

Rathfarnham Care Home

Discipline Transportation	Project name Rathfarnham Care Home	Date 29 November 2021	Prepared by Iain Hamilton
Approved by Stephen Moss	Checked by David Dewar	Verified by Stephen Moss	

Revision History

Revision	Revision date	Details	Authorised	Name	Position
1	09/12/21	Design Team Comments	Authorised	Iain Hamilton	Principal Consultant
2	10/12/21	Care Home parking altered	Authorised	Iain Hamilton	Principal Consultant
3	10/12/21	Care Home parking altered	Authorised	Iain Hamilton	Principal Consultant
4	10/12/21	Design Team Comments	Authorised	Iain Hamilton	Principal Consultant

Introduction

This Technical Note is provided in addition to the Traffic and Transport Assessment (TTA) dated August 2021 and prepared by AECOM. South Dublin City Council (SDCC) has responded to the planning application raising a number of additional concerns in respect to the proposals. These are summarised below:

1. Constrained footway width on the site boundary with Taylors Lane
2. Parking levels within the site
3. Safety of the eastern access point

In preparation of additional information relating to these points AECOM held a meeting with Roads Officers from SDCC to further discuss concerns. Responses to each of these points are set out in the remainder of this note.

Constrained Footway Width

It has been decided to remove the boundary wall with Taylors Lane and widen the footway to 2.0m, exceeding the minimum of 1.8m requested by SDCC Officers during discussions with AECOM.

Parking Levels

Concern was expressed by SDCC about parking levels at the Care Home, and in particular how these would relate to peak demand, for example on Christmas Day. While it is understood that there will be days that there will be higher demand than others, it is not reasonable to expect new developments to provide parking for these extreme peak events that may occur once a year, in the same sense that supermarkets are not expected to provide parking for the peak demand in the days immediately prior to Christmas. Instead, the expectation is that they provide for the average conditions that will most often meet the need for parking.

Further to this the provision of excess parking will encourage car use, an aspect that all governments, local and national, are working to reduce in response to the global climate crisis. If parking is constrained in its provision, then staff and visitors will be less inclined to take private vehicles and more inclined to travel by sustainable modes of transport.

A redesign of the housing element of the application has been undertaken, reducing the number of dwellings to four and providing each with two car parking spaces. The remaining parking on site is provided for the Care Home and this totals 20 spaces.

SDCC considers that the location of the proposed care home lies within the definition of Zone 1 which is 'General rate applicable throughout the County'. Zone two applies to locations within town and village centres, within 800 metres of a

train or Luas station and within 400 metres of a high quality bus service. Figure 5.2 of the SDCC Development Plan (DP) identifies the locations of the town and village centres within the SDCC county boundary. The closest village centres to the site of the proposed development are Knocklyon and Rathfarnham. The extents of these village centres do not reach the site of the proposed development and therefore this would indicate that zone one parking applies to the development. The nearest Luas station to the site of the proposed development is located in Dundrum approximately 5.2 kilometres from the site. This would again indicate that zone one parking applies to the proposed development. Public transport in the form of bus services operate along Taylor's lane throughout the day. During the peak periods services operate at a frequency of up to 12 services per hour on four routes. It is considered that this is a sufficient level of frequency and destination to satisfy meeting the requirements of being a high quality service. This would be an indication that zone 2 parking standards apply. Overall however it is considered that zone one parking levels should apply to the site in agreement with the opinion of SDCC roads officers.

Table 11.23 of the SDCC development plan provides the parking standard for a nursing home in zone 1 as being one space per four residents. It is proposed that the care home will accommodate 111 residents assuming one resident per room. This equates to a total parking provision of 28 car parking spaces. This is however a maximum parking rate, and therefore the provision of parking levels below this would be considered to be acceptable, whereas any provision of parking in excess of this would be undesirable as it would provoke a tendency to over reliance on use of the private car. In recognition of this, roads officers at SDCC have agreed that a parking level of 75% of the maximum should apply at this site. This equates to 21 car parking spaces required for the care home, very marginally more than that which is actually being provided. Parking spaces will be located to both the east and west sides of the building. While this is very marginally below the levels requested by SDCC, with knowledge of the operation of their care homes, the applicant is confident that this will be a robust level of parking for the needs of the site. It also fully adheres to the SDCC policy of providing parking below the maximum of 28 spaces, and by doing so will encourage all staff and visitors to make conscious choices as to their travel choice and encourage the use of more sustainable modes of travel, reducing the carbon footprint, and allowing parking to be kept for those who have no option but to drive.

