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TOWN LOT LANE, FELMERSHAM
OUR REF; 23869/11-18/5894
TECHNICAL NOTE – NOVEMBER 2018

Introduction

Mewies Engineering Consultants Ltd (M-EC) has been commissioned by Phillips Planning Services Ltd on behalf of their client [redacted], to produce a Technical Note (TN) to outline potential options to provide an improved access to a proposed residential development of 5 dwellings on Town Lot Lane, Felmersham, Bedfordshire following concerns raised in a public consultation.

This TN seeks to provide information relating to how access to the development site will be secured along with any viable options that could be implemented to improve accessibility to the site, adjacent farm and allotments beyond the site on Town Lot Lane.

Site Information

The site is located on the western side of Town Lot Lane, approximately 100m south of the junction with Grange Road. Town Lot Lane has a width varying between as narrow as 3.00m-5.70m, with overgrown grass verges present on both sides along the majority of the lane. The road itself is unsurfaced at the site frontage, with surfacing and lane markings only existing in close proximity to the junction with Grange Road. The location of the site is highlighted on Figure 1 below and shown on a site location plan attached within Appendix A.

Figure 1: Site Location Plan

Source: Google Maps

The site currently comprises of two redundant barns, an area of hardstanding and a small paddock area. All of the current buildings were previously utilised for agricultural use and are now derelict.

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Development Proposals
The site proposes the construction of 5 dwellings, 4no° semi-detached dwellings and 1no° detached dwelling. 3 of the 5 houses are proposed to take direct access off Town Lot Lane whilst the remaining two dwellings are proposed to be accessed off a private drive with a turning head provided to facilitate access. A layout plan is attached in Appendix B which illustrates these proposals.

The impact of the proposed development has been evaluated by utilising the TRICS database (version 7.5.1). Trip rates have been obtained for 'Houses – Privately Owned' (03/A) with the criteria used listed below. A full copy of TRICS can be found attached within Appendix C.

- All regions except Greater London, Scotland, Wales, NI and RoI;
- Surveys only taken on weekdays;
- 'Suburban area' and 'neighbourhood centre' sites only;
- Only sites between 1 and 15 dwellings;
- Only detached or semi-detached sites.

Table 1 – Trip Rate Analysis for the Proposed Development

TRICS Land Use Category		AM Peak (08.00 – 09.00)		PM Peak (17.00 – 18.00)	
		Arrivals	Departures	Arrivals	Departures
Proposed Development: Residential/Houses Privately Owned	Trip Rates per unit	0.186	0.512	0.349	0.186
	5 Dwellings	1 trips	3 trips	2 trips	1 trips
Total trips		**4 trips**		**3 trips**	

Analysis of the TRICS database shows that the proposed development is expected to have a minimal impact on the operation of the local highway network with 4 trips noted in the AM peak of 08:00-09:00, the equivalent of 1 additional trip every 15 minutes; and 3 trips noted in the PM peak of 17:00-18:00, an additional trips every 20 minutes.

As such it should be noted that the proposed development has a low impact on the highway network and as such cannot be considered as severe. Therefore, in line with paragraph 32 of the NPPF, the proposals should not be refused on highways grounds.

Access Proposals
A site visit was undertaken on 3rd May 2018, in order to investigate the current site characteristics and look at potential improvements to the access design. The following paragraphs consider the access proposals.

It is proposed to widen, where possible, the carriageway to 4.80m from the existing 3.35m width. Whilst this is an improvement there is potential for further widening around site frontage on Town Lot Lane, where the carriageway could be widened to approximately 5.50m.

With consideration given to the movement of a refuse or delivery vehicle it is suggested that the access is widened to approximately 5.00m in width to help facilitate the movement of these vehicles. The increase in width would also make pedestrian movements from the nearby allotment site easier as well as allowing two cars to pass each other with greater ease.

It was noted during the site visit that the existing conditions of Town Lot Lane were poor, with numerous potholes scattered along the carriageway. This currently reduces the available width for vehicles as they negotiate around the potholes. It is therefore recommended that the carriageway is resurfaced with a bound material for the between the site frontage and the junction with Grange Road.

Figure 2: Town Lot Lane Surface Conditions

Also noted was that beyond the proposed site Town Lot Lane worsened, with the carriageway becoming a rural track with no bound material and significant rutting resulting in a pronounced 'hump' in the centre of the carriageway.

