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New Build Development on Land at

The Dairy, Roads Hill, Waterlooville Hampshire PO8 0TG

December 2020

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1. Introduction

1.1. This Transport Statement has been commissioned by Cornerstone Hampshire Ltd to accompany an outline planning application for a residential / commercial redevelopment of The Dairy, Roads Hill, Waterlooville. The location of the site is shown below.



2. Site and Surrounding Area

- 2.1. The site is located north of Waterlooville on the edge of the settlement known as Catherington.
- 2.2. The site has two existing accesses onto Roads Hill which is an unclassified rural access road with the number U218. The road does not benefit from street lighting or a pedestrian footway.
- 2.3. To the east, Roads Hill connects with Catherington Lane which is classified as the C116 and links Catherington to the north with Waterlooville to the south. This road does benefit from a pedestrian footway on the western side (development side). Catherington Lane is subject to a speed limit of 30 mph which extends into Roads Hill, although this changes to National Speed Limit, just before the existing site access.
- 2.4. A review of the Hampshire Constabulary Person Accident Database has shown that within the last 5 years there have been no person injury accidents at the Roads Hill / Catherington Lane junction, or within a 200m radius which suggests that the highway network is operating in a safe and convenient manner.

2.5. The site currently accommodates a mix of commercial and equestrian uses, including car repairs, soil and turf sales and distribution together with a double glazing business.

3. Planning Policy

3.1. The National Planning Policy Framework was updated in February 2019 and recognises the importance transport policies have in facilitating development and advocates that planning policies and decisions should consider whether:

- The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site to reduce the need for major transport infrastructure.
- Safe and suitable access to the site can be achieved for all people; and
- Improvements can be undertaken within the transport network that cost effectively limits the significant impacts of the development. Development should only be prevented or refused on transport grounds where there would be an unacceptable impact on highway safety or where the residual impacts of the development are severe.

3.2. The East Hampshire Joint Core Strategy – Part 1 Local Plan was adopted by East Hampshire District Council in May 2104. Policy CP31 relates to transport and highlights that sustainable transport modes including cycling, walking and public and community transport will reduce dependence on the private car. It suggests that development proposals should include a range of mitigating measures and where appropriate will be required to:

- Provide adequate, convenient and secure vehicle and cycle parking in accordance with adopted standards;
- Produce and implement Transport Assessments and travel plans for proposals that are likely to have significant transport implications.

3.3. New developments should be located and designed to reduce the need to travel. Development that is likely to generate a significant number of additional vehicular movements will normally be expected to be located near existing centres and supportive infrastructure.

3.4. The East Hampshire District Local Plan (Emerging) 2017. -2036 deals with Transport in Policy S30. It suggests that new developments proposals will be permitted where they provide safe, suitable and convenient access for all potential users, and provides appropriate parking and does not have a severe impact on the operation or safety of, or accessibility to the local and strategic road networks.

4. Planning History

- 4.1. The site has been subject to a previous application which was submitted under the application numbered 21864/018. This was for 9 new dwellings and pedestrian access, car parking, secure cycle storage and landscaping following the demolition of various buildings.
- 4.2. The application included a new access in the approximate location of the existing access with visibility splays of 2.4m by 43.0m measured to the centreline of the carriageway in both the easterly and westerly directions. Although the access was located within a section of road that was derestricted, Hampshire County Council as highway authority recognised that the access lay just a few metres outside of the 30mph limit, close to the Catherington Lane junction.
- 4.3. In considering the highway implications for this proposal, HCC raised no highway objections subject to conditions relating to the stopping up of the existing access, provision of adequate car parking and surface water disposal.

5. Proposed Development

- 5.1. It is now proposed to remove the commercial development from the site and to provide 9 detached dwellings together with a small element of B1c usage whilst the existing equestrian use will be transferred to the proposed residential units. The schedule of accommodation is shown below.

Land Use	Number of	Size	Total
C3	3	3 Bed	3
C3	3	4 Bed	3
C3	3	5 Bed	3
B1c	2	120 sqm	240 sqm

- 5.2. In addition to the above, a community use is to be provided to the west of the site with a vehicular access to be taken from Roads Hill. This is intended to be used by the Local Scout Group, who have shown an interest in locating here.
- 5.3. The Scout Hut will have two car parking spaces for the use of the Scout Leaders, whilst the scouts themselves will access the site via an improved pedestrian footpath that runs along the southern boundary.

