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Residential Development of 6 Dwellings with Associated Access and Parking Land at Longacre, The Street, Walberton BN18 0PY

Introduction

This Highway Technical Note has been commissioned by Maxwell Homes Ltd for a planning submission to Arun District Council as Local Highway Authority (LHA) for a residential development of 6 dwellings on land to the rear of Long Acre, The Street, Walberton. The location of the site is shown below.



The site is located on the northern side The Street, an adopted C Class road that runs through the settlement of Walberton. To the east, The Street forms a roundabout junction with the B2132 Yapton Road, whilst to the west the road forms junctions with West Walberton Road, Eastergate Lane and Barnham Lane.

The road in the vicinity of the site is of conventional design have a two-lane carriageway with white centreline markings together with footways on both sides. The road is also subject to a 30mph speed limit and benefits from street lighting.

A review of the accident history for the area has shown that in the last 5 years there has been just one incident that resulted in a slight injury some 450m to the east of the application site. This appears to be an isolated incident and other than this, the highway networks appears to be operating in a safe and efficient manner.

The site currently accommodates a single detached dwelling which is served by an existing access in the form of a simple footway crossing.

Planning History

Whilst no relevant planning history exists for the site, a recent pre-application submission was made to the LPA who provided a formal response under reference PAA/108/23 on 11th January 2024.

Proposed Development

This application seeks to retain the existing dwelling and for the erection of a further 6 dwellings to the north served by an improved access and widened access road in the form of a shared surfaced private drive. This is shown on drawing numbered SK12 Rev C, included as [Appendix 1](#) to this Note.

Access and Visibility

Advice on the visibility requirements at accesses is included with the Documents Manual for Streets 1 and 2. In this case given the posted speed limit of 30mph, visibility splays of 2.4m by 43.0m would need to be provided in both the easterly and westerly directions. Drawing numbered NJC-001 is included as [Appendix 2](#) to this Note which shows the ability to provide such splays where all land required is contained either within the applicants ownership, or within the extent of the public highway.

The access is currently in the form of a dropped footway crossing which will be widened to a width of 5.5m which allows two large cars to pass one another.

Traffic Impact

In order to determine the likely traffic impact that the proposed dwellings will generate, the TRICS database v7.12.3 has been interrogated. Small, privately owned residential developments of between 6 and 40 dwellings were selected, located in suburban and edge of town areas. The TRICS Data and likely traffic generation is shown below.

TRICS Trip Residential Privately Owned			
	Arrivals	Departures	Two-way Total
AM Peak Hour	0.119	0.350	0.469
PM Peak Hour	0.331	0.144	0.475
Daily Traffic	2.169	2.351	4.520

TRICS Vehicle Trip Generation Based on 6 Units			
AM Peak Hour	0.71 (1)	2.1 (2)	3
PM Peak Hour	1.99 (2)	0.86 (1)	3
Daily Traffic	13.01 (13)	14.11 (14)	27

From the above TRICS data it can be seen that the proposed development is likely to generate just 3 traffic movement in both of the AM and PM peak periods, and an average of 27 daily two-way traffic movements. The TRICS data is included as [Appendix 3](#) to this Note.

Such a minimal increase in traffic is considered not to have any detrimental impact to highway safety.

Car and Cycle Parking

Advice on the parking requirements for new development is given within the Arun District Council Parking Standards Supplementary Planning Document January 2020. The standards are based on a zonal approach and in this case the site falls within Zone 1.

Table 3.1 sets out the number of parking spaces required based on the number of habitable rooms and in which zone the falls.

As the site falls with Zone 1, which is considered to be the least accessible location, the table below gives a breakdown of the house type and parking required and parking provided.

Long Acre Parking Requirements			
Plot No.	Habitable Rooms	Spaces Required	Spaces Provided
1	7	3	2 spaces + 1 Car Port
2	7	3	2 spaces + 1 Car Port
3	6	2	1 space + 1 Car Port
4	6	2	2 Spaces
5	6	2	2 Spaces
6	6	2	1 space + 1 Car Port

Based on the standards, the development would require a total of 14 allocated parking spaces, which are being provided in the form of parking spaces and car ports. In addition, the development includes 3 unallocated visitor parking spaces, which represents just over a 20% additional parking provision.

Each dwelling will be provided with an Electric Vehicle charging point, whilst secure and undercover cycle parking will be provided within sheds located in rear gardens, all of which are externally accessible.

The car and cycle parking therefore fully accords with the adopted parking standards.