It is proposed that the extent of the carriageway leading to the allotment site could be levelled and surfaced with a rolled stone material preferably in order to aid pedestrian movements from the allotment site along Town Lot Lane towards the rest of the village as well as to aid vehicle movements by protecting vehicles from damage.

The allotment site itself was witnessed as having no formal parking spaces. There is the potential for mitigation to take place here, with a rolled stone material, the same as that proposed for Town Lot Lane, being laid in order to formalise the parking arrangement without infringing on the intrinsically green nature of the site.

Figure 3: Town Lot Charity Allotments Parking

Finally, it is considered that from a standard distance of 2.4m back along Town Lot Lane, visibility to the west along Grange Road is hindered. Whilst a creep and peak manoeuvre avoids any conflict, it is possible to realign Grange Road to improve visibility for users along Town Lot Lane by moving the give way line of Town Lot Lane 1.2m further forward. This is shown on Drawing 23869_08_020_01, attached within Appendix D.

Figures 4 and 5: Town Lot Lane Westward Visibility Existing vs Potential

There is further potential for mitigation with the improvement of the nearby public right-of-way Footpath 7 (ID: FEL7H) which extends south east from Grange Road albeit the scale of the development would not justify its need. It was clear upon the site visit that the footpath is used, however the surface of the route was poor and overgrown in places with large rocks along the route providing a trip hazard. It would be possible to provide a better surface for the extent to the field boundary using a loose-gravel type material which would improve the route for pedestrians utilising this leisure route.

Figures 6 and 7: Conditions of Footpath 7

Policy Compliance

Table 2 provides a review, in relation to transport matters, on whether the development proposals comply with local and national policy and guidance.

Table 2 – Policy/guidance against development proposals

Section	Policy/Guidance	Development	Criteria met (✓/x)
Refuse collection	The Council's contractors will only collect refuse containers from a point immediately adjacent to a public highway where the collection vehicle can safely pause while loading. The Council's contractors will not enter a private road unless a prior legal agreement has been entered into. If the proposed road is to be adopted as a public highway then access for vehicles will be straightforward, provided that there is adequate turning space. Individual dwellings with access to ground level should ideally be provided with storage located away from the public realm or street scene. Bins can then be placed at a designated collection point on collection days.	The provision of a turning head will allow refuse vehicles / movements of delivery vehicles to be straightforward. Resurfacing and widening of Town Lot Lane will make the road suitable for use by a refuse vehicle though it should be noted that the rights to the road (public / private) would have to be sorted in order for the council to arrange legal agreements for the road. Current properties along Town Lot Lane wheel bins to the junction with Grange Road and the service of Town Lot Lane by a refuse vehicle would improve highway safety by removing potential obstructions to visibility. If access for a refuse vehicle wasn't to be agreed then wheeling bins to the kerbside of Grange Road does is noted as existing.	✓

Access design	In terms of safety then any new junctions onto the highway will increase conflict for all users. It is therefore generally good practice to utilise existing infrastructure where feasible.	The development seeks to retain the existing access on to Town Lot Lane as well as having dwellings directly accessing Town Lot Lane, with no new access proposed.	✓

Conclusion

This TN has been produced to provide information in respect of a proposed residential development comprising 5 dwellings off Town Lot Lane, Felmersham.

Based on the information provided, the following points are considered of key relevance to the proposed development in relation to highways matters:

- The proposals to widen Town Lot Lane will be of benefit to future residents of the proposed development and other users. It is recommended to make more use of the available width, widening the carriageway to approximately 5.00m width instead of 4.80m.
- The provision of a turning head will be a necessity for refuse or delivery vehicles serving the proposed development.
- It is also suggested that the extent of Town Lot Lane, from the proposed site to the junction of Grange Road, is resurfaced with a bound material as existing carriageway conditions are poor, with potholes reducing the available road width.
- Beyond this, the surface of Town Lot Lane to the nearby Town Lot Charity Allotments could be improved by being levelled and a rolled stone material laid to improve access for pedestrians who were noted as travelling along Town Lot Lane to achieve access.
- Further mitigation measures could involve surfacing the nearby PROW, Footpath 7, and/or formalising the parking arrangement at the allotment site.
- To improve westward visibility, Grange Road could be realigned in order to allow residents egressing the site to be better positioned along Town Lot Lane.

