travel duration. For example, no. 4 below has a total travel duration of 55 min. This is comprised of a 15 min walk, 35 min Luas journey and a 5 min walk.

Table 3.2 – Public Transport Services

No.	MODE	START	LOCATION	DURATION
1	Walking	Airton Road / Greenhills Road	The Spire	2h 5 min
2	Cycling	Airton Road / Greenhills Road	The Spire	33 min
3	Bus Service	Airton Road / Greenhills Road	The Spire	55 min
4	Luas Service	Airton Road / Greenhills Road	The Spire	55 min
5	Car	Airton Road / Greenhills Road	The Spire	45 min

3.4 CONCLUDING COMMENTS ON MOBILITY PLAN

The development shall contain a total of 202 parking spaces. Given the number of apartments (502 No.), the ratio of car spaces to residential units is low, compared to traditional requirements, but is considered adequate for this development for the following reasons:

- Strong public transport facilities in the Luas, existing Bus Route and a proposed Bus Connects Route are in close proximity to the development.
- Full time management will be present at the site. The new development will be fully managed by a dedicate "Mobility Manager" and the facility's management hold control over parking allocation within the development. They have the capacity to ensure residents with private car needs can be accommodated prior to occupancy. The management will have responsibility and, more importantly, the ability to ensure that illegal parking does not occur.
- There will be a minimum of 10 Car Club spaces. Club car sharing has proven benefits to traffic volumes, parking volumes (both private and public), the environment, consumer cost and social inclusivity.
- According to Zipcar, who operate club car operations in both Berlin and London:

  "Every car club car removes up to 17 private cars from the roads, reducing traffic congestion, noise and air pollution.
  Car club members are nearly twice as likely to cycle or take the train than private car owners.
  Car club produces 7 times fewer short trips than car owners.
  A much higher proportion of car club cars are either low emission or fully electric than the general car population.
  Car club allows those who cannot afford a car the opportunity to drive, encouraging social inclusivity."

4.0 OVERALL CONCLUSIONS

1. The development has been classified as "*Accessible"* and therefore the default policy within the Design Standards for New Apartments is for car parking provision to be minimized, substantially reduced or wholly eliminated.

2. Given the restricted car parking provision, this report has demonstrated the sustainability in transportation terms of residents utilising non-car based forms of travel by demonstrating the high level of service that is provided by the transport infrastructure in place at the site with regards to, walking, cycling, public bus services, LUAS, national rail, and other Services (taxis, Car-club)

3. The proposed Airton Road Residential Development is demonstrated to have been designed to integrate and connect to existing and proposed renewable transport routes for the local area. In an effort to reduce the number of privately-owned vehicles on the road, the site will promote the use of alternative sustainable transport services and improve the environment for pedestrians and cyclists.

4. The report has demonstrated the existence of a full range of good alternative transport options available from the site utilising both public transport and soft modes – Luas, Bus, Bicycle, Walking

5. The central management the scheme will offer the opportunity for a dedicated "Mobility Manager" appointed to encourage residents and visitors away from car usage and towards the other more sustainable modes of travel as outlined within this report.

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CONSULTING ENGINEERS
CIVIL & STRUCTURAL

APPENDIX 1

SITE LAYOUT

Proposed Ground Level Site Plan
1 : 500

Application Site

Extent of property owned by Applicant

Existing trees

Proposed trees

NOTES:

* Please refer to Arborist report and drawings for information on trees to be removed.

** Please refer to Landscape Design drawings for landscaping and boundary treatment details.

TECHNOLOGICAL UNIVERSITY DUBLIN, TALLAGHT

GENERAL NOTES:

ALL DIMENSIONS ARE TO BE CONFIRMED ON SITE

DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH CONSULTANTS DRAWINGS

ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH CURRENT BUILDING REGULATIONS

rev	date	by	Description
A	11.02.2020	CB	For Planning

FOR PLANNING

PROJECT TITLE:	Residential Development at the Former Gallaher site, Airton Road, Tallaght, Dublin 24 for Greenleaf Homes Limited		
DRAWING TITLE:	Proposed Ground Level Site Plan		
PROJECT NO:	1904	DATE:	27/01/20
SCALE:	1 : 500 @ A1	DRAWN BY:	CB/PS
MODEL NAME:	1904-FA-ZZ-00-M3-A-Site	CHECKED BY:	CB
DRAWING NO:	1904 - SITE - 0502	REVISION:	A