Servicing

General servicing on a day-to-day basis will be by a transit sized internet delivery vehicle or slightly larger 7.5t van which can easily be accommodated although the site has been designed to accommodate the turning requirements of a large 11.2m long refuse vehicle. Drawing numbered NJC-002 is included as Appendix 4 which shows the ability of such a vehicle to enter from The Street, turn and exit in forward gear.

For completeness, drawing numbered NJC-003 is also included as Appendix 5 which shows the ability of a fire appliance to also enter the site, turn and leave in forward gear.

Summary and Conclusion

This Highway Technical Note has been produced in support of a residential development of 6 dwellings to be served from an improved access onto The Street, Walberton.

Adequate visibility is to be provided commensurate with the posted speed limit and the access road has been designed to accommodate two vehicles passing one another.

Using latest TRICS data, it has been demonstrated that if approved, the development would generate a minimal increase in traffic in both the AM and PM peak periods and a modest increase across a 12-hour day.

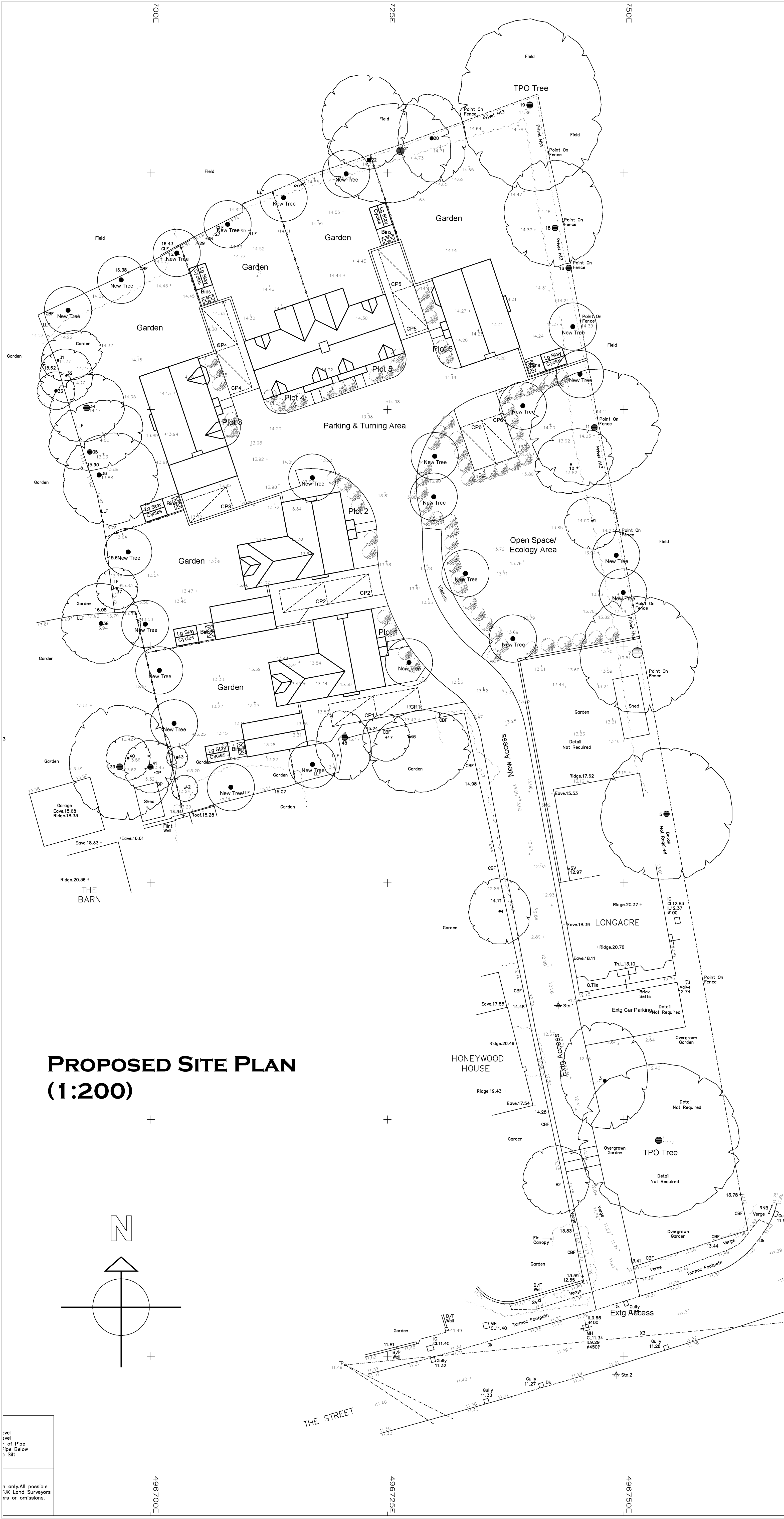
The development provides car and cycle parking in accordance with adopted standards whilst the layout has been designed to accommodate the turning requirements of the largest vehicle likely to enter the site.