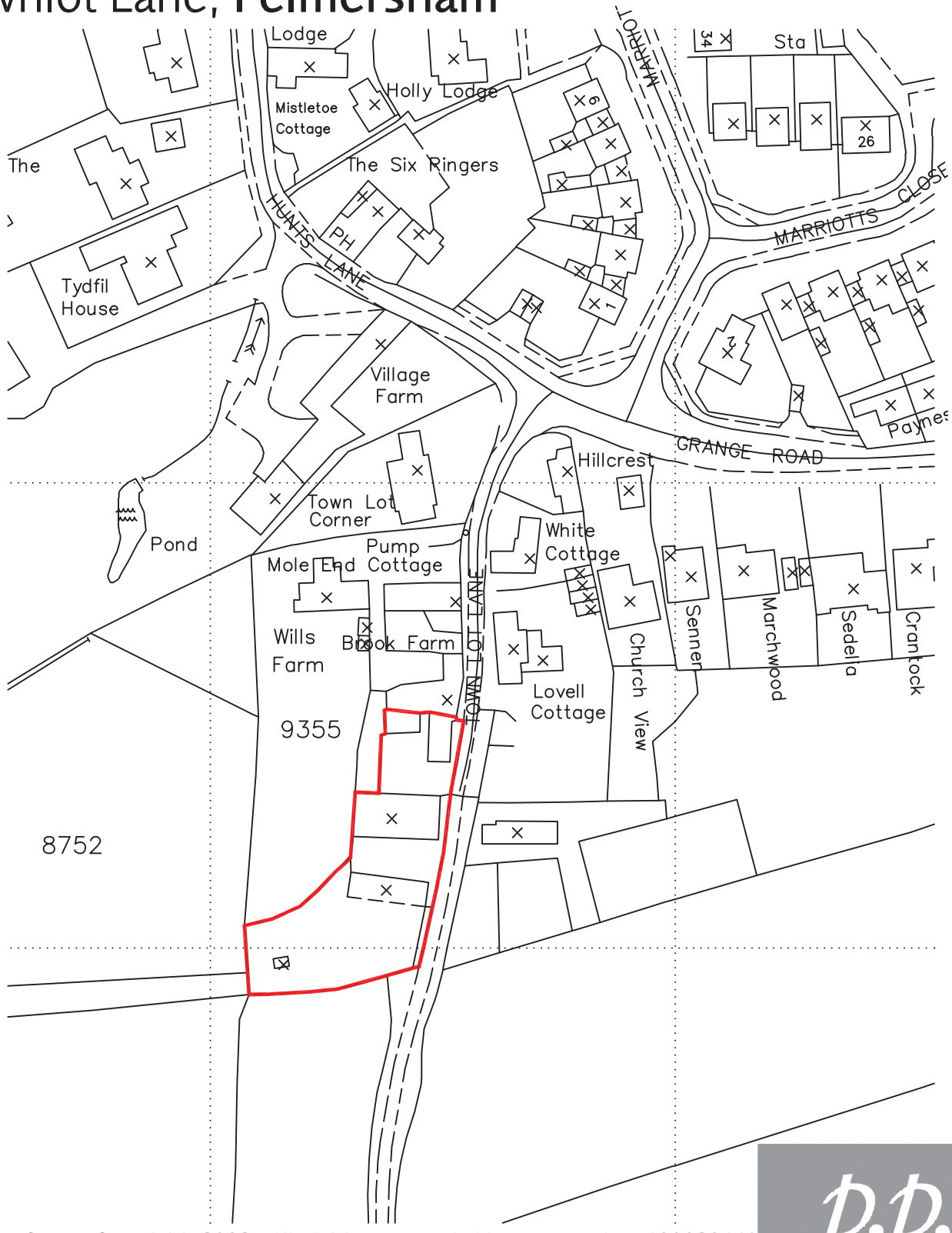
Based on the information and supporting evidence provided within this TN, it has been established that there are no highway or transportation reasons why the proposed development should not be granted planning permission in accordance with paragraph 32 of the National Planning Policy Framework (NPPF).

