



## Travel Plan

Proposed Strategic Housing Development at Auburn, Malahide Road

April 2022

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### Quality Assurance – Approval Status

This document has been prepared and checked in accordance with  
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**Comments**

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# 1. Introduction

## 1.1 Introduction

This Travel Plan has been prepared by Waterman Moylan to accompany a planning application to An Bord Pleanála for a proposed Strategic Housing Development (SHD) in lands around Auburn House in Malahide, Co. Dublin.

## 1.2 Development Description

The proposed development will consist of the preservation and protection of the existing Protected Structure of Auburn House and its stables as 1 no. residential dwelling; the conversion of the existing stables of Auburn House to provide for storage space for the main Auburn House and the construction of 368 no. new residential dwelling units (comprising 87 no. houses, 239 no. apartments & 42 no. duplex units) for an overall total of 369 no. residential units, including Auburn House.

The development shall consist of 135 no. 1-bedroom apartments and duplex apartments, 138 no. 2-bedroom apartments and duplex apartments, 8 no. 3-bedroom apartments and duplex apartments, 47 no. 3-bedroom houses, 34 no. 4-bedroom houses, 6 no. 5-bedroom houses and the existing 11-bedroom Auburn House along with 1 no. childcare facility and 1 no. ancillary resident facility.

The breakdown of the proposed development is set out in the Schedule of Accommodation below:

| Description                              | 1-Bed      | 2-Bed      | 3-Bed     | 4-Bed     | 5-Bed or more | Total      |
|--|------------|------------|-----------|-----------|---------------|------------|
| Houses ( <i>including Auburn house</i> ) | -          | -          | 47        | 34        | 7             | 88         |
| Apartments                               | 109        | 124        | 6         | -         | -             | 239        |
| Duplexes                                 | 26         | 14         | 2         | -         | -             | 42         |
| <b>Total</b>                             | <b>135</b> | <b>138</b> | <b>55</b> | <b>34</b> | <b>7</b>      | <b>369</b> |

**Table 1** | *Schedule of Accommodation*

The proposed development shall also provide landscaped public open space, car parking and all associated ancillary site development infrastructure including foul and surface water drainage, internal roads, cycle paths and footpaths, and boundary walls and fences. Vehicular access to the proposed development is to be via a new entrance at the R107 Malahide Road/Dublin Road entrance, with the existing entrance to Auburn House acting as a pedestrian/cyclist entrance and access to existing properties outside the application site, there will be a secondary entrance comprising modifications of the existing vehicular entrance off Carey's Lane to the south west of the development, the closure of the existing vehicular entrance to Little Auburn, the provision of 4 no. ESB substations, 1 no. new foul pumping station, public lighting; proposed foul sewer works along Back Road and Kinsealy Lane and all associated engineering and site works necessary to facilitate the development. The building heights range from 2 storey to 5 storey buildings with balconies or terraces being provided to the apartments and duplex units.

It is recommended that this report is read in conjunction with the accompanying Traffic and Transport Assessment that forms part of this submission.

## 1.3 Program

It is expected that construction of the proposed development will commence in 2022 for completion in 2026.

## 1.4 Scope

This Travel Plan will be a key operational element for the proposed residential development at Streamstown Masterplan. The owners will implement a Travel Plan on an ongoing basis with the triple objectives of promoting sustainability, enhancing the use of public transport and reducing dependency on the use of the private car.

This Travel Plan is intended to deal with the typical day-to-day operational conditions at the site. The targets set out in the plan will be achieved against the background of expanding public transport capacity.

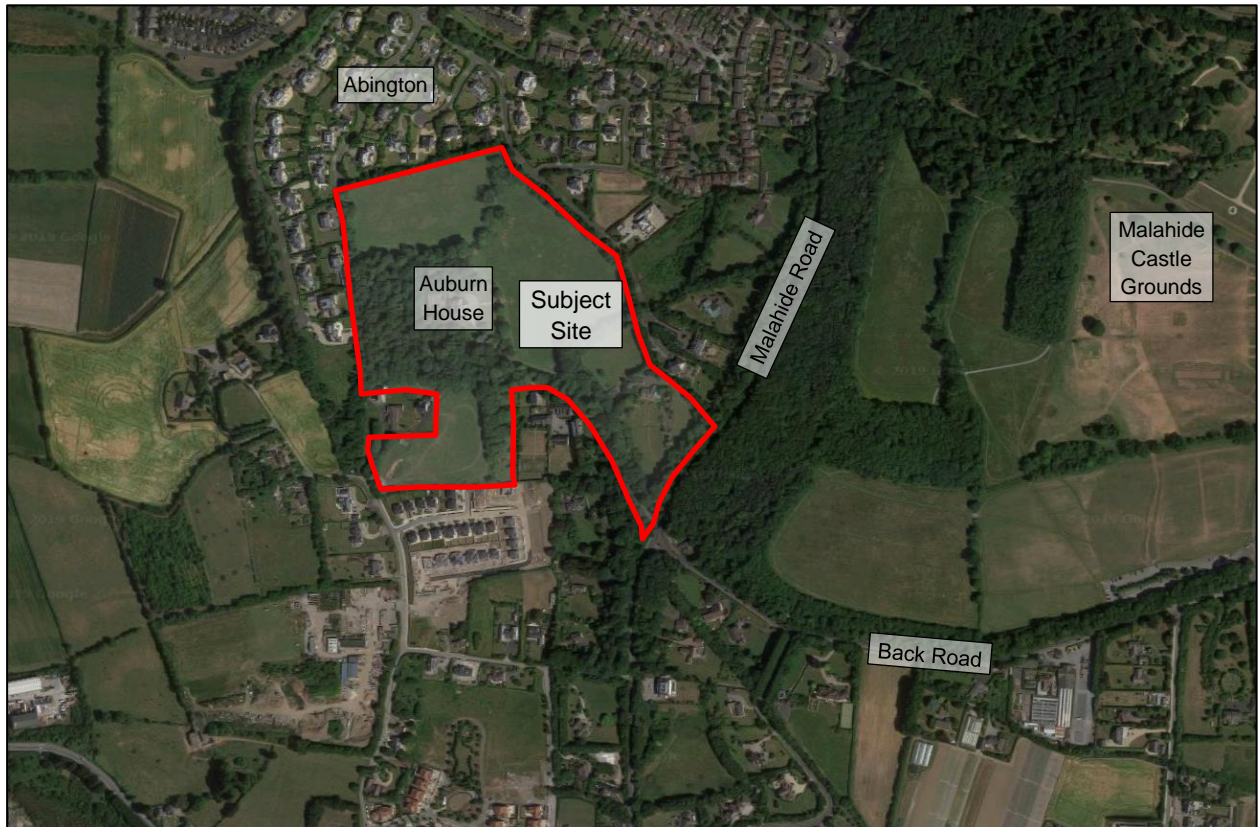
The Plan will assess, examine and manage the typical traffic that will be generated by the residential units during the operational phase of the development. It will also encourage the residents to avail of public transport by improving awareness of public transport options and providing information on bus and train routes and frequencies.



## 2. Site Location

The site is located between the existing Abington residential development and the Malahide Road. The site entrance is from the Malahide Road, adjacent to the Malahide Road/Back Road junction.

The subject lands form the western, northern, and eastern boundaries of Auburn House, an eighteenth century three-storey mansion located within a wooded demesne. Malahide Castle is approximately 900m north-east of the site.