Given the above, the highway implications of this modest residential development are deemed to be acceptable.

Nick Culhane October 2024

Appendix 1

Site Plan



Notes

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DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCING WORK AND ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGNER. FIGURED DIMENSIONS MUST BE TAKEN IN PREFERENCE TO SCALED DIMENSIONS.

Rev:-	Description:-	Date:-	Chkd by:-
A	Layout amended	10/06/24	PJD
B	Reduced to 6 units	18/07/24	PJD
C	Changed turning head	15/10/24	

Schedule of Areas

Total Site Area
= 4385sqm/0.44hectares/1.08acres

Long Acre
Existing House Retained

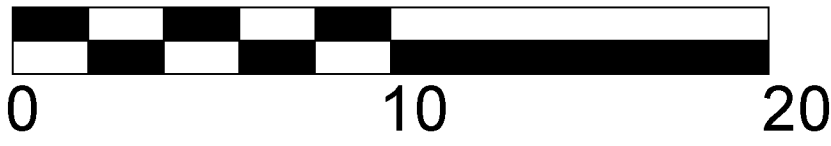
Plot 1&2
Four Bedroom Detached House
NFA = 128sqm/sqft
plus single garage & 2 car parking spaces

Plot 3&6
Three Bedroom Detached House
NFA = 107sqm/sqft
plus single car port & 1 car parking space

Plot 4&5
Three Bedroom Semi Detached House
NFA = 98sqm/sqft
plus 2 car parking spaces

Total Units 6
2x 4bed
4x 3bed

Total Car Parking Spaces = 14
plus 3 visitors



SCALE BAR 1:200



The Barn, Calcot Mount Business Park, Calcot Lane,
Curdridge, Southampton, Hampshire, SO32 2BN
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Proposed Residential Development
Long Acre
The Street
Walberton
West Sussex

Title:- Proposed Site Plan			
Client:- Maxwell Homes Winchester Ltd			
Scale:- 1:200 (@A1)			
Drawn By:- PJD	Checked By:- PJD	W-	
Date:- 16/05/24	Date:- 16/05/24		
Job.No:- 220043	Org.No:- SK12	Rev:- C	In

Appendix 2

Access and Visibility



Client		
		
Project		
RESIDENTIAL DEVELOPMENT AT LONG ACRE		
Drawing Title		
ACCESS AND VISIBILITY		
Drawing Status		
FOR INFORMATION		
Date	Scale	Size
OCT 2024	1:150	A1
Drawing No.	Rev	
NJC-001	-	

Appendix 3

TRICS Data

LAND AT LONG ACRE THE STREET WALBERTON	NICK CURFANE HIGHWAY CONSULTANT LTD
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Calculation Reference: AUDIT-405201-211006-1019

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

TOTAL VEHICLESSelected regions and areas:

04	EAST ANGLIA	
	NF NORFOLK	2 days
	SF SUFFOLK	2 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	2 days
08	NORTH WEST	
	CH CHESHIRE	1 days
10	WALES	
	VG VALE OF GLAMORGAN	1 days
11	SCOTLAND	
	AG ANGUS	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: 7 to 40 (units:)
 Range Selected by User: 6 to 40 (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: 01/11/11 to 04/06/19

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:

Monday	1 days
Tuesday	3 days
Wednesday	5 days
Thursday	1 days

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

Selected survey types:

Manual count	9 days
Directional ATC Count	1 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	7

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

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:

1,001 to 5,000	2 days
5,001 to 10,000	1 days
10,001 to 15,000	3 days
15,001 to 20,000	3 days
20,001 to 25,000	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
25,001 to 50,000	3 days
50,001 to 75,000	3 days
75,001 to 100,000	2 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:

0.6 to 1.0	4 days
1.1 to 1.5	6 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:

Yes	1 days
No	9 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
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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	AG-03-A-01	BUNGALOWS/DET.	ANGUS
	KEPTIE ROAD ARBROATH		
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 7 Survey date: TUESDAY 22/05/12		Survey Type: MANUAL
2	CH-03-A-10	SEMI-DETACHED & TERRACED	CHESHIRE
	MEADOW DRIVE NORTHWICH BARNTON Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: TUESDAY 04/06/19		Survey Type: MANUAL
3	NF-03-A-03	DETACHED HOUSES	NORFOLK
	HALING WAY THETFORD		
	Edge of Town Residential Zone Total No of Dwellings: 10 Survey date: WEDNESDAY 16/09/15		Survey Type: MANUAL
4	NF-03-A-10	MIXED HOUSES & FLATS	NORFOLK
	HUNSTANTON ROAD HUNSTANTON		
	Edge of Town Residential Zone Total No of Dwellings: 17 Survey date: WEDNESDAY 12/09/18		Survey Type: DIRECTIONAL ATC COUNT
5	NY-03-A-11	PRIVATE HOUSING	NORTH YORKSHIRE
	HORSEFAIR BOROUGHBRIDGE		
	Edge of Town Residential Zone Total No of Dwellings: 23 Survey date: WEDNESDAY 18/09/13		Survey Type: MANUAL
6	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 Survey date: WEDNESDAY 10/05/17		Survey Type: MANUAL
7	SF-03-A-04	DETACHED & BUNGALOWS	SUFFOLK
	NORMANSTON DRIVE LOWESTOFT		
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 7 Survey date: TUESDAY 23/10/12		Survey Type: MANUAL
8	SF-03-A-05	DETACHED HOUSES	SUFFOLK
	VALE LANE BURY ST EDMUNDS		
	Edge of Town Residential Zone Total No of Dwellings: 18 Survey date: WEDNESDAY 09/09/15		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	SH-03-A-06	BUNGALOWS	SHROPSHIRE
	ELLESMERE ROAD		
	SHREWSBURY		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	16	
	Survey date: THURSDAY	22/05/14	Survey Type: MANUAL
10	VG-03-A-01	SEMI-DETACHED & TERRACED	VALE OF GLAMORGAN
	ARTHUR STREET		
	BARRY		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	12	
	Survey date: MONDAY	08/05/17	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.

Nick Culhane Highway Consultant Fairclose Drive Winchester

Licence No: 405201

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	16	0.100	10	16	0.275	10	16	0.375
08:00 - 09:00	10	16	0.119	10	16	0.350	10	16	0.469
09:00 - 10:00	10	16	0.119	10	16	0.231	10	16	0.350
10:00 - 11:00	10	16	0.163	10	16	0.138	10	16	0.301
11:00 - 12:00	10	16	0.119	10	16	0.163	10	16	0.282
12:00 - 13:00	10	16	0.181	10	16	0.175	10	16	0.356
13:00 - 14:00	10	16	0.181	10	16	0.194	10	16	0.375
14:00 - 15:00	10	16	0.156	10	16	0.175	10	16	0.331
15:00 - 16:00	10	16	0.244	10	16	0.212	10	16	0.456
16:00 - 17:00	10	16	0.237	10	16	0.150	10	16	0.387
17:00 - 18:00	10	16	0.331	10	16	0.144	10	16	0.475
18:00 - 19:00	10	16	0.219	10	16	0.144	10	16	0.363
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.169			2.351			4.520

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: 7 - 40 (units:)
 Survey date range: 01/11/11 - 04/06/19
 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 4

Swept Path Tracking – Refuse Vehicle



VEHICLE DETAILS:

PHOENIX 2 DUO
(P2-15W WITH ELITE 6X4 CHASSIS)

Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.750m
Min Body Ground Clearance	0.394m
Track Width	2.300m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	9.500m

Design speed 16kph for all Forward movements
Design speed 10kph for all Reverse movements

Client

Project

RESIDENTIAL DEVELOPMENT
AT LONG ACRE

Drawing Title

REFUSE VEHICLE
SWEEP PATH TRACKING

Drawing Status

FOR INFORMATION

Date	Scale	Size
OCT 2024	1:250	A1
Drawing No.	Rev	
NJC-002	-	

Appendix 5

Swept Path Tracking – Fire Appliance



VEHICLE DETAILS:

Green line shows body
Orange line shows axle/wheels

D932 Fire Appliance
Overall Length 8.680m
Overall Width 2.180m
Overall Body Height 3.452m
Min Body Ground Clearance 0.337m
Max Track Width 2.121m
Lock-to-lock time 6.00s
Curb to Curb Turning Radius 7.910m
Design speed 10kph for all Forward movements
Design speed 10kph for all Reverse movements

Client

Nick Culhane
Highway Consultant

Project

RESIDENTIAL DEVELOPMENT
AT LONG ACRE

Drawing Title

FIRE APPLIANCE
SWEEP PATH TRACKING

Drawing Status

FOR INFORMATION

Date	Scale	Size
OCT 2024	1:250	A1
Drawing No.	Rev	
NJC-003	-	