Report Prepared By:	Report Checked By:	Report Approved By:
[redacted]	[redacted]	[redacted]
Apprentice Civil Engineer	Associate Transport Engineer	Associate Transport Engineer

APPENDIX A

Site Location Plan
Townlot Lane, **Felmersham**

Plan PPS 1



Site Boundary

Phillips Planning Services Ltd
Town Planning & Development Consultants

Kingsbrook House
7 Kingsway
Bedford
MK42 9BA

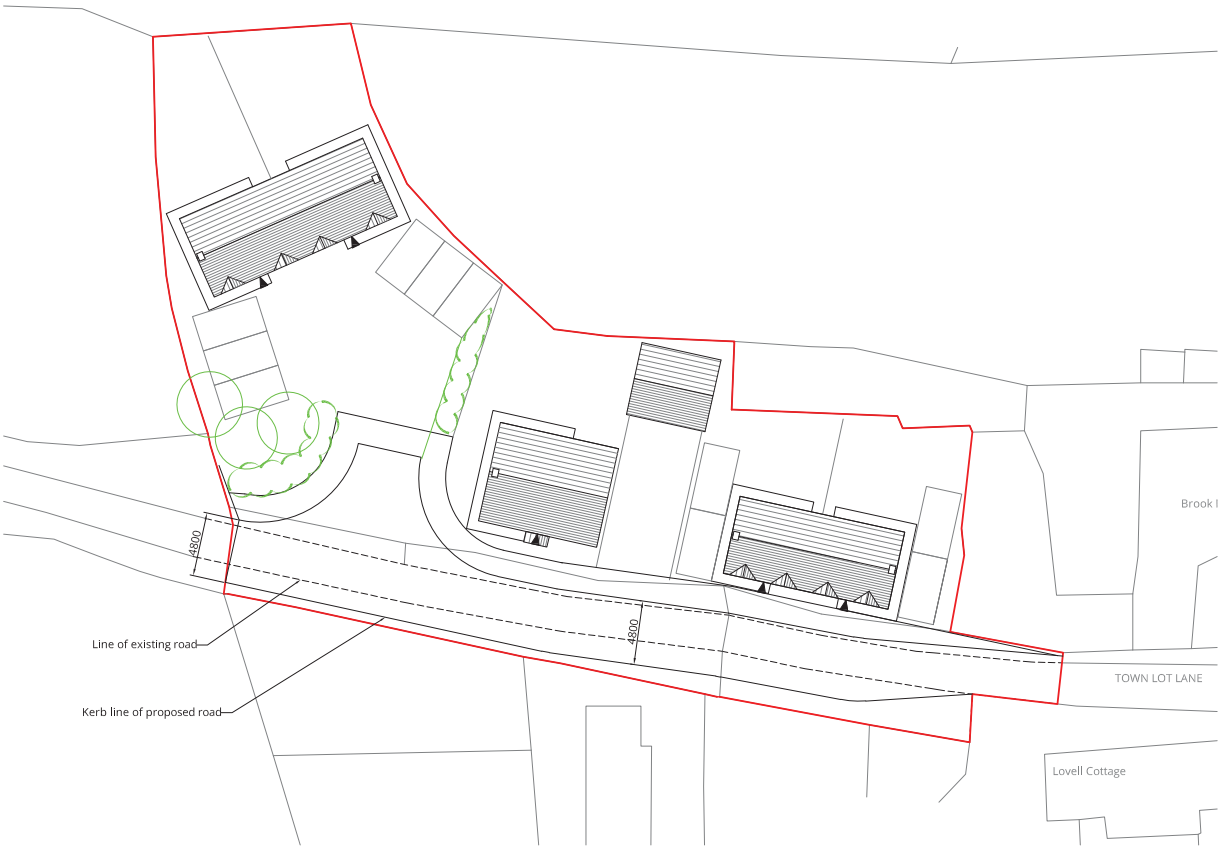
Tel . 01234 272829
Fax . 01234 271412
Email . info@phillips-planning.co.uk

Date : August 2008
Scale : 1:1,250 @ A4

APPENDIX B

Town Lot Lane, Felmersahm

Site Layout Plan



Scale 1:200

0 1 2 5 10 20m

N

REVISIONS DATE

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Phillips Planning Services Ltd.
Town Planning and Development Consultants

PROJECT
Town Lot Lane, Felmersham

TITLE
Site Layout Plan

CLIENT
[redacted]