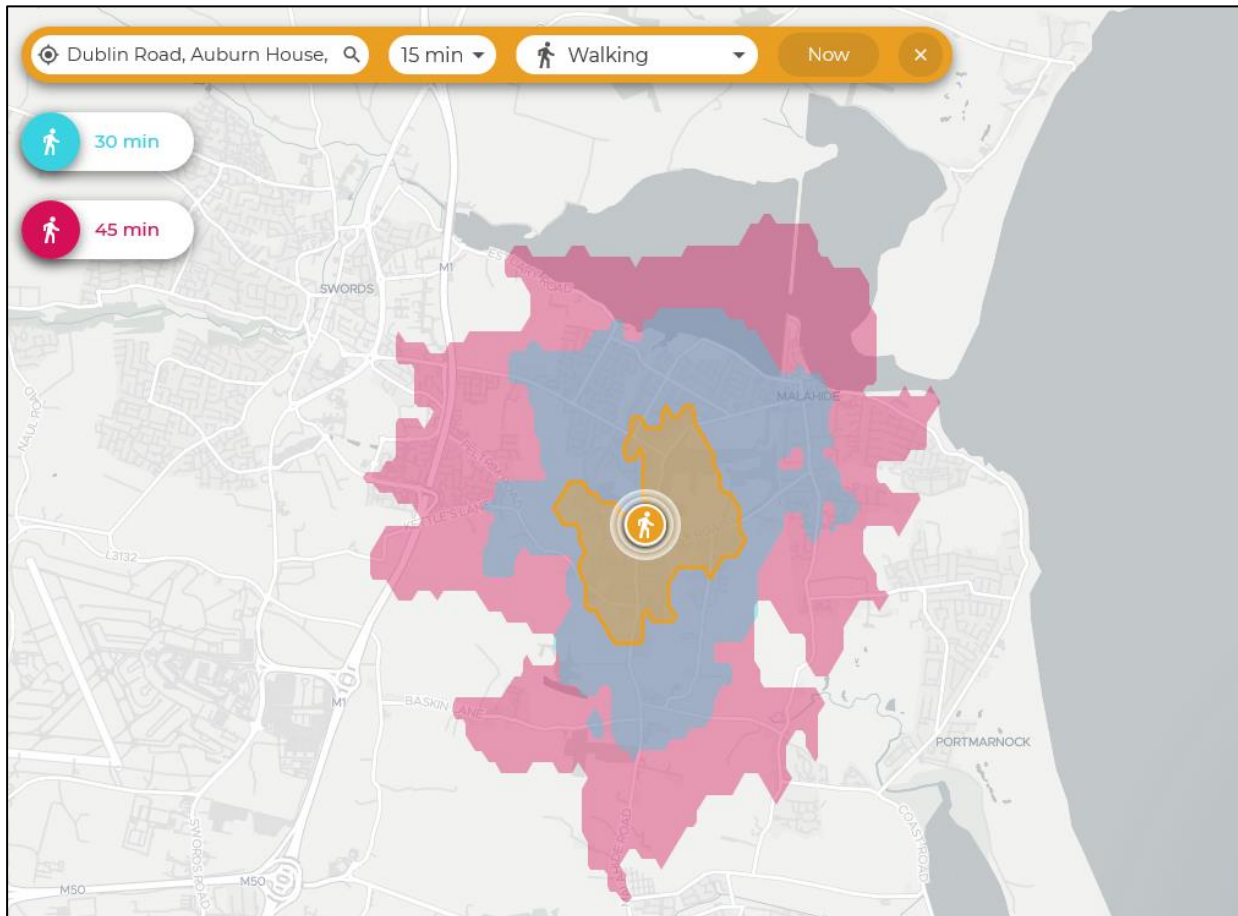


**Figure 1** | Site Location (Source: Google Maps).

### 3. Site Accessibility

#### 3.1 Walking

The national Transport Authority (NTA), formerly the Dublin Transport Office, have published the document “The Route to Sustainable Commuting” which describes acceptable walking distances for pedestrians without mobility impairment. This document states that 4,000m or approximately 50 minutes is the preferred maximum walking distance.



**Figure 2 | Walking Catchments from the Proposed Development.**

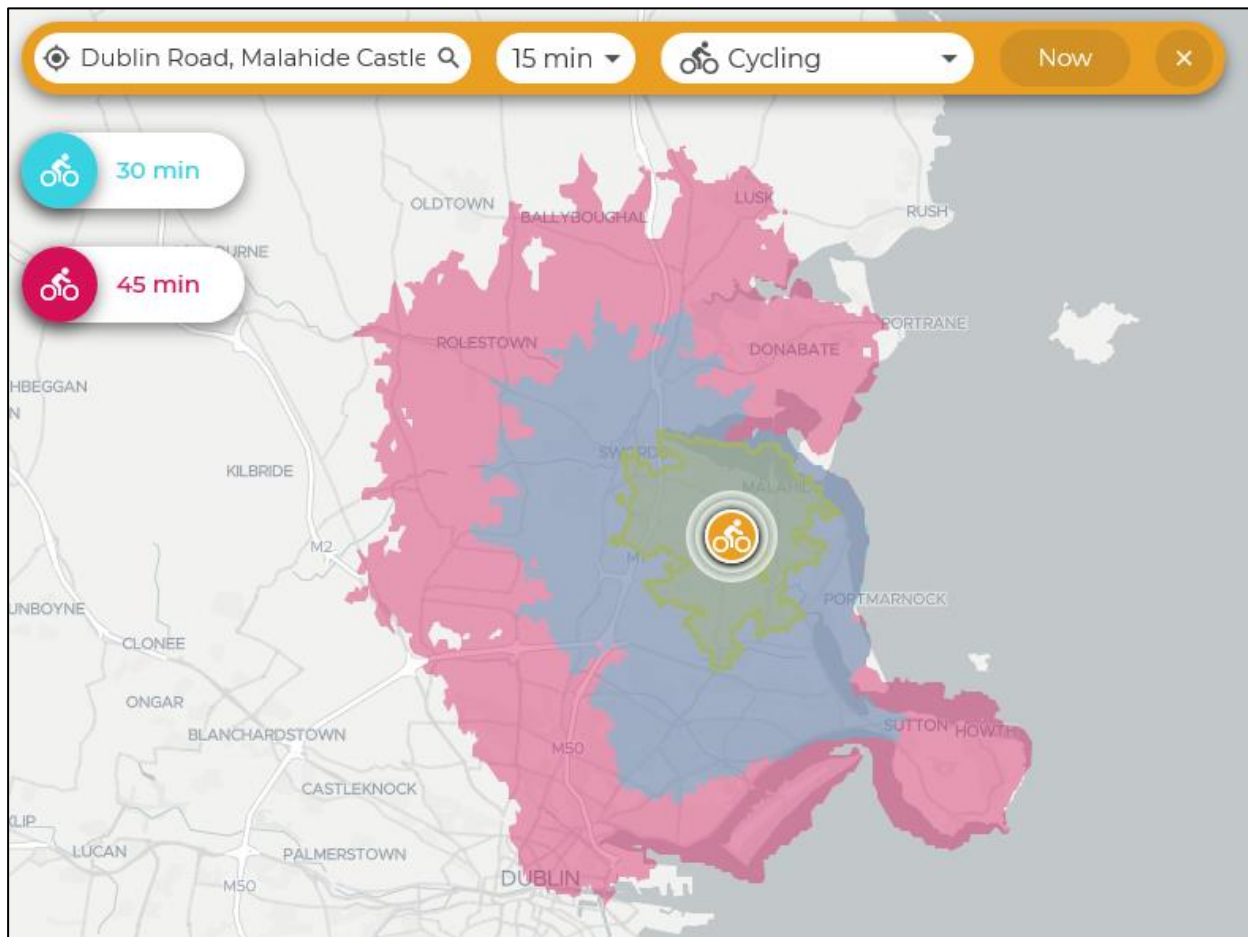
As illustrated in Figure 2, walkable distance from the development would allow residents to walk to Malahide Centre (northeast of the site), where currently comprises a number of facilities of all types, including leisure, retail and commercial developments within a walking time of approximately 30-45 minutes. The Malahide Rail Station is also reachable within the time range of 30-45 minutes and is currently a good option for those residents wishing to commute to Dublin City Centre.