FERREIRA ARCHITECTS
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DUNDRUM ROAD, DUNDRUM, D14 FP59
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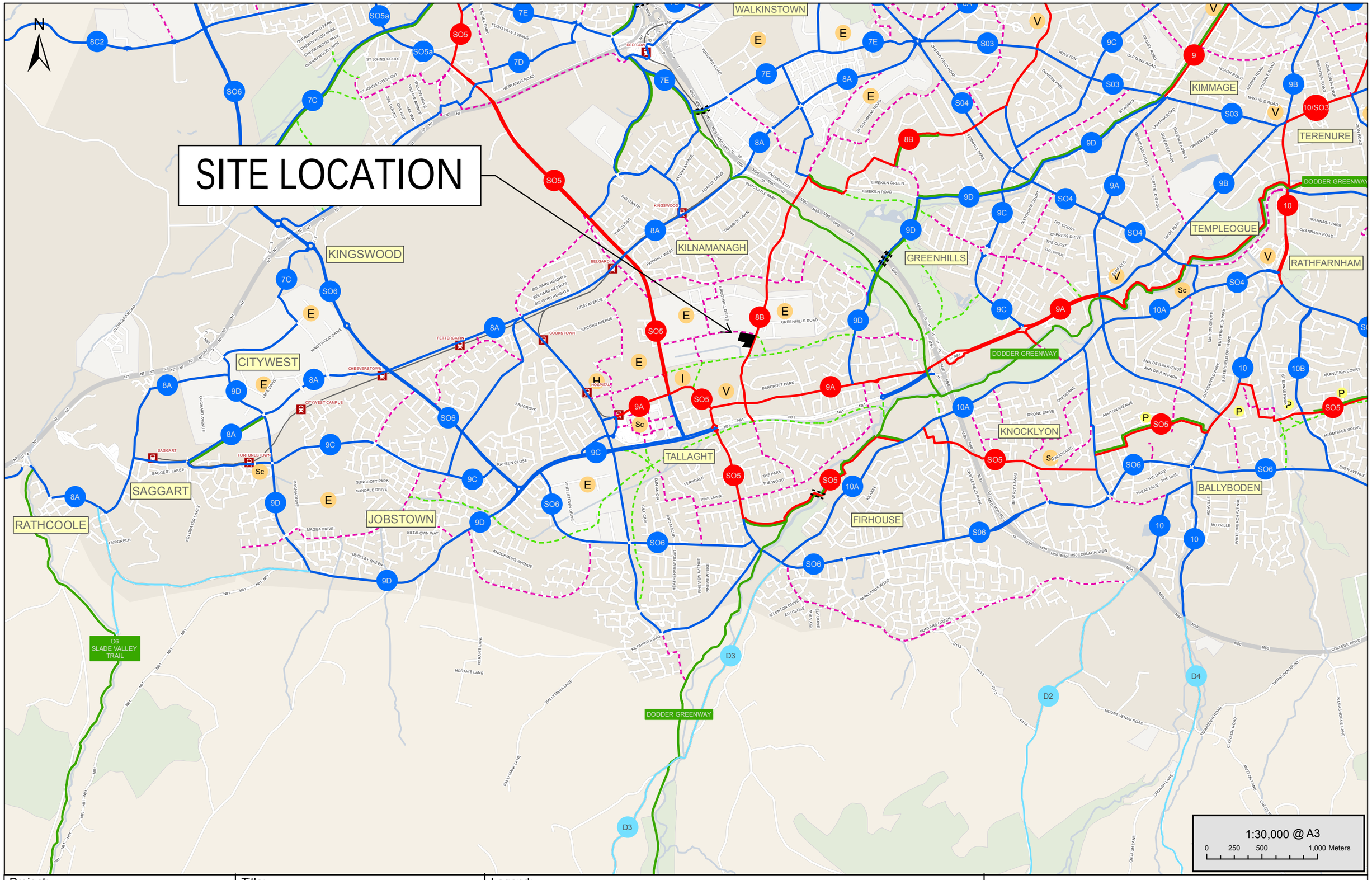
CONSULTING ENGINEERS
CIVIL & STRUCTURAL

APPENDIX

2

CYCLE NETWORK PLAN



Project:

CYCLE NETWORK PLAN FOR THE GREATER DUBLIN AREA

Title:

PROPOSED CYCLE NETWORK
DUBLIN SOUTH WEST
SHEET N6

Legend:

- Primary
- Secondary
- Greenway
- Primary/Secondary
- Inter-Urban
- Feeder
- Minor Greenway
- New Cycle Bridge
- P Permeability Link
- Gateway
- E Employment Zones
- H Hospitals
- I Institute of Technology
- Sc Shopping Centre
- Tc Town Centre
- U University
- V Village Centre
- Greenline Tram Stops
- Redline Tram Stops
- Stations

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APPENDIX

3

BUS CONNECTS ROUTE 9

Greenhills > City Centre

Core Bus Corridor (bus & cycle infrastructure)

9

Key Facts

- Route length **11kms**
- Current bus journey time up to **80mins**
- BusConnects journey time **35-40mins**
- Future bus journey time without BusConnects **100mins+**

Potential Impacts

- Parts of front gardens removed
- Loss of parking spaces
- Changes to traffic movements
- Loss of trees

Additional Specific Challenges on Route

- Restricted width on many roads along this route requiring road widening.
- Walkinstown Roundabout is challenging for both bus and cycle movements.
- A proposal is to construct new link roads to divert all traffic via Calmount Avenue and Calmount Road while still maintaining access to the old section of Greenhills Road.
- A proposal is to realign a section of the Greenhills Road adjoining Castletymon Road junction.