While the location of the development is not compliant with all aspects of the zone 2 parking classification, it does adhere to some of them, and therefore the hard application of zone 1 parking is not necessarily appropriate as it does not take full account of the characteristics of the site itself. As referenced above there is a high level of bus service along Taylors Lane. Zone 2 parking areas require a frequency of a 10 minute frequency at peak and 20 minute frequency off peak in accordance with the SDCC DP. This is comfortably met by the services on Taylors Lane. While the area around the site is not designated a Village Centre in the SDCC DP, there are aspirations to develop the area to achieve this status as outlined in the Ballyboden Village Plan.

Section 6.4.4 of the SDPP DP identifies that "the availability and cost of car parking has a major impact on the level of traffic that is generated by a development and attracted to an area. There is a need for a balanced approach to car parking management that takes the car parking needs of businesses and households into account, and the need to limit the impact of traffic congestion and promote more sustainable forms of transportation. A balanced approach will be adopted, by limiting the number of spaces to be provided for any given development". With a desire to restrict traffic congestion in general, and specifically in an area with aspirations to achieve Village Centre status, it is imperative that volumes of car parking that will achieve this are provided at developments. The proposed level of car parking at the Care Home is considered to be appropriate to deliver the SDCC DPs written and approved policy of attempting to reduce use of private vehicles and subsequently congestion. Doing so will aid the areas aspirations towards becoming a Village Centre as well as contributing generally to traffic reduction and subsequent carbon emissions.

The development is providing further commitment to the reduction of its carbon footprint through the provision of two electric vehicle charging bays and fully meeting the requirements for cycle parking within the site. It should also be acknowledged that facilities within the development, including the hair salon, cinema and café are not open to the public, and therefore do not require parking in their own right. These facilities will be available for the use of residents only. Visitors to residents may choose to use the café while they are visiting a resident, however this will be as part of a visit that would be happening anyway and simply an alternative to sitting in the residents room.

It is acknowledged that there may on rare occasions be a higher demand for parking than that which is provided within the site. As discussed above it is not considered a requirement for the development to provide space to meet abnormally large volumes of parking on rare occasions such as Christmas Day. However AECOM has given consideration to where alternative parking could be located should this be required. It must be emphasised that as parking in line with SDCC's parking standards is being provided it will not be necessary to make use of any parking out with the site except in exceptional circumstances.

On street parking is available on a large number of residential streets to both the north and south of the proposed development. It must be emphasised that only on a very small number of occasions during the year there may be a very small additional demand for parking above that which is provided within the development. Within the day today, and

normal, operations of the care home sufficient parking is being provided to meet needs, in line with SDCC parking standards. On rare occasions one or two additional vehicles may require to park on street creating a very small demand on streets where there is a high level of residual capacity from on site observations. It is not anticipated any drivers would attempt to park on Taylors Lane due to the nature of this street, the volume of vehicles passing along it, and the close location of suitable on street parking. Drivers parking on streets to the north of Taylors Lane would be able to cross Taylors Lane through use of one of two signalised crossings with raised table platforms. This enhances accessibility for all users.

Eastern Access Point

The councils final concerns relate to use of the existing eastern access point and its proximity to the existing petrol filling station. It must be reiterated at this point that this is an existing access to the site and is in legal and legitimate use. It is not proposed to make any significant changes to this access junction, including how it will operate. Through the change of use of the site to a care home a significant improvement to the existing situation will be delivered reducing risk associated with the use of this junction compared to the current situation.

The site has most recently been used as a commercial builders yard, and therefore holds consent for non food retail use. Non food retail will generate a significantly higher volume of trips and vehicles than the proposed care home and four residential houses. Access through the eastern junction will be limited to the four houses, three parking spaces for the care home and deliveries being made to the care home. All other access will be through the western access point, which the council has indicated meets with their satisfaction.

Where the site to be put back into non food retail use this would not require a change of use application and therefore any comments that roads officers would be able to make would be limited 2 minor details within the site, and not through the suitability of use of the eastern access point. Examination of the tricks database has yielded non food retail trip rates presented in Table 1 below.

Table 1. Non Food Retail Trip Generation

Time Period	In	Out	Total
Trip Rate per 100sq m.	12 931	13 146	26 077

Source: TRICS v.7 8.3

The site is approximately 6,335sq.m. in size and it would be reasonable to assume that any new non food retail space would cover one third of this equating to 1,902sq.m. with the remaining space being used for car parking and landscaping. Using the trip rates defined in Table 1, this would equate to a trip generation as set out in Table 2.

Table 2. Non Food Retail Trip Generation

Time Period	In	Out	Total
Trip Generation	246	250	496

It could therefore be expected that approximately 500 vehicle movements could be made for non-food retail purposes on a typical day through the existing eastern access. The proposed use will see the site serve four houses and three Care Home parking spaces along with the servicing to the Care Home. The anticipated traffic generation with each of these uses is set out below.