A network of inter-connected footpaths is provided along the entire route from the subject site towards the Malahide Centre.

#### 3.2 Cycling

As per walking, the NTA document “The Route to Sustainable Commuting” mentioned earlier also describes acceptable cycling distances for cyclists without mobility impairment. According to this document 10Km is the maximum distance people will travel by bike. There are a large number of commercial and employment

areas within 10km or c.50min bike ride from the site. As show in Figure 3, those travelling by bike from the proposed development site could reach Malahide Centre within 15-minute cycling, Dublin Airport within 30-minute cycling and Dublin City Centre (North side) within 45-minute cycling.



**Figure 3 | Cycling Catchments from Proposed Development.**

### 3.3 Rail

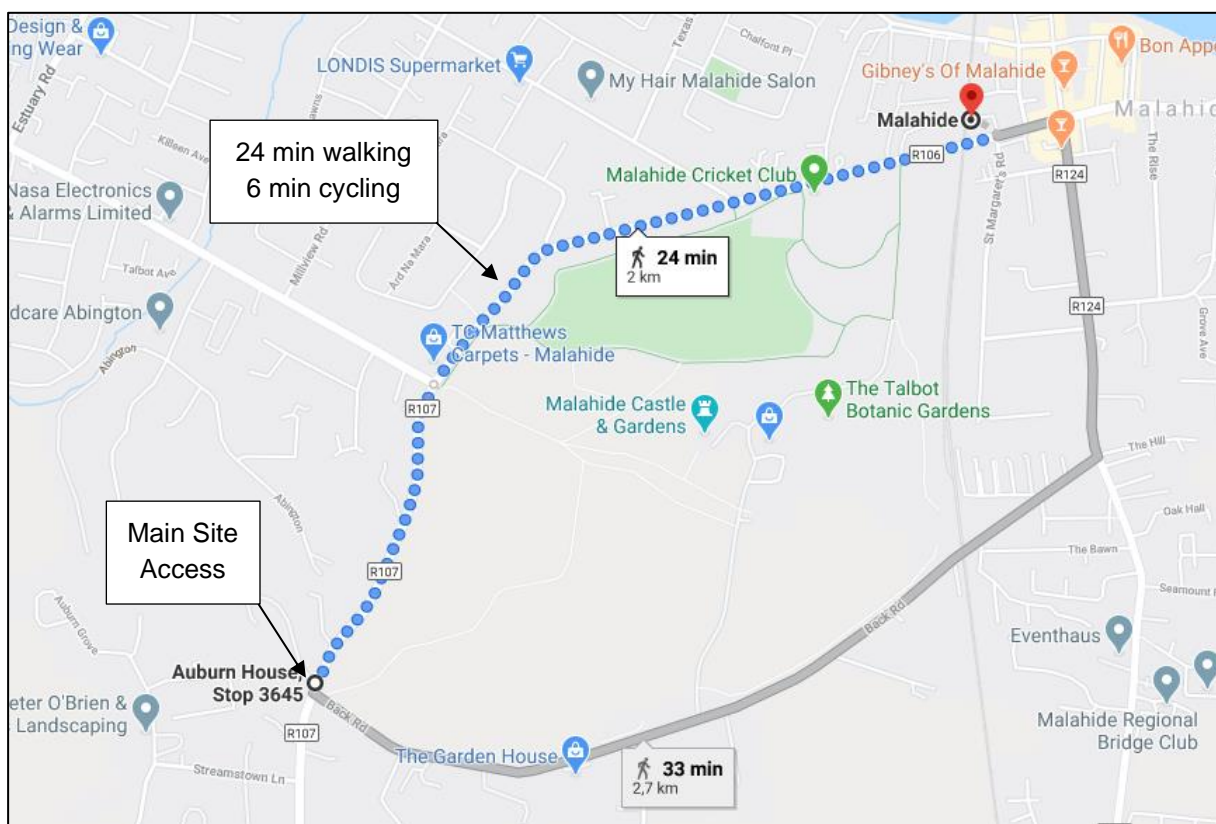
The closest train station (Malahide) is located approximately 2.0km (24-minute walk/6-minute cycling) northeast of the site access off R106 Dublin Road (Figure 4). Walking access from the subject site to the Malahide Station would be via R107 Malahide Road and R106 Dublin Road. Along the route to the station, a narrow footpath, directly adjacent to the carriageway, is provided on the western side of R107 Malahide Road. On the R106 Dublin Road, a wider footpath is provided along the western side of the carriageway and on both sides of the road from Yellow Walls Road up until the Malahide Station. No cycle lanes are provided along the route.

The Malahide Station is served by Commuter Rail and DART services.

The Commuter Rail service through Malahide Station serves all stations from Dundalk through Dublin City Centre to Gorey. The service operates at 3 – 4 services per hour in both direction on weekdays.

The DART service through Malahide Station serves all station from Malahide through Dublin City Centre to Bray and Greystones. On weekdays, this service operates at a 20-minute frequency in both directions.





**Figure 4 | Walking Route to Malahide Rail Station**

### 3.4 Bus

The subject site is directly served by public bus services. The closest bus stops are located on R107 Malahide Road just to the north of the junction with Back Road, being Bus Stops No. 3579 (Northbound) and No. 3645. The subject bus stops are served by the Bus Routes 42. This route is operated by Dublin Bus and connects Talbot Street in Dublin City Centre to Sand's Hotel on Portmarnock. A summary of Dublin Bus Route 42 frequency is presented in Table 2. The location of the subject bus stops in relation to the proposed development site is illustrated in Figure 5.

| Route No. | From                       | To                         | Weekday Frequency      | Saturday Frequency     | Sunday Frequency       |
|-----------|----------------------------|----------------------------|------------------------|------------------------|------------------------|
| 42        | Talbot Street              | Sand's Hotel (Portmarnock) | Every 15 to 30 minutes | Every 15 to 30 minutes | Every 30 to 60 minutes |
| 42        | Sand's Hotel (Portmarnock) | Talbot Street              | Every 20 to 25 minutes | Every 15 to 30 minutes | Every 30 to 60 minutes |

**Table 2 | Bus Route 42 - AM and PM Weekday Frequency**



**Figure 5 | Location of Closest Bus Stops.**

Travel time from the subject bus stop on R107 Malahide Road (southbound) to Talbot Street in Dublin City Centre is approximately 32 minutes. On the opposite direction, the travel time from the subject bus stop on R107 Malahide Road (Northbound) to Malahide Centre is approximately 11 minutes, and to Sand's Hotel in Portmarnock is approximately 22 minutes.

The proposed internal layout includes pathways and pedestrian crossings throughout the site leading to the subject bus stops just outside the site. From the centre point of the site, it is approximately 400m (5-minute walk) to these bus stops.

The internal layout of the proposed development will provide pedestrian pathways on both sides of the road, often separated by a grass bank. All footpaths for the proposed development will be provided in accordance with Section 4.3.1 of the DMURS which suggests that a minimum 1.8m footpath should be provided.