Bus Route

Alternative Cycle Route

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APPENDIX

4

ILTP ROAD SAFETY AUDIT

Proposed Residential Development, Airton Road, Tallaght, Dublin 24

Client: Airton Road Properties Ltd

Stage 1 Road Safety Audit (for Planning)

PROPOSED RESIDENTIAL DEVELOPMENT, AIRTON ROAD, TALLAGHT, DUBLIN 24

Description:

Stage 1 Road Safety Audit (for Planning)

Author:

Ken Swaby

Mark Andrews

Audit Brief Submitted By:

Barrett Mahony Consulting Engineers

Distribution:

Barrett Mahony Consulting Engineers

1 AUDIT INFORMATION

1.1	**Title**	**RSA AIRTON ROAD S1**
1.2	**Audit Reference Number**	**RSA AIRTON ROAD S1 KS 298**
1.3	**Project Code**	**RSAAIRTNRD**
1.4	**Date Audit Completed**	**15th August 2019**
1.5	**Audit Attended By**	**Mark Andrews**
		Ken Swaby
1.6	**Audit Team**	
	Team Leader	**Ken Swaby, ILTP**
	Team Member	**Mark Andrews, ILTP**

1.7 Information Received

ITEM		Supplied	Comments
A	Plans	Yes	Received from Barrett Mahony Consulting Engineers Barrett Mahony Consulting Engineers Drawings: 1. *Road Layout*, ref. ARD-BMD-00-XX-DR-C-1020, rev. PL1 2. *Road Layout Site Entrance 1*, ref. ARD-BMD-00-XX-DR-C-1021, rev. PL1 3. *Road Layout Site Entrance 2,* ref. ARD-BMD-00-XX-DR-C-1022, rev. PL2 Ferreira Architects Drawings: *4. Site Location Plan,* ref. 1904-SITE-0500, rev. A *5. Proposed Ground Level Site Plan, ref. 1904-Site-0501, rev. C* *6. Proposed First Floor Site Plan, ref. 1904-Site-0502, rev. C* Geodata Surveying Ltd: *7. Topograhical Survey 2D,* ref. 18611-100, rev. 03 Mitchell + Associates: *8. Landscape Masterplan (File dated 2nd August 2019)*
B	Traffic Count Data	No	
C	Speed Count Data	No	
D	Accident Data	No	
E	Design Standards	No	
F	Design Brief	No	
G	Other Data	No	

2 INTRODUCTION

2.1.1 This is a Stage 1 Road Safety Audit undertaken at planning application stage which examines the road safety implications of a proposed residential development on Airton Road, Tallaght, Dublin 24, and its connection to the existing road network.

2.1.2 The extent of this Stage 1 Road Safety Audit is the internal site layout and proposed vehicular accesses onto Airton Road and Greenhills Road.

2.1.3 This Stage 1 Road Safety Audit is based upon drawings provided to the design team, as included above under paragraph 1.7.

2.1.4 The Feedback Form for this Stage 1 Road Safety Audit is included in **Appendix A** of this report.

2.1.5 This Stage 1 Road Safety Audit has been conducted in accordance with the Transport Infrastructure Ireland publication entitled *Road Safety Audit*, ref. GE-STY-01024, March 2015.

2.1.6 A site visit was carried out on Friday 9th August 2019 in daylight conditions, at approximately 17:00hrs. The weather was wet and overcast.

2.1.7 This Stage 1 Road Safety Audit specifically examines the road safety aspects of the proposed development. It is not an appraisal of policy or strategic issues associated with the planning of the development and it does not examine or verify the compliance of the design to any other design criteria or guidelines. The designer and all concerned stakeholders must therefore defend all actions taken on the basis that such care was taken, as was in all circumstances reasonably required, to ensure that the roadway was not unsafe for road users. It is important, therefore that where possible the recommendations in this report are acted upon.

3 ITEMS RESULTING FROM PREVIOUS ROAD SAFETY AUDITS

3.1.1 The audit team are not aware of this proposed residential development having been previously audited.

4 ITEMS RESULTING FROM STAGE 1 ROAD SAFETY AUDIT

4.1 General

Problem 4.1.1

The site inspection has shown that there is an existing pedestrian crossing on Airton Road at the location of the proposed vehicular access arrangements (refer to Figure 4.1). The information provided for audit does not indicate if this existing pedestrian crossing is to be removed or relocated to accommodate the proposals. Without appropriate pedestrian crossing facilities vulnerable road users may cross Airton Road in inappropriate locations, and potentially come into conflict with other road users.