SCALE (@ A2)	DRAWN BY	DATE
1 : 200	LK	03/18

PROJECT NUMBER	DRAWING NUMBER	REV
083948	17-03	

GENERAL DISCLAIMER

Planning drawings only - not to be used for construction purposes. These drawings can be scaled for planning purposes. All measurements to be checked on site and any discrepancies to be brought to the attention of the designer

APPENDIX C

Calculation Reference: AUDIT-350901-180514-0524

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	KC	KENT	1 days
04	**EAST ANGLIA**		
	CA	CAMBRIDGESHIRE	1 days
08	**NORTH WEST**		
	CH	CHESHIRE	1 days
	MS	MERSEYSIDE	1 days

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

Secondary 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: Number of dwellings
Actual Range: 8 to 15 (units:)
Range Selected by User: 1 to 15 (units:)

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	2 days
Friday	2 days

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

Selected survey types:

Manual count	4 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 undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Neighbourhood Centre (PPS6 Local Centre)	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:

Residential Zone	3
Village	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	3 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	2 days
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:

100,001 to 125,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	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	1 days
1.1 to 1.5	2 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	4 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	4 days

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

LIST OF SITES relevant to selection parameters

1 CA-03-A-04 DETACHED CAMBRIDGESHIRE

THORPE PARK ROAD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: TUESDAY *18/10/11* *Survey Type: MANUAL*

2 CH-03-A-08 DETACHED CHESHIRE

WHITCHURCH ROAD
BOUGHTON HEATH
CHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY *22/05/12* *Survey Type: MANUAL*

3 KC-03-A-05 DETACHED & SEMI-DETACHED KENT

ROCHESTER ROAD
BURHAM
NEAR CHATHAM
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 8
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

4 MS-03-A-03 DETACHED MERSEYSIDE

BEMPTON ROAD
OTTERSPOOL
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 15
Survey date: FRIDAY *21/06/13* *Survey Type: MANUAL*

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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
NY-03-A-13	Terraced
SF-03-A-04	Bungalows
WK-03-A-01	Terraced

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	4	11	0.023	4	11	0.302	4	11	0.325
08:00 - 09:00	4	11	0.186	**4**	**11**	**0.512**	**4**	**11**	**0.698**
09:00 - 10:00	4	11	0.116	4	11	0.163	4	11	0.279
10:00 - 11:00	4	11	0.256	4	11	0.186	4	11	0.442
11:00 - 12:00	4	11	0.186	4	11	0.256	4	11	0.442
12:00 - 13:00	4	11	0.163	4	11	0.256	4	11	0.419
13:00 - 14:00	4	11	0.093	4	11	0.116	4	11	0.209
14:00 - 15:00	4	11	0.093	4	11	0.163	4	11	0.256
15:00 - 16:00	4	11	0.186	4	11	0.140	4	11	0.326
16:00 - 17:00	4	11	0.256	4	11	0.093	4	11	0.349
17:00 - 18:00	**4**	**11**	**0.349**	4	11	0.186	4	11	0.535
18:00 - 19:00	4	11	0.326	4	11	0.163	4	11	0.489
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.233			2.536			4.769

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.*

Parameter summary

Trip rate parameter range selected:	8 - 15 (units:)
Survey date date range:	01/01/10 - 22/09/17
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	3

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 for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

TAXIS

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	4	11	0.000	4	11	0.000	4	11	0.000
08:00 - 09:00	4	11	0.000	4	11	0.000	4	11	0.000
09:00 - 10:00	4	11	0.000	4	11	0.000	4	11	0.000
10:00 - 11:00	**4**	**11**	**0.023**	**4**	**11**	**0.023**	**4**	**11**	**0.046**
11:00 - 12:00	4	11	0.000	4	11	0.000	4	11	0.000
12:00 - 13:00	4	11	0.000	4	11	0.000	4	11	0.000
13:00 - 14:00	4	11	0.000	4	11	0.000	4	11	0.000
14:00 - 15:00	4	11	0.000	4	11	0.000	4	11	0.000
15:00 - 16:00	4	11	0.000	4	11	0.000	4	11	0.000
16:00 - 17:00	4	11	0.000	4	11	0.000	4	11	0.000
17:00 - 18:00	4	11	0.000	4	11	0.000	4	11	0.000
18:00 - 19:00	4	11	0.023	4	11	0.023	4	11	0.046
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.046			0.046			0.092

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.