### 3.5 Car Sharing (GoCar)

The closest GoCar vehicles are located at Malahide Centre, Bridgefield Car Park, Malahide Dart Station and at Ard Na Mara off Yellow Walls Road. See Figure 6. At the time of writing this report, one vehicle is provided at each GoCar station, except for the Bridgefield Car Park Station which provides two.



**Figure 6 | Location of GoCar Stations (Source: [www.gocar.ie](http://www.gocar.ie))**

## **4. Transportation Improvements**

### **4.1 Roads and Junctions**

#### **4.1.1 R107 Malahide Road / Back Road Junction Upgrade System**

As part of subject development works, it is proposed to upgrade the existing R107 Malahide Road / Back Road priority-controlled T-junction to a four-armed signalised junction. The additional fourth arm (western approach) of the proposed layout will form the main vehicular access to the subject development site.

The proposed scheme comprises of:

- Construction of the fourth arm of the junction to provide controlled access to the proposed development site;
- Installation of a new traffic signal infrastructure with 4 normal traffic phases and 1 pedestrian phase;
- Provision of dedicated pedestrian crossings with dropped kerbs and tactile paving on Back Road (E) and R107 Malahide Road (N) arms;
- Reconfiguration of the Back Road (E) approach to include a dedicated right-turning pocket lane;
- Reconfiguration of the R107 Malahide Road (S) approach to include a dedicated right-turning pocket lane;
- Improvements to the existing footpaths northeast, southwest and southeast of the junction;
- Provision of advanced stop lines for cyclists on the southern, eastern and northern approaches;
- Provision of MOVA control with loop detectors as per Fingal County Council requirements.

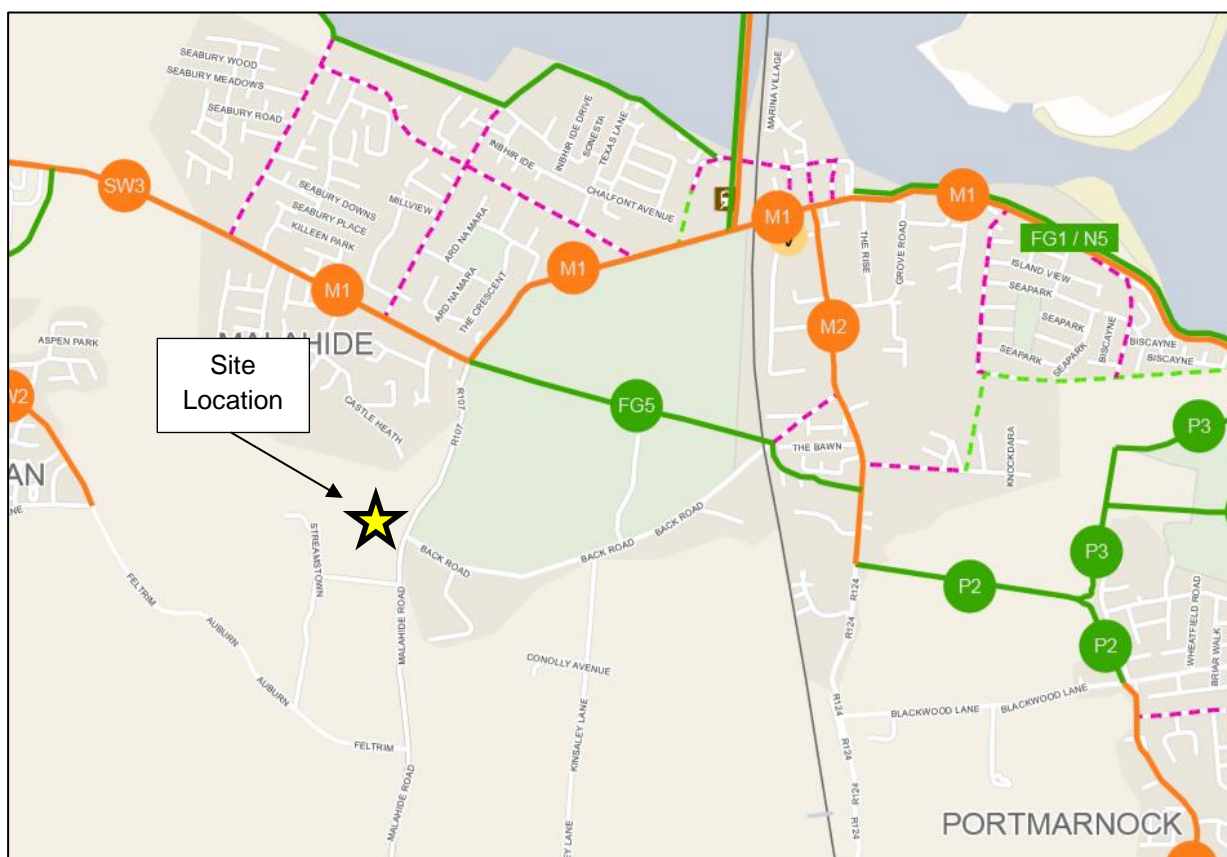
The proposed upgrade layout for this junction can be seen in Waterman Moylan Drawing No. 19-020-P110 accompanying the subject application.

### **4.2 Greater Dublin Area Cycle Network Plan**

Proposals for the Greater Dublin Area Cycle Network Plan were published by the National Transport Authority in December 2013. The plan sets out a vision and a strategy for the construction and/or designation of a comprehensive network of cycling routes throughout the Greater Dublin Area (Counties Dublin, Meath, Kildare and Wicklow).

An extract from Sheet N9 (Proposed Cycle Network for Dublin North West) is reproduced in Figure 7 below:





**Figure 7 | Proposed Cycle Network Upgrades**

As part of the subject development works, it is proposed to provide advanced stop lines for cyclists on the southern, northern, and eastern approaches of the proposed signalised junction between R107 Malahide Road / Back Road. These advanced stop lines will provide with a safe area for cyclists in front of vehicular queues and help position themselves correctly for their right/left turning movements.

### 4.3 Bus Connects

The Bus Connects project currently being promoted by the National Transport Authority aims to deliver a much-enhanced bus service to the Greater Dublin Area (GDA). The routes proposed to serve the subject development are the **Secondary Radial Routes 20 and 21** and the **Peak Times Route X78** (See Figure 8). The frequency of this proposed route is presented below.

| Route No.  | From                 | To          | AM Weekday Frequency (07:00 to 09:00) | PM Weekday Frequency (17:00 to 19:00) |
|------------|----------------------|-------------|---------------------------------------|---------------------------------------|
| <b>20</b>  | Malahide             | City Centre | Every 30 minutes                      | Every 30 minutes                      |
| <b>21</b>  | Swords Business Park | City Centre | Every 30 minutes                      | Every 30 minutes                      |
| <b>X78</b> | Malahide             | UCD         | 2 Buses at 07:00                      | 1 Bus at 16:00<br>1 Bus at 17:00      |

**Table 3 | Bus Connects Routes 20, 21 and X78 – Weekday Frequency**





## **4.5 GoCar**

It is expected that GoCar will provide 4-6 shared car club vehicles in the proposed SHD scheme by Auburn House in Malahide. A letter to confirm GoCar's intention to provide these new car club vehicles is included in Appendix A of the Traffic and Transport Assessment accompanying the subject application under a separate cover.

## **4.6 Pedestrians**

Additional pedestrian facilities, such as renovated footpaths and new dedicated pedestrian crossings will be provided on R107 Malahide Road / Back Road junction prior to the construction of the proposed development.