Figure 4.1: Existing Pedestrian Crossing on Airton Road at Location of Proposed Vehicular Access

Recommendation 4.1.1

It is recommended that the design team ensures that appropriate pedestrian crossing facilities are in place on Airton Road in the vicinity of at the proposed vehicular access junction.

Problem 4.1.2

The site inspection has shown that there is an existing street lighting column at the location of the proposed vehicular access arrangements (refer to Figure 4.2). The information provided for audit does not indicate if this existing street lighting column is to be removed or relocated to accommodate the proposals. Without adequate street lighting within the area of the proposals it is possible that road users may come into conflict with each other during the hours of darkness.

Figure 4.2: Existing Street Lighting Column on Airton Road at Location of Proposed Vehicular Access

Recommendation 4.1.2

It is recommended that the design team ensures that appropriate street lighting facilities are in place on Airton Road in the vicinity of at the proposed vehicular access junction. All columns should be located such that they do not present a hazard to road users in terms of blocking or restricting safe passage, or restricting visibility.

Problem 4.1.3

The site inspection has shown that there are a number of trees lining Airton Road immediately adjacent to the proposed access point. Should these trees encroach into the required visibility areas road users may emerge from the proposed junction heedless of on-coming traffic potentially resulting in side impacts, or approach the junction unaware of its presence and be forced to brake at the last minute potentially resulting in shunt type collisions.

Recommendation 4.1.3

It is recommended that the design team ensures that adequate visibility can be attained both from and to the proposed access arrangements. Should appropriate visibility not be attainable from the proposed alignment it is recommended that the design team amend the layout of the junction or adjust the nature of the vegetation.

Problem 4.1.4

The drawings provided for audit indicate footways in the vicinity of the proposed vehicular access on Airton Road which appear to direct pedestrians from footpaths set back from the carriageway to a crossing location in front of the Stop line immediately adjacent to the Airton Road carriageway (refer to Figure 4.3). Motorists turning from Airton Road into the development may not anticipate pedestrians crossing at this location, which may potentially lead to conflict between vehicles and non-motorised users.

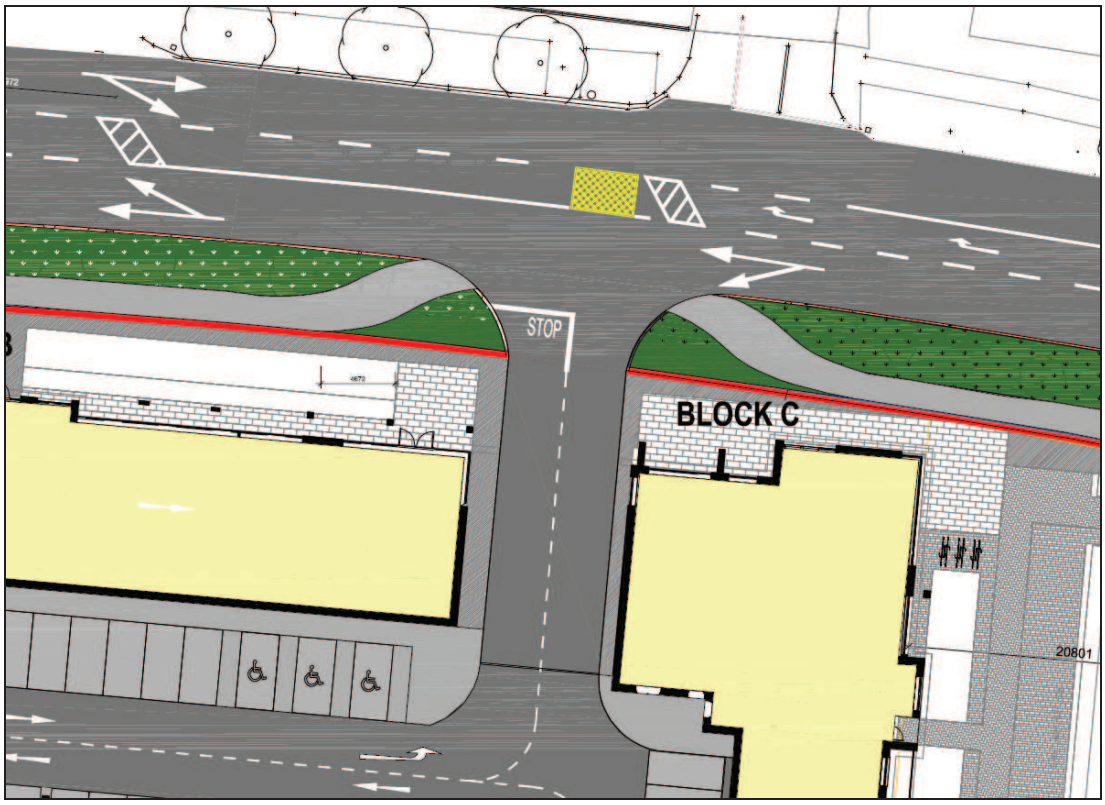


Figure 4.3: Footways in the Vicinity of the Proposed Vehicular Access on Airton Road

Recommendation 4.1.4

It is recommended that the design team ensures that appropriate pedestrian facilities are in place at the proposed vehicular access junction on Airton Road and that the facilities guide all pedestrians along and appropriate route.