6. Access

- 6.1. The site has an existing access onto Roads Hill, which currently has restricted visibility. A secondary access that serves the soil and turf business is located at the radius of the junction of Roads Hill with Catherington Lane.
- 6.2. This proposals seeks to close the secondary access and to reinstate the highway verge. A new access is then to be created to serve the small commercial element, whilst the existing access is to be improved to serve the residential development.

6.3. The previous application showed visibility splays of 2.4m by 43.0m to be provided at the site access junction, although these were measured to the centreline of the carriageway in both the easterly and westerly directions. This application now provides visibility splays of 2.4m by 43.0m measured to the nearside channel lines for the residential element and 2.0m by 43.0m for the commercial access. Given the fact that the existing commercial access at the junction radius (shown below) is to be closed, this is deemed to be an improvement over the current situation.



- 6.4. Drawing numbered NJC-001 is attached as Appendix 1 to this report which shows the access and visibility arrangements.
- 6.5. Access to the Scout Hut will be taken from an existing access to the west of Roads Hill where this access will serve two car parking spaces for use by the Scout Leaders. There is an existing pedestrian footpath that runs along the southern boundary of the site and it is intended to improve this by providing a permeable surface and low level lighting. This will be the primary access for the scouts attending the site.
- 6.6. Scouts attending will either walk or cycle to the site whilst those being driven will be dropped off and collected via the large layby located to the south of the site on the western side of Catherington Lane close to the footpath.

7. Car and Cycle Parking

- 7.1. Whilst the application is in outline form, the submission includes an indicative layout which shows car parking for both the residential and commercial elements of the proposal.
- 7.2. The development will provide parking in accordance with East Hampshire's adopted parking standards whilst the commercial element will provide 4 spaces with secure cycle parking within each of the units.

8. Highway Impact

- 8.1. The site currently has a lawful planning use of equestrian and B1c. In addition, there is a soil and turf wholesale business and double glazing business being run at the north east corner of the site. This former use generates large HGV's on a frequent basis with the importation of soil and turf, with smaller vehicles being used to distribute the imported material.
- 8.2. The existing equestrian and B1c uses also generates a considerable amount of traffic, both large and smaller vehicles on a daily basis.
- 8.3. In order to assess the likely impact that the proposed development would generate however, the TRICS database V 7.7.3 has been interrogated. Small industrial units of between 150 sqm and 600 sqm were selected in suburban and edge of town areas. The TRICS data is shown below.

TRICS Trip Rate B1c Use per 100 sqm			
	Arrivals	Departures	Two-way Total
AM Peak Hour	0.526	0.234	0.76
PM Peak Hour	0.175	0.702	0.877
Daily Traffic	6.602	6.781	13.383
B1c Vehicle Trip Generation based on 240 sqm			
AM Peak Hour	1.263(1)	0.562(1)	2
PM Peak Hour	0.42(0)	1.685(2)	2
Daily Traffic	15.845(16)	16.274(16)	32

- 8.4. From the data above, it can be seen that the proposed commercial units would generate 2 traffic movements in each of the peak periods and a total of 32 movements over the course of a day.
- 8.5. In order to determine the likely traffic generation that the proposed residential units will generate, small residential developments within neighbourhood centres and urban areas were selected. A summary of the TRICS data is shown below.

TRICS Trip Rate Residential Dwellings			
	Arrivals	Departures	Two-way Total
AM Peak Hour	0.188	0.435	0.623
PM Peak Hour	0.329	0.176	0.505
Daily Traffic	2.495	2.896	5.364
Vehicle Trip Generation based on 9 Residential Units			
	Arrivals	Departures	Two-way Total
AM Peak Hour	1.692(2)	3.915(4)	6
PM Peak Hour	2.961(3)	1.584(2)	5
Daily Traffic	22.46(22)	26.06(26)	48

- 8.6. From the table above it can be demonstrated that the proposed residential units would generate 6 movements in the AM peak, 5 in the PM peak and a daily total of 48 two-way movements. When this is combined with the proposed commercial element, it would give a total of 8 AM peak movements, 7 PM peak movements and 80 two-way daily movements. The TRICS data is attached as Appendix 2 to this report.
- 8.7. Some of these movements can be off-set against the existing traffic generated by the various uses on site, a large proportion of which are heavy goods vehicles.
- 8.8. The amount of traffic likely to be generated by the development is therefore considered to be modest and would not have any material impact to highway safety.