There will be toucan crossings provided at the junction with R107 Malahide Road / Back Road which connect to the pedestrian/cycle network along Malahide Road, Back Road and within the Malahide Castle grounds. This provides safe passage walking from the proposed development into Malahide town Centre and the DART station.

The internal layout of the site will include an interconnect network of footpaths. These footpaths will include greenways into the existing woodlands surround Auburn House and also connect to the site access point at Carey's Lane via a pathway alongside the road. The internal layout can be seen in the architect drawings accompanying the documentation package. A green route footpath will be used as another site access point connecting to the site entrance at R107 Malahide Road.

## 5. Proposed Development

### 5.1 Development Proposals

The proposed development will consist of the preservation and protection of the existing Protected Structure of Auburn House and its stables as 1 no. residential dwelling; the conversion of the existing stables of Auburn House to provide for storage space for the main Auburn House and the construction of 368 no. new residential dwelling units (comprising 87 no. houses, 239 no. apartments & 42 no. duplex units) for an overall total of 369 no. residential units, including Auburn House.

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The breakdown of the proposed development is set out in the Schedule of Accommodation below:

| Description                              | 1-Bed      | 2-Bed      | 3-Bed     | 4-Bed     | 5-Bed or more | Total      |
|--|------------|------------|-----------|-----------|---------------|------------|
| Houses ( <i>including Auburn house</i> ) | -          | -          | 47        | 34        | 7             | 88         |
| Apartments                               | 109        | 124        | 6         | -         | -             | 239        |
| Duplexes                                 | 26         | 14         | 2         | -         | -             | 42         |
| <b>Total</b>                             | <b>135</b> | <b>138</b> | <b>55</b> | <b>34</b> | <b>7</b>      | <b>369</b> |

**Table 4 | Schedule of Accommodation**

The proposed development shall also provide landscaped public open space, car parking and all associated ancillary site development infrastructure including foul and surface water drainage, internal roads, cycle paths and footpaths, and boundary walls and fences. Vehicular access to the proposed development is to be via a new entrance at the R107 Malahide Road/Dublin Road entrance, with the existing entrance to Auburn House acting as a pedestrian/cyclist entrance and access to existing properties outside the application site, there will be a secondary entrance comprising modifications of the existing vehicular entrance off Carey's Lane to the south west of the development, the closure of the existing vehicular entrance to Little Auburn, the provision of 4 no. ESB substations, 1 no. new foul pumping station, public lighting; proposed foul sewer works along Back Road and Kinsealy Lane and all associated engineering and site works necessary to facilitate the development. The building heights range from 2 storey to 5 storey buildings with balconies or terraces being provided to the apartments and duplex units.

As part of the proposed development works, it is also proposed to upgrade the R107 Malahide Road / Back Road from a priority-controlled T-junction to a signalised four-armed junction. The fourth arm of the proposed signalised junction (western approach) will form the main vehicular access to the proposed development site. See Section 5.2 below.

The development proposals will increase the pedestrian permeability of the site and surrounding area by introducing footpaths within the development and connecting them with the existing wider network. This increased permeability makes the development an attractive place to travel by foot.

Furthermore, the proposed development will provide safe/secure cycle parking, in order to encourage those traveling to/from the development to travel by bike. Refer to Section 5.3.2.

## 5.2 Proposed Site Access Points

The proposed development will benefit from two vehicular access points. To the southeast of the site, R107 Malahide Road / Back Road priority-controlled T-junction is proposed to be upgraded to a four-armed signalised junction with the western arm forming the primary access to the site. A secondary access is proposed from west of the site via Carey's Lane leading to Streamstown Lane and Feltrim Road.

In addition to the two site access described above – which will be used by all modes of transport, pedestrians and cyclists will also benefit from a green route across the site leading to R107 Malahide Road just north of the proposed vehicular access point to the site. There will be toucan crossing incorporated to the proposed R107 Malahide Road / Back Road junction, connecting the proposed development to existing footpaths on both Malahide Road and Back Road.

A detailed report on all site access points considered was created by Downy Planning accompanies this planning application. This report details all site access options discussed and the impacts of each access point.

## 5.3 Parking

### 5.3.1 Car Parking Proposed

The number of car parking spaces projected to serve the proposed development is presented in Table 4 below. Further details on Car Parking are provided in Section 15 of the TTA accompanying this submission.

As can be seen from the above, it is proposed to provide a total of 505 car parking spaces, 497 spaces for residential use, 3 staff car parking spaces for the Creche and 5 drop-off spaces for the Creche. Note that the four street level drop-off spaces provided for the Crèche can also be used by visitors of the proposed development outside of Crèche drop-off and pickup hours.

| Land Use/Blocks  |           | No. of Units | Under Croft/<br>Under Podium | Podium/<br>Street | Total | Notes   |
|--|-----------|--------------|------------------------------|-------------------|-------|---|
| <b>Houses</b> (excluding Auburn House)                         |           | 87           | -                            | 177               | 177   | Each House provided 2 spaces. (In Curtilage) plus 3 x visitor spaces in Back Field        |
| Auburn House and Stables                                       |           | 1            | -                            | 2                 | 2     | 2 car spaces for Auburn House in existing gravel parking court to the front of the house. |
| <b>The Backfield</b><br>(Blocks 1, 2 & 3)                      | Block 1   | 46           | 153                          | 8                 | 161   | 1 car parking space per unit plus 24 x visitor spaces                                     |
|  | Block 2   | 49           |                              |                   |       |   |
|  | Block 3   | 42           |                              |                   |       |   |
| <b>Streamstown</b><br>(Blocks 6 & 7 and Duplex Block 1)        | Block 6   | 21           | -                            | 24                | 24    | 1 car parking space per unit plus 3 x visitor spaces                                      |
|  | Block 7   | 25           | -                            | 28                | 28    | 1 car parking space per unit plus 3 x visitor spaces                                      |
|  | Duplex 1  | 6            | -                            | 9                 | 9     | 1 car parking space per unit plus 3 x visitor spaces                                      |
| <b>The Avenue</b><br>(Blocks 4 and 5, Duplexes 2A, 2B, 2C, 2D) | Block 4   | 28           | 94                           | 2                 | 96    | 1 car parking space per unit plus 4 x visitor spaces.                                     |
|  | Block 5   | 28           |                              |                   |       |   |
|  | Duplex 2A | 8            |                              |                   |       |   |
|  | Duplex 2B | 11           |                              |                   |       |   |

| Land Use/Blocks |           | No. of Units | Under Croft/<br>Under Podium | Podium/<br>Street | Total      | Notes  |
|-----------------|-----------|--------------|------------------------------|-------------------|------------|--|
|                 | Duplex 2C | 9            |                              |                   |            |  |
|                 | Duplex 2D | 8            |                              |                   |            |  |
| Creche          |           | -            | 3 Staff Spaces               | 5 Drop-Off Spaces | 8          | 5 x additional creche drop off spaces can be used for residential drop off/visitors outside of creche hours. |
| <b>Total</b>    |           | <b>369</b>   | <b>250</b>                   | <b>255</b>        | <b>505</b> | <b>-</b>   |

**Table 5 | Proposed Car Parking**

The reduced provision of 1 car parking space per apartment / duplex unit reflects the location of the development in relation to public transport services. This is in line with the Design Standards for New Apartments as outlined above and is considered adequate to serve the proposed development.