Problem 4.1.5

The drawings provided for audit indicate footways in the vicinity of the proposed vehicular access on Airton Road which appear to direct pedestrians from footpaths set back from the carriageway to a crossing location in front of the Stop line immediately adjacent to the Airton Road carriageway (refer to Figure 4.3). The alignment of the footway indicated on the drawings would appear to direct pedestrians into Airton Road, rather than to a safe crossing of the access arrangements. This may cause pedestrians, particularly the visually impaired, to enter the carriageway in an inappropriate manner and potentially coming into conflict with vehicles.

Recommendation 4.1.5

It is recommended that the design team ensures that appropriate pedestrian facilities are in place at the proposed vehicular access junction on Airton Road and that the facilities guide all pedestrians along an appropriate route.

Problem 4.1.6

The information provided for audit does not clearly indicate how pedestrian and cycle movements along Greenhills Road will be directed around the proposed vehicular access junction, with no indicated crossing facilities. Without clear and appropriate pedestrian and cycle crossing facilities vulnerable road users may cross the access road to the development in inappropriate locations, and potentially come into conflict with other road users.

Recommendation 4.1.6

It is recommended that the design team ensures that appropriate pedestrian and cycle facilities are in place at the proposed vehicular access junction on Greenhills Road.

Problem 4.1.7

The drawings provided for audit appear to have discrepancies in relation to the proposed road markings on Airton Road. This includes missing right-turn lane markings and unclear ghost island hatching markings (refer to Figure 4.4). Without clear and appropriate road markings road users may become confused as to how to progress through the proposals and come into conflict with other road users.

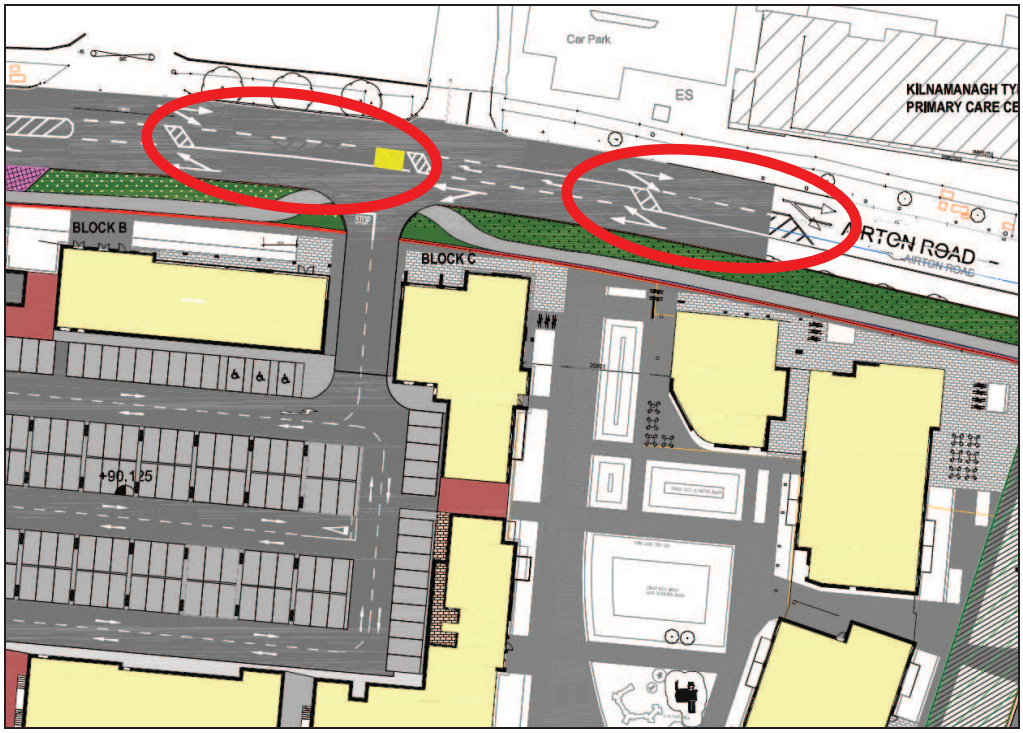


Figure 4.4: Apparent Discrepancies in Proposed Road Markings on Airton Road

Recommendation 4.1.7

It is recommended that the design team ensures that appropriate road markings are in place on Airton Road and throughout the proposals.