Table 3. Non Food Retail Trip Generation

Time Period	In	Out	Total
Housing ¹	12	12	24
Care Home Parking ²	9	9	18
Care Home Servicing ³	5	5	10
Total	26	26	52

Examination of Tables 2 and 3 shows that the proposed use will significantly reduce the volume of vehicle movements associated with use of the eastern access junction from its existing use and which could legitimately be put back into use within the current permissions. Approximately 90% fewer vehicles will use the site access as part of the Care Home proposals.

The proposed development will also significantly increase the safety of the junction by improving visibility. The removal of the boundary wall will enhance visibility in both directions from that which is currently available, and the required visibility splay of 4.5m x 80m will be met compared to the existing heavily restricted visibility. Neighbouring junctions to the east and west will be visible along with vehicle movements on Taylors Lane. Were the sight to be brought back into use for non-food retail, this could be done without any requirement to alter the junction or make the improvements that are being made in association with the Care Home.

The access junction is adjacent to the exit from a petrol filling station (PFS) and not a standard junction with a street. Therefore, only vehicles exiting the PFS require to be negotiated by those using the Care Home access as those entering the PFS will do so in a different location. The nature of a PFS is such that vehicles will exit sporadically with varying, but generally large gaps between them. The behaviour does not mirror that of a street. Vehicles will additionally be travelling very slowly as they approach Taylors Lane.

These factors, particularly the improvements being made to the junction as a result of the Care Home and the significant reduction in traffic volume compared to the current use, mean that the two junctions will be able to operate comfortably adjacent to each other.

¹ TRICS has not been used to determine a trip rate due to the small scale of the housing development and it has been assumed that three vehicular departures and arrivals will be made per dwelling

² It has been assumed that due to their location a staff member will park in each of these spaces in each of three shifts

³ It has been assumed that one laundry, one food, one medical and two general deliveries will be made per day

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
 Category : G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE

TOTAL VEHICLESSelected regions and areas:

12 CONNAUGHT	
CS SLIGO	1 days
17 ULSTER (NORTHERN IRELAND)	
AN ANTRIM	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 2903 to 3416 (units: sqm)
 Range Selected by User: 850 to 3500 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 22/11/18

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Thursday	1 days
Saturday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	2 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Retail Zone	1
Built-Up Zone	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:Use Class:

E(a)	2 days
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This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):Population within 1 mile:

5,001 to 10,000	1 days
15,001 to 20,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
125,001 to 250,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
1.1 to 1.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	2 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	2 days
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This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	2 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

<p>1 AN-01-G-01 DFS BOUCHER ROAD BELFAST BALMORAL Suburban Area (PPS6 Out of Centre) Built-Up Zone Total Gross floor area: 2903 sqm Survey date: THURSDAY 22/11/18</p>	<p>ANTRIM</p> <p>Survey Type: MANUAL</p>
<p>2 CS-01-G-02 SMYTHS TOYS PEARSE ROAD SLIGO CARRAROE RETAIL PARK Edge of Town Retail Zone Total Gross floor area: 3416 sqm Survey date: SATURDAY 26/10/13</p>	<p>SLIGO</p> <p>Survey Type: MANUAL</p>

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 01 - RETAIL/G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	3416	0.000	1	3416	0.000	1	3416	0.000
08:00 - 09:00	2	3160	0.253	2	3160	0.016	2	3160	0.269
09:00 - 10:00	2	3160	0.158	2	3160	0.142	2	3160	0.300
10:00 - 11:00	2	3160	0.712	2	3160	0.538	2	3160	1.250
11:00 - 12:00	2	3160	0.918	2	3160	0.918	2	3160	1.836
12:00 - 13:00	2	3160	1.440	2	3160	1.282	2	3160	2.722
13:00 - 14:00	2	3160	1.709	2	3160	1.899	2	3160	3.608
14:00 - 15:00	2	3160	1.931	2	3160	1.772	2	3160	3.703
15:00 - 16:00	2	3160	1.915	2	3160	1.867	2	3160	3.782
16:00 - 17:00	2	3160	1.503	2	3160	1.709	2	3160	3.212
17:00 - 18:00	2	3160	1.124	2	3160	1.203	2	3160	2.327
18:00 - 19:00	2	3160	0.269	2	3160	0.285	2	3160	0.554
19:00 - 20:00	1	2903	0.551	1	2903	0.620	1	2903	1.171
20:00 - 21:00	1	2903	0.379	1	2903	0.413	1	2903	0.792
21:00 - 22:00	1	2903	0.069	1	2903	0.482	1	2903	0.551
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			12.931			13.146			26.077

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected:	2903 - 3416 (units: sqm)
Survey date range:	01/01/13 - 22/11/18
Number of weekdays (Monday-Friday):	1
Number of Saturdays:	1
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.