### 5.3.2 Cycle Parking Proposed

The number of cycle parking spaces projected to serve the proposed development is presented below.

| Description  |          | No. of Units     | No. of Bicycle Parking Spaces | Comments   |
|--|----------|------------------|-------------------------------|--|
| <b>Houses</b> (including Auburn House)                                 |          | 88               | N/A                           |  |
| <b>The Backfield</b><br>Apt Blocks 1, 2 & 3                            | Block 1  | 46               | 346                           | 270 Spaces in the Combined Basement Carpark, 76 on street spaces |
|  | Block 2  | 49               |                               |  |
|  | Block 3  | 42               |                               |  |
| <b>Streamstown</b><br>Blocks 6 & 7 and Duplex Block 1                  | Block 6  | 21               | 54                            | 42 within building, 12 outdoors                                  |
|  | Block 7  | 25               | 68                            | 56 within building, 12 outdoors                                  |
|  | Block 1  | 6                | 16                            | All 16 outdoors  |
| <b>The Avenue</b><br>Apt Blocks 4 & 5, Duplex Apt Block 2A, 2B, 2C, 2D | Block 4  | 28               | 208                           | 182 Spaces in the Combined Podium Carpark, 26 on street spaces   |
|  | Block 5  | 28               |                               |  |
|  | Block 2A | 8                |                               |  |
|  | Block 2B | 11               |                               |  |
|  | Block 2C | 9                |                               |  |
|  | Block 2D | 8                |                               |  |
| <b>Total</b>   |          | <b>369 Units</b> | <b>692</b>                    |  |

**Table 6 | Proposed Cycle Parking**

As can be seen from the above, the bicycle parking project to serve the proposed development exceeds both the Fingal Development Plan 2017 – 2023 and the Design Standard for New Apartments (December 2020) requirements. Further details on Cycle Parking are provided in Section 16 of the accompanying TTA.

## **6. Modal Choice Targets**

### **6.1 Strategy**

The strategy for this Travel Plan is based on the movement of people not vehicles.

The objectives of the Plan are:

- (a) To endeavour to reduce the use of the car by single occupants;
- (b) To endeavour to reduce the use of the car for the journey from Auburn Lands to work, especially during network peak periods;
- (c) To encourage the development of more sustainable transport modes for trips to and from Auburn Lands
- (d) To increase the percentage of persons choosing to walk, cycle or travel by public transport to and from Auburn Lands instead of driving;
- (e) To create an alliance with Fingal County Council, providers of public transport and tenants/owners of other major developments to promote a sustainable transport network in the Auburn Lands area.

In pursuance of achieving these objectives, modal split targets for residents have been set for the future year of 2030.

These targets are based on data presently available and will be measured to monitor progress. They follow examples of good practice in other developments both in Ireland and overseas.

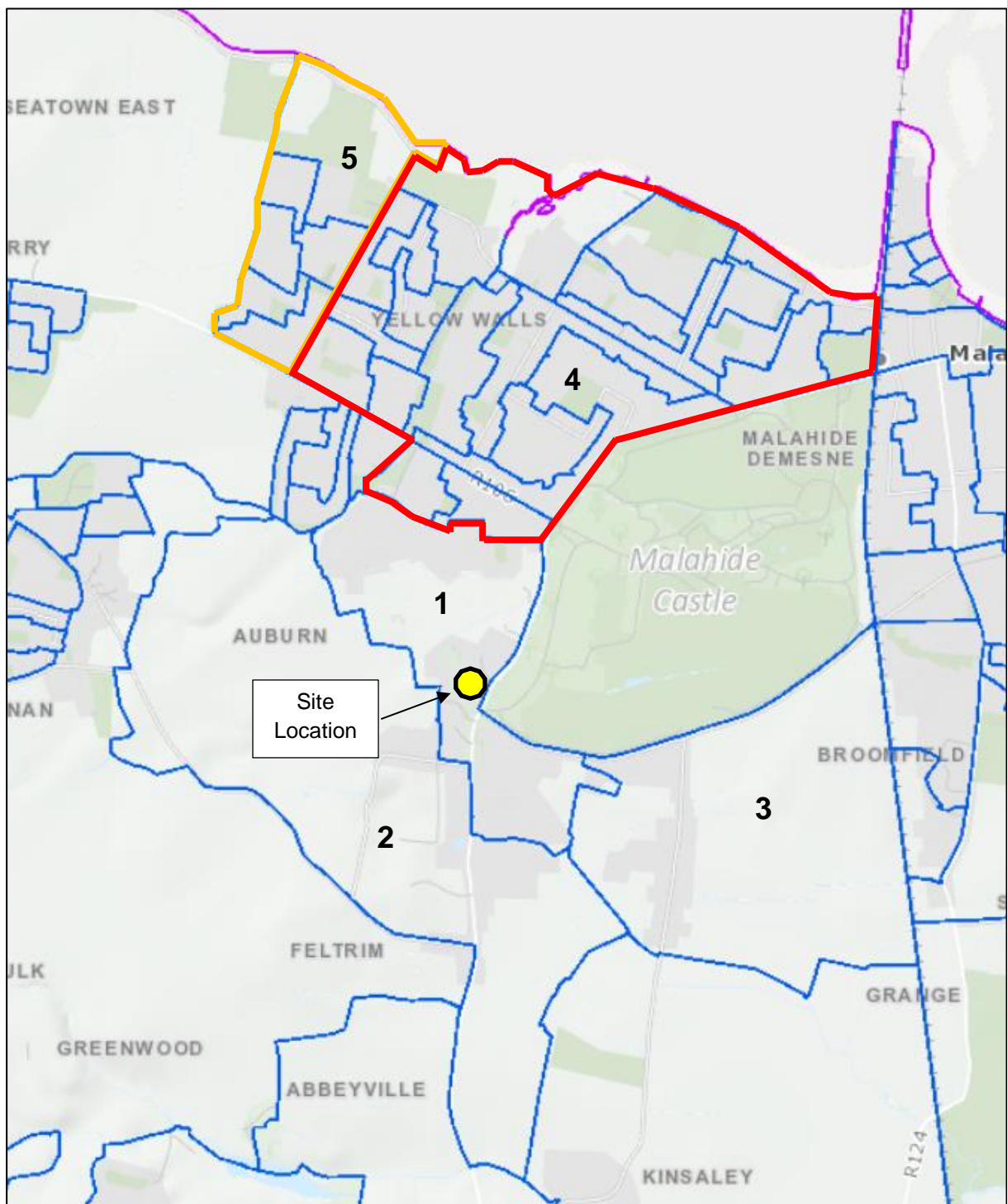
Further targets will be developed during the implementation of this Plan as development and infrastructure progresses and new data becomes available.

The promoters of Auburn Lands are aware of the importance of maximising opportunities to make non-car trips for the journey to/from the development. To this end, the provision of close facilities helps in reducing the car use for other purposes (i.e. schools, employment, shopping, etc.).

### **6.2 Existing Modal Split – Adjoining Areas**

The existing modal split for journey to work or school/college was extracted from the Census 2016. Census 2016 was carried out by the Central Statistics Office (CSO) on April 24<sup>th</sup>, 2016. The subject area and the surrounding Small Areas Zones were surveys for the modal split. Figure 9 below shows the five areas surveys.