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Parameter summary

Trip rate parameter range selected:	8 - 15 (units:)
Survey date date range:	01/01/10 - 22/09/17
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	3

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

OGVS

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	4	11	0.000	4	11	0.000	4	11	0.000
08:00 - 09:00	4	11	0.000	4	11	0.000	4	11	0.000
09:00 - 10:00	4	11	0.000	4	11	0.000	4	11	0.000
10:00 - 11:00	4	11	0.000	4	11	0.000	4	11	0.000
11:00 - 12:00	4	11	0.000	4	11	0.000	4	11	0.000
12:00 - 13:00	4	11	0.000	4	11	0.000	4	11	0.000
13:00 - 14:00	4	11	0.000	4	11	0.000	4	11	0.000
14:00 - 15:00	4	11	0.000	4	11	0.000	4	11	0.000
15:00 - 16:00	4	11	0.000	4	11	0.000	4	11	0.000
16:00 - 17:00	4	11	0.000	4	11	0.000	4	11	0.000
17:00 - 18:00	4	11	0.000	4	11	0.000	4	11	0.000
18:00 - 19:00	4	11	0.000	4	11	0.000	4	11	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	4	11	0.000	4	11	0.000	4	11	0.000
08:00 - 09:00	4	11	0.000	4	11	0.000	4	11	0.000
09:00 - 10:00	4	11	0.000	4	11	0.000	4	11	0.000
10:00 - 11:00	4	11	0.000	4	11	0.000	4	11	0.000
11:00 - 12:00	4	11	0.000	4	11	0.000	4	11	0.000
12:00 - 13:00	4	11	0.000	4	11	0.000	4	11	0.000
13:00 - 14:00	4	11	0.000	4	11	0.000	4	11	0.000
14:00 - 15:00	4	11	0.000	4	11	0.000	4	11	0.000
15:00 - 16:00	4	11	0.000	4	11	0.000	4	11	0.000
16:00 - 17:00	4	11	0.000	4	11	0.000	4	11	0.000
17:00 - 18:00	4	11	0.000	4	11	0.000	4	11	0.000
18:00 - 19:00	4	11	0.000	4	11	0.000	4	11	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

Parameter summary

Trip rate parameter range selected:	8 - 15 (units:)
Survey date date range:	01/01/10 - 22/09/17
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	3

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 for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

CYCLISTS

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	4	11	0.000	**4**	**11**	**0.116**	**4**	**11**	**0.116**
08:00 - 09:00	4	11	0.000	4	11	0.023	4	11	0.023
09:00 - 10:00	4	11	0.000	4	11	0.000	4	11	0.000
10:00 - 11:00	4	11	0.000	4	11	0.000	4	11	0.000
11:00 - 12:00	4	11	0.000	4	11	0.023	4	11	0.023
12:00 - 13:00	4	11	0.000	4	11	0.000	4	11	0.000
13:00 - 14:00	4	11	0.023	4	11	0.000	4	11	0.023
14:00 - 15:00	4	11	0.000	4	11	0.000	4	11	0.000
15:00 - 16:00	**4**	**11**	**0.070**	4	11	0.000	4	11	0.070
16:00 - 17:00	4	11	0.070	4	11	0.000	4	11	0.070
17:00 - 18:00	4	11	0.000	4	11	0.000	4	11	0.000
18:00 - 19:00	4	11	0.000	4	11	0.000	4	11	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.163			0.162			0.325

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.