Problem 4.1.8

The drawings provided for audit do not clearly indicate a pedestrian access route within the undercroft area between the proposed cycle parking area located at the centre of Block A and the access door to the southern part of Block A (refer to Figure 4.5). This may lead to non-motorised users inappropriately navigating the car park at inappropriate locations and potentially coming into conflict with vehicular traffic.

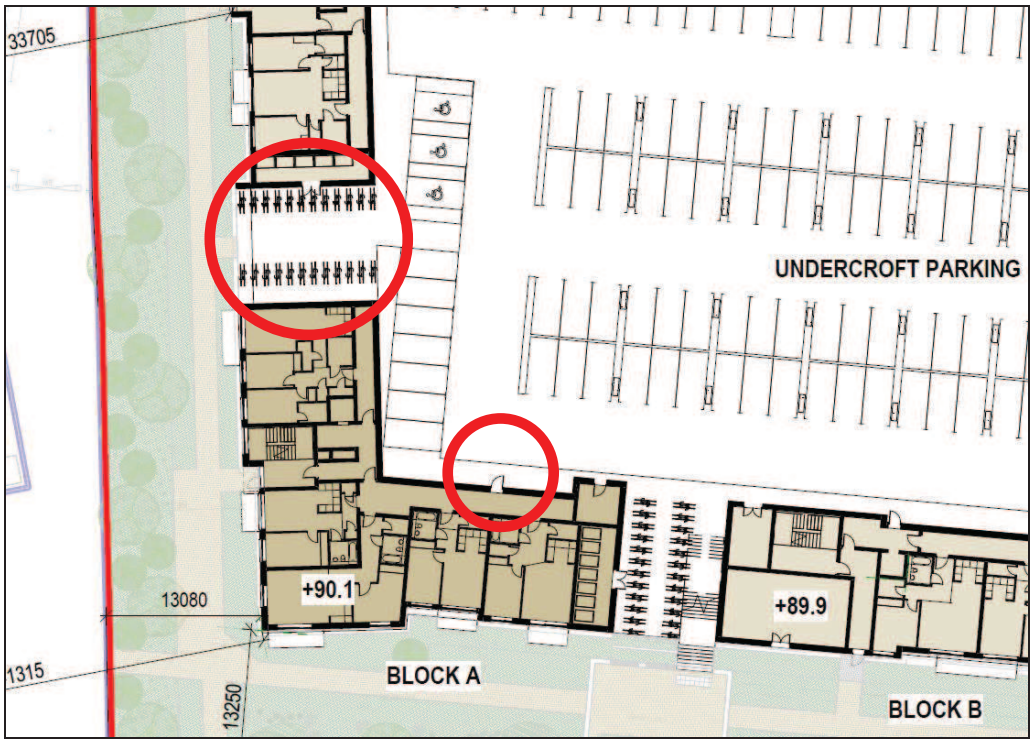


Figure 4.5: Pedestrian Access Route within the Undercroft Area Not Indicated Between the Proposed Cycle Parking Area Located at the Centre of Block A and the Access Door to the Southern Part of Block A

Recommendation 4.1.8

It is recommended that the design team ensures that the pedestrian facilities within the undercroft car park area are appropriate to safely guide pedestrians along the intended routes. It is further recommended that such pedestrian access routes account for pedestrian desire lines.

Problem 4.1.9

The drawings provided for audit indicate that the majority of cycle parking spaces are to be provided within the undercroft areas of Blocks A, B and C, with lower cycle parking space numbers in the vicinity of Blocks D, E and F. It is unclear if there are sufficient pedestrian facilities to safely guide non-motorised users along the intended routes between the cycle parking facilities on the site and the relevant access points to Blocks D, E and F.

Recommendation 4.1.9

It is recommended that the design team ensures that the pedestrian facilities within the site are appropriate to safely guide non-motorised users along the intended routes to and from the proposed cycle parking facilities. It is further recommended that such pedestrian access routes account for pedestrian desire lines.

5 OTHER ISSUES

5.1 Local Interface Issues

Problem 5.1.1

The site inspection has shown that the existing tactile paving on the opposite side of the local access road off Airton Road to the immediate west of the subject site is not aligned with the proposed footpath facilities fronting the subject site on Airton Road (refer to Figure 5.1). This may lead to confusion for non-motorised users, particularly visually impaired users, as to how to safely cross the access road, and potentially result in conflict with vehicular traffic.