**Figure 9 | Census 2016 Small Areas**

The existing modal split for the journey to work by the residents at the Small Areas (Zones) as surveyed in Census 2016 is presented in Table 6.

| Area  | Pop.  | Trip Attractor | Car Driver | Car Passenger | Train | Bus | Bicycle | On Foot | Others or Not Stated | Total |
|-------|-------|----------------|------------|---------------|-------|-----|---------|---------|----------------------|-------|
| 1     | 328   | Work           | 92         | 3             | 8     | 3   | 2       | 1       | 4                    | 113   |
|       |       |                | 81%        | 3%            | 7%    | 3%  | 2%      | 1%      | 3%                   | 100%  |
|       |       | College        | 18         | 50            | 17    | 14  | 3       | 6       | 2                    | 110   |
|       |       |                | 16%        | 45%           | 15%   | 13% | 4%      | 5%      | 2%                   | 100%  |
| 2     | 325   | Work           | 78         | 1             | 14    | 4   | 3       | 2       | 3                    | 105   |
|       |       |                | 74%        | 1%            | 13%   | 4%  | 3%      | 2%      | 3%                   | 100%  |
|       |       | College        | 6          | 64            | 8     | 18  | 1       | 6       | 3                    | 106   |
|       |       |                | 6%         | 60%           | 8%    | 17% | 1%      | 6%      | 3%                   | 100%  |
| 3     | 353   | Work           | 90         | 3             | 19    | 5   | 3       | 3       | 5                    | 131   |
|       |       |                | 69%        | 2%            | 15%   | 4%  | 2%      | 2%      | 6%                   | 100%  |
|       |       | College        | 5          | 66            | 3     | 12  | 7       | 5       | 2                    | 100   |
|       |       |                | 5%         | 66%           | 3%    | 12% | 7%      | 5%      | 2%                   | 100%  |
| 4     | 6,224 | Work           | 1495       | 49            | 472   | 218 | 49      | 78      | 54                   | 2415  |
|       |       |                | 62%        | 2%            | 20%   | 9%  | 2%      | 3%      | 2%                   | 100%  |
|       |       | College        | 75         | 458           | 169   | 289 | 34      | 360     | 31                   | 1416  |
|       |       |                | 5%         | 32%           | 12%   | 20% | 2%      | 25%     | 2%                   | 100%  |
| 5     | 1,547 | Work           | 507        | 28            | 85    | 116 | 15      | 13      | 15                   | 779   |
|       |       |                | 65%        | 4%            | 11%   | 15% | 2%      | 2%      | 2%                   | 100%  |
|       |       | College        | 29         | 190           | 47    | 142 | 14      | 65      | 9                    | 496   |
|       |       |                | 6%         | 38%           | 9%    | 29% | 3%      | 13%     | 2%                   | 100%  |
| Total | 8,777 | Work           | 2262       | 84            | 598   | 346 | 72      | 97      | 81                   | 3543  |
|       |       |                | 64%        | 2%            | 17%   | 10% | 2%      | 3%      | 2%                   | 100%  |
|       |       | College        | 133        | 828           | 244   | 475 | 59      | 442     | 47                   | 2228  |
|       |       |                | 6%         | 37%           | 11%   | 21% | 3%      | 20%     | 2%                   | 100%  |

**Table 7 | Existing Modal Split Census 2016.**

The surveyed 'modal split for the journey to work, school or college' by the residents at the five consulted areas as surveyed in Census 2016 recorded that 65% of 8,777 population generated 5,771 trips for the journey to work, school or college. Work trips made up for 40% of trips generated in the area, some 66% were by car, 17% by Train, 10% by Bus, 2% by Bicycle, 3% On foot and 2% were others or not stated. College trips made up 25% of the trips generated in the area, some 43% were by car (37% of these were car passenger), 11% by Train, 21% by Bus, 3% by Bicycle, 20% by Foot, and 2% were others or not stated.

### 6.3 Target Modal Split – Proposed Development

The 2030 target proposals for modal split for residents and Creche staff on the journey to and from work and college/school are presented in Table 7 below.

| Mode            | Census 2016 | Target 2030 |
|-----------------|-------------|-------------|
| Car (Driver)    | 35%         | 40%         |
| Car (Passenger) | 19.5%       |             |
| Train           | 14%         | 17%         |
| Bus             | 15.5%       | 20%         |
| Cycle           | 2.5%        | 8%          |
| On foot         | 11.5%       | 15%         |
| Other           | 2%          | -           |
| Total           | 100%        | 100%        |

**Table 8 | Modal Split – Target 2030.**



## 7. Travel Plan

### 7.1 Introduction

The Dublin Transportation Office in its Advice Note on Mobility Management Plans (July 2002) describes Mobility Management as *“a transport demand management mechanism that seeks to provide for the transportation needs of people and goods. The aim is to reduce demand for and use of cars by increasing the attractiveness and practicality of other modes of transport.”*

A Travel Plan will be implemented and developed on an ongoing basis with the triple objectives of promoting sustainability, enhancing public transport and reducing dependency on the use of the private car. It is important to strike an appropriate balance between promoting new development and preventing excessive car parking provision that can undermine cycling, walking and public transport use.

The Travel Plan is intended to deal with the typical day-to-day operating conditions at the site.

### 7.2 Action Plan

#### 7.2.1 Walking

It is known that there are many local, global and personal benefits to walking to/from work every day. The proposed development is not situated close to any business/retail parks. Residents will be encouraged to walk to the nearest dart station in Malahide Town for access to the city centre. A Facebook page will be set up in order to create a communication tool between residents to meet and walk together, therefore, create a sense of community between residents of the development.

Furthermore, residents will be encouraged to travel from/to work, school and college under a travel share-mode, meaning walking to/from the closest rail/bus station before using these other means of transport.

For the Creche, parents leaving in the proposed development will be advised about the upgraded local pedestrian network and facilities proposed as part of the subject application such as dedicated pedestrian crossings and wide footpaths and will be encouraged to walk their children to the Creche.

Staff of the Creche living in the proposed development or at nearby locations will also be informed about the upgraded local pedestrian network and facilities and will be encouraged to also walk to work.

#### 7.2.2 Cycling

Cycling is a great way to travel short distances. It helps to promote independence and helps the environment. This way of transport would be a great option for residents to travel to work, school or college from the proposed development. An effort will put into target an increase in residents who cycle. The proposed upgraded cycle infrastructure around the development, such as internal cycle routes and advanced stop lines on the proposed junction between R107 Malahide Road / Back Road will facilitate this task.

For those residents wishing to commute to work, school or college by this mode, the proposed development will provide a number of secure bicycle parking spaces within the site (Refer to Section 5.3.2). The number of bicycle spaces can be increased if demand arises.

In addition, residents will be regularly informed about the bike to work scheme, the safest cycle routes to specific locations such as Malahide and Malahide DART Station and the benefits of commuting to work, school and college every day by bike.

Staff of the Creche will also be regularly informed about the bike to work scheme, the upgraded local cycle network and cycle routes to the site and the bike parking proposed within the development and will be encouraged to commute every day to work by bike.

### 7.2.3 Public Transport

There are many benefits to taking public transport (rail and bus service) every day to/from work, such as helping the environment by reducing carbon emission, reducing congestion, saving money and allowing you to relax and read. In this regard some initiatives will be used to encourage residents to take public transport to work such as:

- Providing information to residents and staff about tax incentives for public transport users;
- Publicise the national Journey Planner on [www.transportforireland.ie](http://www.transportforireland.ie);
- Publicise real time information services for public transport e.g. next bus and next train services for mobile phones, apps on smart phones for Dublin Bus real time passenger information;
- Publicise student LEAP travel cards and associated benefits;
- Provision of up-to-date public transport timetables and routes; and
- Advice for new residents and staff regarding local bus routes and the nearest bus stops, the nearest train station, and the travel time to/from Dublin City Centre, Dublin Airport and other key destinations.