9. Servicing

- 9.1. The largest vehicle likely to service the site on a regular basis is a refuse freighter. Drawing numbered NJC-002 is attached to this report as Appendix 3 and this demonstrates the ability of such a vehicle to enter the site, turn and leave in forward gear.
- 9.2. The commercial units are likely to be served by smaller Transit type vehicles although this will be on an infrequent basis. These are likely to reverse into the site and exit in forward gear, onto the lightly trafficked unclassified road.

10. Public Consultation

- 10.1. At the start of the process, a public consultation exercise was undertaken with local residents and two main issues were raised which related to potential highway improvements. Some concern was raised with regard to the bend on the north western section of Roads Hill. The applicant has therefore indicated his willingness to dedicate an area of land to the highway authority should they consider that the forward visibility around this bend needs improvement.
- 10.2. In addition, residents inquired whether a gateway feature could be provided on Catherington Lane, north and south of its junction with Roads Hill. Whilst there does not appear to be a traffic speeding problem at this location, and no recorded accidents have occurred at the junction within the last 5 years, the applicant is willing to fund such features should the highway authority consider this to be necessary.

11. Summary and Conclusion

- 11.1. This Transport Statement has been produced to support an outline planning application for a residential, commercial and community use at The Dairy, Roads Hill, WaterlooVille. The application is in outline form with just means of access to be considered.

- 11.2. Access to the residential and commercial elements are to be provided from new and improved access points onto Roads Hill, where visibility is being provided as previously agreed by Hampshire County Council as highway authority.
- 11.3. The development will result in a modest increase in traffic when judged against the existing permitted equestrian and commercial uses of the site.
- 11.4. Car and cycle parking will be provided in accordance with East Hampshire District Councils parking standards.
- 11.5. The residential element will make adequate provision for the turning requirements of an 11.2m long refuse vehicle, so that it can enter and leave the highway in a forward gear.
- 11.6. The applicant is prepared to dedicate an area of land within the site to improve forward visibility at the bend to the west of Roads Hill. Additionally, the applicant is also happy to fund gateway features on Catherington Lane, north and south of its junction with Roads Hill, should the highway authority deem it necessary.
- 11.7. Taking the above into account, it is considered that the development fully accords with The National Planning Policy Framework, the East Hampshire Joint Core Strategy – Part 1 Local Plan and the East Hampshire District Local Plan (Emerging) 2017. -2036.

Nick Culhane December 2020

Appendix 1

Access and Visibility Details

Appendix 2

TRICS Data

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : C - INDUSTRIAL UNIT
 TOTAL VEHICLES

Selected regions and areas:

04	EAST ANGLIA	
	NF NORFOLK	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
08	NORTH WEST	
	LC LANCASHIRE	1 days
13	MUNSTER	
	KE KERRY	1 days
15	GREATER DUBLIN	
	DL DUBLIN	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: 150 to 600 (units: sqm)
 Range Selected by User: 150 to 600 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 07/11/19

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:

Tuesday	1 days
Wednesday	1 days
Thursday	3 days

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

Selected survey types:

Manual count	5 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)	3
Edge of Town	2

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:

Industrial Zone	4
Commercial 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:

B1	4 days
B2	1 days

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@.

Filter by Use Class Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	1 days
20,001 to 25,000	3 days
25,001 to 50,000	1 days

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

Population within 5 miles:

25,001 to 50,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	2 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	2 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.

Travel Plan:

No	5 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	5 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

The 'browse and select' feature in TRICS was used to choose the sites to be included in this selected set. The TRICS user browsed the full list of sites for this land use category and selected directly from this list.