Figure 5.1: Tactile Paving on Opposite Side of Local Access Road off Airton Road to the Immediate West of Subject Site Not Aligned with Proposed Footpath Facilities Fronting the Subject Site on Airton Road

Recommendation 5.1.1

Whilst it is recognised that this tactile paving is not within the extents of the proposed development it is recommended that the Design Team liaise with the local authority with the view to having appropriate pedestrian crossing facilities at this location.

6 COMMENTS

It is recommended that the proposals for the site are considered in terms of this Stage 1 audit, and measures, where appropriate are designed to mitigate the risks considered. The scheme proposals should be subject to a Stage 2 Road Safety Audit at Detailed Design Stage and prior to commencement of construction works on site.

7 CONCLUSIONS

It is recommended that the specific issues raised in this report be taken into account and that appropriate measures be put in place where practicable to mitigate the concerns raised.

This Stage 1 Road Safety Audit Report recommends various actions, which should be considered for inclusion in the detailed design process. Where recommendations are not incorporated into the design this should be documented in an Exception Report and forwarded to the ILTP Road Safety Audit Team. The Design Team should document and provide the rationale for incidences where the audit recommendations have not been incorporated or where alternatives are put forward.

The Design Team should respond to all issues raised in this Stage 1 Road Safety Audit Report through returning a signed copy of the Road Safety Audit Feedback Form.

8 ROAD SAFETY AUDIT TEAM STATEMENT

8.1 Statement

We certify that the drawings and documents provided with the Audit Brief have been examined. The examination has been carried out with the sole purpose of identifying any features of the scheme that could be improved or modified in order to improve the safety of the scheme. The problems that we have identified have been noted in the report, together with suggestions for improvement, which we recommend should be considered for implementation.

8.2 Signatures

8.2.1 Audit Team Leader Signature

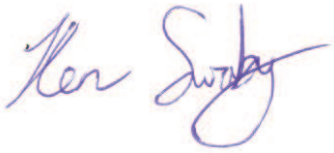
Name: Ken Swaby

Position: Transport Engineer

Date: 15 / 08 / 2019

Organisation: ILTP Consulting

Signed:



8.2.2 Audit Team Member Signature

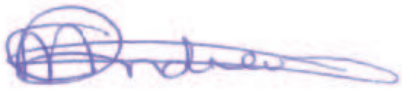
Name: Mark Andrews

Position: Transport Engineer

Date: 15 / 08 / 2019

Organisation: ILTP Consulting

Signed:



APPENDIX A ROAD SAFETY AUDIT FEEDBACK FORM

Road Safety Audit Reference RSA AIRTON ROAD S1 KS 298

Audit Stage Stage 1

Date Road Safety Audit Completed 15th August 2019

Para No. in Report	Problem Accepted (Y/N)	Recommendation Accepted (Y/N)	Comments / Alternative Measures (Describe)	Alternative Measures Accepted by Auditor? (Y/N)
4.1.1	Y	Y	This pedestrian crossing has been removed to facilitate the entrance to the proposed development. This site entrance was proposed by SDCC during the S247 meeting and follow-on discussion. This will be further reviewed with SDCC to ensure that appropriate access is provided for pedestrian desire lines within the site area. Other items to note below are; 1. There is a fully signalised junction 100m East of this crossing. 2. Pedestrians are unlikely to walk to the industrial/retail park as the goods sold here require vehicular transportation.	Y
4.1.2	Y	Y	This comment has been taken on board. At this point a full street lighting drawing has not been produced. However, the design team will ensure that adequate lighting is provided in and around the site for users.	Y
4.1.3	Y	Y	A sightlines drawing has been produced as part of the pre-planning application and the site entrance has been designed per DMURS guidelines. These indicate that visibility should not be an issue when entering and leaving the site. The design team will be undertaking works on the street for this new junction. Any trees obstructing visibility will be addressed.	Y
4.1.4	Y	Y	These drawings have been updated and revised. Please see drawings which have been issued as part of this response. The pedestrian route has now been set-back. The crossing has been designed per DMURS guidelines.	Y See 'Note 1' below
4.1.5	Y	Y	Addressed as part of 4.1.4.	Y

See 'Note 1' below

Para No. in Report	Problem Accepted (Y/N)	Recommendation Accepted (Y/N)	Comments / Alternative Measures (Describe)	Alternative Measures Accepted by Auditor? (Y/N)
4.1.6	Y	Y	Addressed with updated drawing package. The existing pedestrian and cycle routes will remain in place, with clear visibility provided for motor vehicle users. The entrance has been designed per DMURS guidelines.	Y See 'Note 1' and 'Note 2' below
4.1.7	Y	Y	Addressed with updated drawing package. The new site entrance will be designed per DMURS guidelines.	Y See 'Note 1' and 'Note 2' below
4.1.8	Y	Y	Recommendation accepted. Pedestrian access to facilities within the undercroft parking will be revised as part of the Stage 3 ABP drawing submission.	Y
4.1.9	Y	Y	Recommendation accepted. Pedestrian access to facilities within the undercroft parking will be revised as part of the Stage 3 ABP drawing submission.	Y
5.1.1	Y	Y	As noted, the tactile paving is beyond the control of applicant as it is outside of the red line boundary. However, the design team will liaise with the local authority to ensure that pedestrians have safe crossing facilities at the site.	Y

Note 1: The updated drawings provided by the Design Team as part of this Feedback Form have not been subject to a Stage 1 Road Safety Audit and have been considered only in terms of the original highlighted problem.