### 7.2.4 Car Sharing

There are many benefits of car sharing to/from work/college every day, such as reducing carbon emissions, reducing fuel costs and parking fees, reducing congestions and journey times due to fewer cars being on the road and increasing pleasure of journey due to less congestion and having company. In this regard, a car sharing scheme will be incentivised to encourage residents, students and staff of the proposed development who work/study at the same place (within the development or not) or in close locations, to commute together and to minimise the number of people commuting to/from work/college alone.

## 7.3 Strategy for Travel

The strategy of this Travel Plan will be to encourage residents and Creche staff to reduce dependency on the private car and instead encouraging travel by green modes of transport.

The methodology to be employed to implement the strategy will include:

- The provision of an extensive information service for public transport routes at locations within the development;
- The ongoing updating of public transport information adjacent to the development;
- Advising residents of tax incentives for public transport and bike to work schemes which may be available from their employer;
- Lobbying the public transport operators to ensure the ongoing provision of a high level of service on the public transport routes serving the development;
- The provision of secure cycle parking within the development and information on upgraded cycling facilities;
- The provision of good footpaths and pedestrian crossings in the area of the development;
- The provision of information regarding car sharing scheme;

## 7.4 Specific Measures

### 7.4.1 Transport Co-ordinator

A management company will be appointed by the developer to manage the development. A senior member of staff from the management company who supports the philosophy of the Plan will be appointed as the Transport Coordinator. The Transport Coordinator should be appointed within 2 months of the Site being occupied. A dedicated commuter space will be provided within the tenant amenity areas where travel information, timetables, access to the internet and notice boards will be provided.

The Coordinator's roles in the development, implementation and management of the Plan shall include:

- Promotion of the Travel Plan to residents and staff;
- Implementation and maintenance of the Plan;
- Monitoring progress of the Plan;
- Liaison with public transport operators and officers of the Planning and Highway Authorities;
- Production of information reports for the Developer, the Occupier(s) and the Planning and Highway Authorities; and
- Ongoing assessment of the objectives of the Plan.

To develop a thorough understanding of the existing situation, the best approach is generally to distribute (electronically or via hardcopy) a questionnaire to all users of the site, from which a database of existing travel behaviour can be compiled. The Transport Coordinator shall arrange for this resident's travel survey to be carried out within the first 4 months of being appointed.

The information requested in the questionnaire should include:

- Personal details, including place of work or study, start/finish times, and typical daily commute duration;
- Primary mode of transport;
- Current travel patterns including the time taken to travel to work/study and the place of work/study;
- Views on alternative modes to the car (i.e. what would encourage them to switch to other modes); and
- Usage of car sharing scheme;

Traditionally, response rates to such questionnaires are relatively low and it may be necessary to encourage recipients to complete and return them.

The information obtained from the survey should be entered onto a database and used to formulate and monitor the implementation of the Plan and to set and review targets. These targets are to be agreed with the Planning and Highway Authorities or their agents within 6 months of the survey being carried out.

### 7.4.2 Public Transport

Up to date local bus and rail timetables will be maintained within the tenant amenity area and other fixed points within the facilities on the site. Residents will be advised of their location. In addition, Internet access to travel information will be provided. The developer will provide all new residents and Creche staff with a travel pack showing alternative modes of travel to the development. Where possible, the developer will advise visitors to the site of alternative modes of travel to that of the car.

### 7.4.3 Provision for Cyclists

Secure bicycle parking facilities will be provided for residents at designated areas within the apartment blocks and on the curtilage of each house. For visitors, Crèche staff and Crèche users, a number of bicycle parking will be provided through the site at the surface level. Local cycle route information will be provided in the tenant amenity area and at other fixed points within the development. Residents and Crèche staff will be advised of their location. Details of the cycle parking proposed is included in Section 5.3.2.

### 7.4.4 Car Sharing

One of the focuses for reducing the use of private cars will be promoting car sharing. This will consist of promotional material to be produced by the Transport Coordinator to outline the benefits of car sharing for commuting purpose every day.

### 7.4.5 Car Parking

The co-ordinator will be responsible for the management of inappropriate parking within the development.

## 7.5 Monitoring of the Travel Plan

The monitoring and review of the Plan will be the responsibility of the Coordinator. The travel survey will establish the initial modal split of travel by residents.

The Coordinator, in consultation with the Developer, the Occupiers, and the Local Authority or its agents, will agree annual targets, following completion and analysis of the travel survey.

The Coordinator will:

- Meet with officers of the Local Authorities or its agents within a period of 6 months following occupation of the building(s) and thereafter every 12 months to assess and review progress of the Plan and agree objectives for the next 12 months, and
- Prepare and submit to senior management of the Developer, the Occupier(s) and the Local Authorities or its agents, an annual Monitoring Report.

### 7.5.1 Why Monitor?

Monitoring the success of the Travel Plan is essential for a number of reasons, including:

- Review the success of particular initiatives and whether or not they are meeting the objectives defined;
- Increase or reduce resource allocations as required;
- Forecast future activity; and
- Report on success.

### 7.5.2 What to Monitor?

As part of the monitoring process the Coordinator will be responsible (in conjunction with other key personnel) to monitor and measure the below indicators:

- Changes in modal split;
- Bikes parked on site and utilisation of the bike parking provided;

- Cars parked on site and utilisation of car parking provided;
- Number of residents using student LEAP cards to commute to school/college;
- Number of residents/staff commuting on a car sharing basis to/from work and college/school;
- Number of residents working on a remotely basis and not generating commuting trips;
- Facilities upgrades.

## **7.6 Marketing and Implementation**

As part of the implementation of this Plan, the Management Company will provide all new residents and staff at the site with a Travel Pack. The pack will include:

- The Travel Plan;
- Public Transport information, such as Bus and Rail routes and frequencies;
- Benefits of the Travel Plan for residents, staff and visitors;
- Details of tax incentives available, such as Bike to Work Scheme and Tax Saver Scheme for public transport tickets;
- Travel Survey Form;
- Details of pedestrian facilities;
- Details of cycle facilities; and
- Details of car sharing schemes.

## 8. Conclusion

This Travel Plan has been prepared in support of a planning application for a residential development in the surrounding lands Auburn House, Malahide, County Dublin. This document focused on how residents could be encouraged to use sustainable means of transport to and from the site and to minimise the number of residents who will drive to work.

The implementation of the strategy proposed in this document, such as the provision of: secure cycle parking spaces; up-to-date information of public transport routes and bus stop locations; information about bike to work scheme to all residents; will encourage residents to reduce dependency of private car and increase the travel by green modes of transport. These measures will not only benefit the residents but will also prevent any transport impacts that can be provoked by the operational phase of the proposed development.

The area surrounding the site is well served by public transport with frequent bus routes and rail service within walking and cycling distance of the development. The site is within walking and cycling distance of Malahide village centre and associated facilities such as shops, restaurants and the Malahide DART station. Secure bicycle parking will be provided on site to encourage the use of existing sustainable modes of travel to and from the development.

The traffic impact of the proposed development is assessed as part of the Traffic and Transport Assessment prepared for the site which is accompanying the documentation package under a separate cover, however, the measures outlined in this plan have been devised to limit the impact of the development on the surrounding road network.

The findings of this Travel Plan are based upon information available at the time of writing, including current road, cycle & pedestrian networks and public transport provision. It should be noted that this plan should be subject to constant review and should be amended to suit the changing transport situation in the local and wider area.

In summary, the proposed development mobility management measures will be deployed to ensure as far as is practical sustainable travel to/from the proposed development will be encouraged.



# UK and Ireland Office Locations