1	DL-02-C-01 ROWAN AVENUE DUBLIN SANDYFORD Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 400 sqm <i>Survey date: THURSDAY 26/09/19</i>	NAILS/STAPLES COMPANY DUBLIN	<i>Survey Type: MANUAL</i>
2	KE-02-C-01 WOODLANDS ROAD KILLARNEY Edge of Town Industrial Zone Total Gross floor area: 600 sqm <i>Survey date: THURSDAY 17/10/19</i>	PRINT & GRAPHIC DESIGN KERRY	<i>Survey Type: MANUAL</i>
3	LC-02-C-03 GOLDEN HILL LANE LEYLAND Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: 150 sqm <i>Survey date: TUESDAY 06/11/18</i>	TIMBER SUPPLIES LANCASHIRE	<i>Survey Type: MANUAL</i>
4	NF-02-C-03 ELVIN WAY NORWICH HELLESDON Edge of Town Industrial Zone Total Gross floor area: 260 sqm <i>Survey date: THURSDAY 07/11/19</i>	SHEET METAL CONTRACTOR NORFOLK	<i>Survey Type: MANUAL</i>
5	WM-02-C-02 SYDNEY ROAD BIRMINGHAM SMALL HEATH Suburban Area (PPS6 Out of Centre) Commercial Zone Total Gross floor area: 300 sqm <i>Survey date: WEDNESDAY 17/06/09</i>	ARDONPRINT WEST MIDLANDS	<i>Survey Type: MANUAL</i>

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 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	400	0.000	1	400	0.000	1	400	0.000
05:30 - 06:00	1	400	0.000	1	400	0.000	1	400	0.000
06:00 - 06:30	1	400	0.000	1	400	0.000	1	400	0.000
06:30 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 07:30	5	342	0.058	5	342	0.000	5	342	0.058
07:30 - 08:00	5	342	0.351	5	342	0.117	5	342	0.468
08:00 - 08:30	5	342	0.058	5	342	0.000	5	342	0.058
08:30 - 09:00	5	342	0.468	5	342	0.234	5	342	0.702
09:00 - 09:30	5	342	0.234	5	342	0.117	5	342	0.351
09:30 - 10:00	5	342	0.234	5	342	0.175	5	342	0.409
10:00 - 10:30	5	342	0.409	5	342	0.351	5	342	0.760
10:30 - 11:00	5	342	0.175	5	342	0.292	5	342	0.467
11:00 - 11:30	5	342	0.643	5	342	0.585	5	342	1.228
11:30 - 12:00	5	342	0.292	5	342	0.292	5	342	0.584
12:00 - 12:30	5	342	0.234	5	342	0.175	5	342	0.409
12:30 - 13:00	5	342	0.292	5	342	0.409	5	342	0.701
13:00 - 13:30	5	342	0.409	5	342	0.409	5	342	0.818
13:30 - 14:00	5	342	0.526	5	342	0.175	5	342	0.701
14:00 - 14:30	5	342	0.409	5	342	0.643	5	342	1.052
14:30 - 15:00	5	342	0.409	5	342	0.526	5	342	0.935
15:00 - 15:30	5	342	0.643	5	342	0.409	5	342	1.052
15:30 - 16:00	5	342	0.058	5	342	0.234	5	342	0.292
16:00 - 16:30	5	342	0.175	5	342	0.351	5	342	0.526
16:30 - 17:00	5	342	0.292	5	342	0.468	5	342	0.760
17:00 - 17:30	5	342	0.117	5	342	0.351	5	342	0.468
17:30 - 18:00	5	342	0.058	5	342	0.351	5	342	0.409
18:00 - 18:30	5	342	0.058	5	342	0.000	5	342	0.058
18:30 - 19:00	5	342	0.000	5	342	0.117	5	342	0.117
19:00 - 19:30	1	400	0.000	1	400	0.000	1	400	0.000
19:30 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 20:30	1	400	0.000	1	400	0.000	1	400	0.000
20:30 - 21:00	1	400	0.000	1	400	0.000	1	400	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			6.602			6.781			13.383

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:	150 - 600 (units: sqm)
Survey date date range:	01/01/09 - 07/11/19
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	KC KENT	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	1 days
	MS MERSEYSIDE	1 days
11	SCOTLAND	
	AG ANGUS	1 days
15	GREATER DUBLIN	
	DL DUBLIN	1 days
16	ULSTER (REPUBLIC OF IRELAND)	
	DN DONEGAL	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: No of Dwellings
 Actual Range: 4 to 15 (units:)
 Range Selected by User: 4 to 15 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 22/09/17

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:

Tuesday	4 days
Wednesday	2 days
Friday	4 days

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

Selected survey types:

Manual count	10 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)	7
Neighbourhood Centre (PPS6 Local Centre)	3

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:

Residential Zone	7
Village	2
No Sub Category	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:

C3 10 days

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

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	2 days
5,001 to 10,000	1 days
10,001 to 15,000	1 days
15,001 to 20,000	3 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

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

Population within 5 miles:

5,000 or Less	1 days
25,001 to 50,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	3 days
250,001 to 500,000	1 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	4 days
1.6 to 2.0	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.