Note 2: It is recommended that the final details in relation to this item be agreed with the local authority and subject to a Stage 2 Road Safety Audit at Detailed Design stage and prior to commencement of construction works on site.

Signed RYAN MULVANEY

Design Team Leader

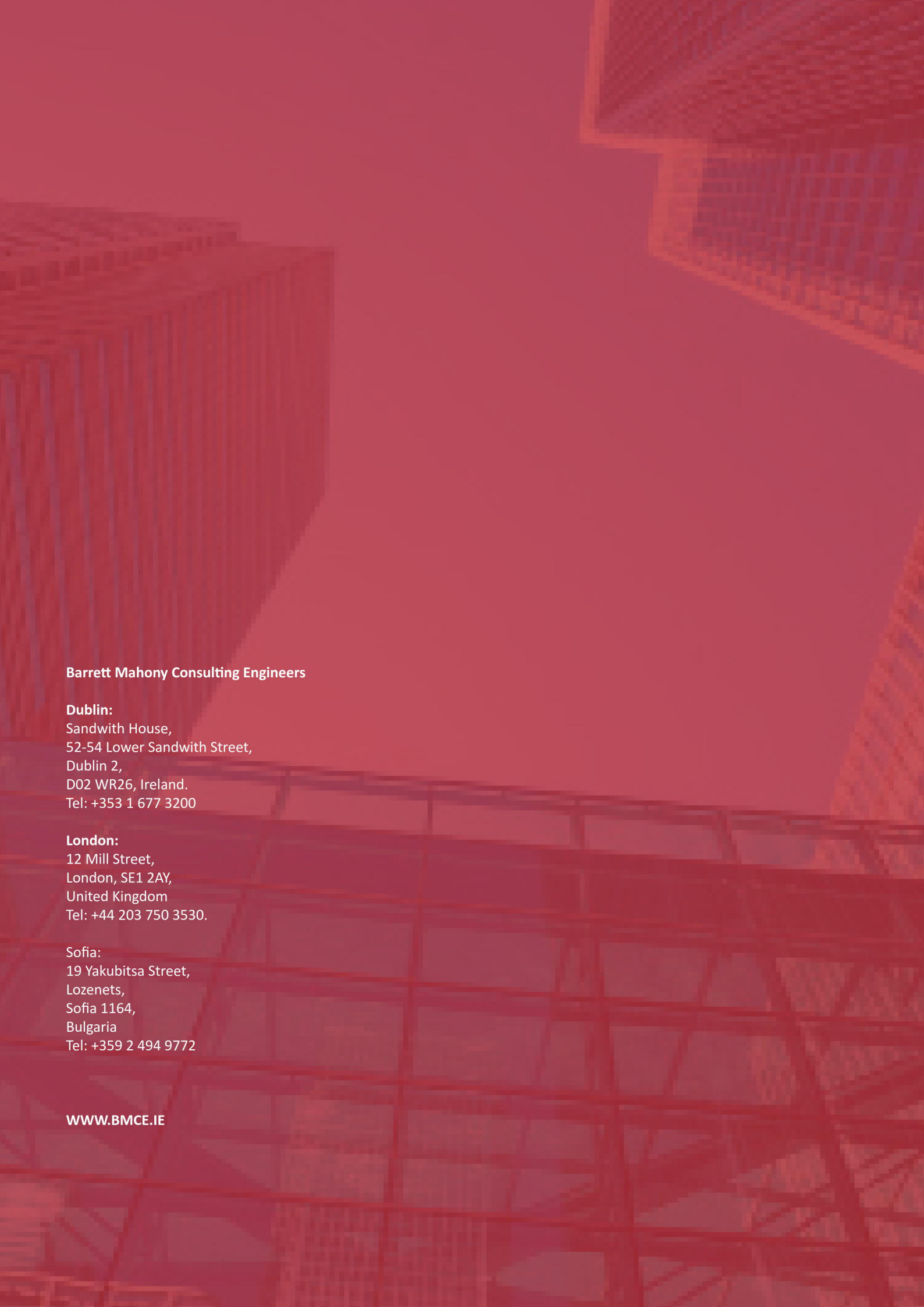
Date 16/8/19

(Please Complete and return to the Auditor)

Safety Audit Signed Off;

Road Safety Audit Team Leader

Date 20/8/19



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