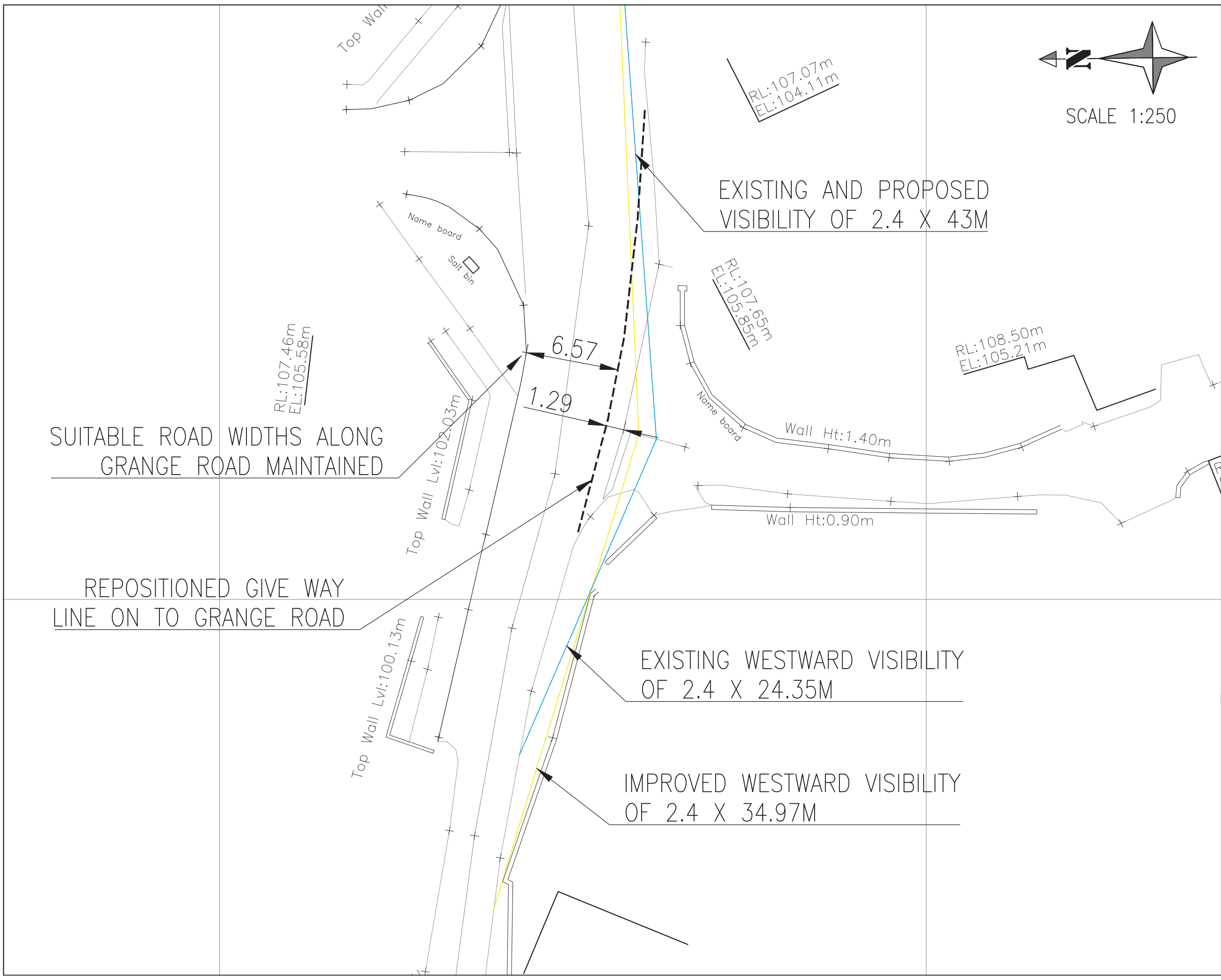
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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.*

Parameter summary

Trip rate parameter range selected:	8 - 15 (units:)
Survey date date range:	01/01/10 - 22/09/17
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	3

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.

APPENDIX D



NOTES:
1. DO NOT SCALE THIS DRAWING.

REV:	AMENDMENTS:	DRN:	CHK:	DATE:

PROJECT:
TOWN LOT LANE,
FELMERSHAM,
BEDFORDSHIRE

DRAWING TITLE:
RECOMMEND REPOSITION OF
TOWN LOT LANE / GRANGE ROAD
STOP LINE

CLIENT:
[redacted]

DRAWING NUMBER:
23869_08_020_01

REVISION:	SHEET SIZE:	SCALE:
	A3	AS SHOWN
DRAWN BY:	CHECKED BY:	DATE:
DG	SP	14/05/2018

STATUS:
PRELIMINARY

M-EC
Consulting Development Engineers
Leicester T: 01530 264 753
Birmingham T: 0121 2624 045
Milton Keynes T: 01908 440 042
Nottingham T: 0115 838 0990
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