Travel Plan:

No 10 days

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 10 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

The 'browse and select' feature in TRICS was used to choose the sites to be included in this selected set. The TRICS user browsed the full list of sites for this land use category and selected directly from this list.

1	AG-03-A-01 KEPTIE ROAD ARBROATH	BUNGALOWS/DET.	ANGUS
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 7		
	<i>Survey date: TUESDAY 22/05/12</i>		<i>Survey Type: MANUAL</i>
2	CA-03-A-04	DETACHED	CAMBRI DGESHI RE
	PETERBOROUGH THORPE PARK ROAD Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 9		
	<i>Survey date: TUESDAY 18/10/11</i>		<i>Survey Type: MANUAL</i>
3	CH-03-A-08	DETACHED	CHESHIRE
	WHITCHURCH ROAD CHESTER BOUGHTON HEATH Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 11		
	<i>Survey date: TUESDAY 22/05/12</i>		<i>Survey Type: MANUAL</i>
4	DL-03-A-09	TERRACED	DUBLIN
	RATHFARNHAM ROAD DUBLIN RATHFARNHAM Neighbourhood Centre (PPS6 Local Centre) No Sub Category Total No of Dwellings: 8		
	<i>Survey date: FRIDAY 07/09/12</i>		<i>Survey Type: MANUAL</i>
5	DN-03-A-01	DETACHED	DONEGAL
	GLENFIN STREET BALLYBOFEY Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 4		
	<i>Survey date: WEDNESDAY 30/06/10</i>		<i>Survey Type: MANUAL</i>
6	KC-03-A-05	DETACHED & SEMI -DETACHED	KENT
	ROCHESTER ROAD NEAR CHATHAM BURHAM Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 8		
	<i>Survey date: FRIDAY 22/09/17</i>		<i>Survey Type: MANUAL</i>
7	MS-03-A-03	DETACHED	MERSEYSI DE
	BEMPTON ROAD LIVERPOOL OTTERSPOOL Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 15		
	<i>Survey date: FRIDAY 21/06/13</i>		<i>Survey Type: MANUAL</i>
8	NY-03-A-13	TERRACED HOUSES	NORTH YORKSHIRE
	CATTERICK ROAD CATTERICK GARRISON OLD HOSPITAL COMPOUND Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 10		
	<i>Survey date: WEDNESDAY 10/05/17</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

9	SF-03-A-04 NORMANSTON DRIVE LOWESTOFT	DETACHED & BUNGALOWS	SUFFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 7 <i>Survey date: TUESDAY 23/10/12</i>		
10	WK-03-A-01 ARLINGTON AVENUE LEAMINGTON SPA	TERRACED/SEMI /DET.	WARWICKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 6 <i>Survey date: FRIDAY 21/10/11</i>		
			<i>Survey Type: MANUAL</i>

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 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	10	9	0.071	10	9	0.353	10	9	0.424
08:00 - 09:00	10	9	0.188	10	9	0.435	10	9	0.623
09:00 - 10:00	10	9	0.153	10	9	0.282	10	9	0.435
10:00 - 11:00	10	9	0.212	10	9	0.188	10	9	0.400
11:00 - 12:00	10	9	0.200	10	9	0.259	10	9	0.459
12:00 - 13:00	10	9	0.224	10	9	0.200	10	9	0.424
13:00 - 14:00	10	9	0.188	10	9	0.259	10	9	0.447
14:00 - 15:00	10	9	0.165	10	9	0.188	10	9	0.353
15:00 - 16:00	10	9	0.224	10	9	0.188	10	9	0.412
16:00 - 17:00	10	9	0.294	10	9	0.188	10	9	0.482
17:00 - 18:00	10	9	0.329	10	9	0.176	10	9	0.505
18:00 - 19:00	10	9	0.247	10	9	0.153	10	9	0.400
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.495			2.869			5.364

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:	4 - 15 (units:)
Survey date range:	01/01/10 - 22/09/17
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
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.

Appendix 3

Refuse Freighter Tracking Details