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Residential Development of Two Detached Dwellings with Associated Access and Parking Land to the Rear of 354 Barkham Road, Wokingham RG41 4DE

Introduction

This Highway Technical Note has been produced in support of a planning application submission to Wokingham Borough Council as Local Planning Authority for a residential development of two detached dwellings on land to the rear of 354 Barkham Road, Wokingham. The location of the site is shown below.



The site is located on the southern side of Barkham Road, a residential access road with the classification number B33349. The road is of conventional design having a wide two-lane carriageway with pedestrian footways on both sides. The road at this point is subject to a 30mph speed limit and benefits from street lighting.

To the west Barkham Road connects Arborfield Green whilst to the east, the road links in with Wokingham.

A review of the accident history for this area has revealed that within the last 5-years, there has been just one recorded accident that resulted in personal injury within a 500m radius of the site. This occurred at the junction of Barkham Road and Dowles Barn Close to the east of the application site. It appears that a car drove into the rear of a motorcyclist who was waiting to turn right, and this resulted in one serious injury. This appears to be due to driver error as forward visibility at this location is excellent. Other than this one isolated incident, the surrounding highway network is operating in a safe and convenient manner. The details of the incident are included as **Appendix 1** to this Note.

Proposed Development

This application seeks planning consent for two detached residential dwellings on land to the rear of 354 Barkham Road, together with associated access and parking. 354 Barkham Road, the host dwelling, has an access directly onto Barkham Road, but enjoys a long rear garden which benefits from an access rights onto a private road that runs along the western boundary of the site. This road also serves Wrens Nest Stables, Half Way Tree, Fairway and Halford Cottage.

The road also takes the form of a Public Footpath with the identification number WOKI33 and links Barkham Road to the north with Edney's Hill, to the south.

The road is therefore lightly trafficked and does not have a metalled surface so combined with the width and alignment, results in low traffic speeds. Advisory signs indicate a speed limit of 5mph.

Access and Visibility

Access to the site is to be taken from the private road via simple verge crossing located approximately 30m south of the junction with Barkham Road. Drawing numbered NJC-001 is included as [Appendix 2](#) to this Note which shows the new access together with visibility splays of 2.0m by 15.0m, commensurate with approaching vehicle speeds of 10mph, which is considered appropriate in this instance. The visibility splays can be maintained clear of all obstructions 600mm in height above the carriageway level, and all land required is contained within land under the control of the applicant.

Traffic Impact

In order to assess the likely traffic impact that the development would generate, the TRICS database v7.11.4 has been interrogated. In selecting suitable comparison sites, the following parameters were used.

- Land Use – Residential – Houses Privately Owned
- Range of Dwellings – 8 to 50
- Date Range - 01/01/16 to 27/03/24
- Selected Locations - Suburban Area, Edge of Town, Neighbourhood Centre

The TRICS trip rates and the likely traffic that a development of 2 dwellings would generate is shown in the table below, whilst the TRICS Data is included as [Appendix 3](#).

TRICS Trip Residential Privately Owned Dwellings			
	Arrivals	Departures	Two-way Total
Peak Hour (10:00 – 11:00)	0.171	0.350	0.521
Peak Hour (17:00- 1800)	0.312	0.173	0.485
Daily Traffic	2.331	2.383	4.71

Vehicle Trip Generation based on 2 Dwellings			
AM Peak Hour	0.34 (0)	0.70 (1)	1
PM Peak Hour	0.62 (1)	0.35 (0)	1
Daily Traffic	4.7 (5)	4.8 (5)	5

From the above it can be seen that if approved a development of 2 dwellings is likely to generate just 1 traffic movement in the both the AM and PM peak periods and a total of 10 daily two-way trips. Such a minimal increase is considered to be di minimis and will have no adverse effect on the safe operation of the Public Right of Way or the adjoining public highway.

Car Parking

Car Parking requirements are based on the Wokingham Parking Calculator and in this case the development requires a total of 7 spaces (5 allocated + 1.6 unallocated).

The development provides 4 parking spaces within a detached car port and each dwelling has an integral garage. In addition, the site has forecourt parking in front of the garages giving a total of 8 parking spaces. The number of spaces is therefore in accordance with adopted requirements.

Secure and undercover cycle parking is provided in the form of sheds located in the rear gardens which are accessible via personnel gates between the two dwellings.

Drawing numbered NJC-002 is included as [Appendix 4](#) to this Note which demonstrates how a large car has the ability to enter the site and park in each space, and manoeuvre so as to leave in forward gear.

Servicing

The most frequent servicing of the site will take place using Transit type vans, whilst refuse will be collected from the existing private road, as happens at present for the dwellings to the south of the site.

Drawing numbered NJC-003 is included as [Appendix 5](#) to this Note which shows the ability of a service vehicle to enter the site, turn and exit in forward gear.

Summary and Conclusion

This Highway Technical Note supports a proposal for two detached dwellings on land to the rear of 354 Barkham Road.

Access to the site is to be taken from an unmetalled private road where traffic speeds and volumes are low and adequate visibility is provided commensurate with vehicle speeds.

Using TRICS Data it has been shown that the site will generate very little additional traffic which will not have any adverse effect to the safe operation of the private road or the wider public highway.

Car and cycle parking is provided in accordance with adopted standards and adequate on-site turning provision is being made for the most frequent service vehicles that will visit the site.

The highway implications of the development are therefore considered to be acceptable.

Nick Culhane April 2025

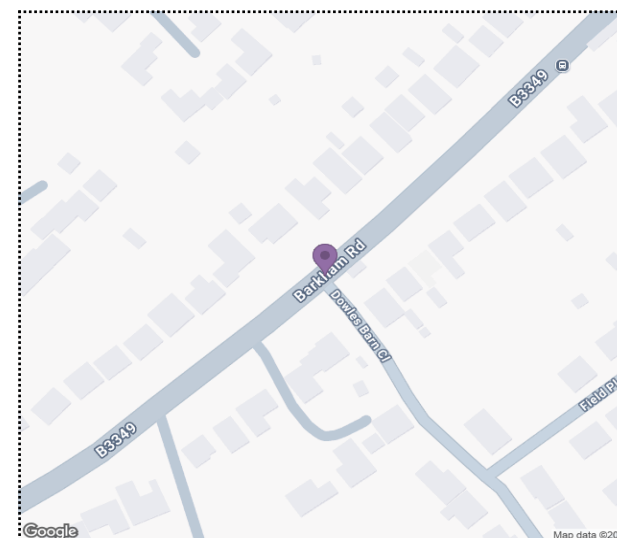
Appendix 1

Accident Data



Validated Data

Crash Date:	Sunday, July 18, 2021	Time of Crash:	15:21:00	Crash Reference:	2021430318794
Highest Injury Severity:	Serious	Road Number:	B3347	Casualties:	1
Highway Authority:	Wokingham			Vehicles:	2
Local Authority:	Wokingham			OS Grid Reference:	478875 167417
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/faq

To subscribe to unlimited reports using CrashMap Pro visit: www.crashmap.co.uk/home/premium_services



Validated Data

Crash Date:

Sunday, July 18, 2021

Time of Crash: 15:21:00

Crash Reference: 2021430318794

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire cars 2005 onwards)	6	Female	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None
2	Motorcycle A over 50cc and up to 125cc (1999 onwards)	-1	Male	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Back	Unknown	None	None

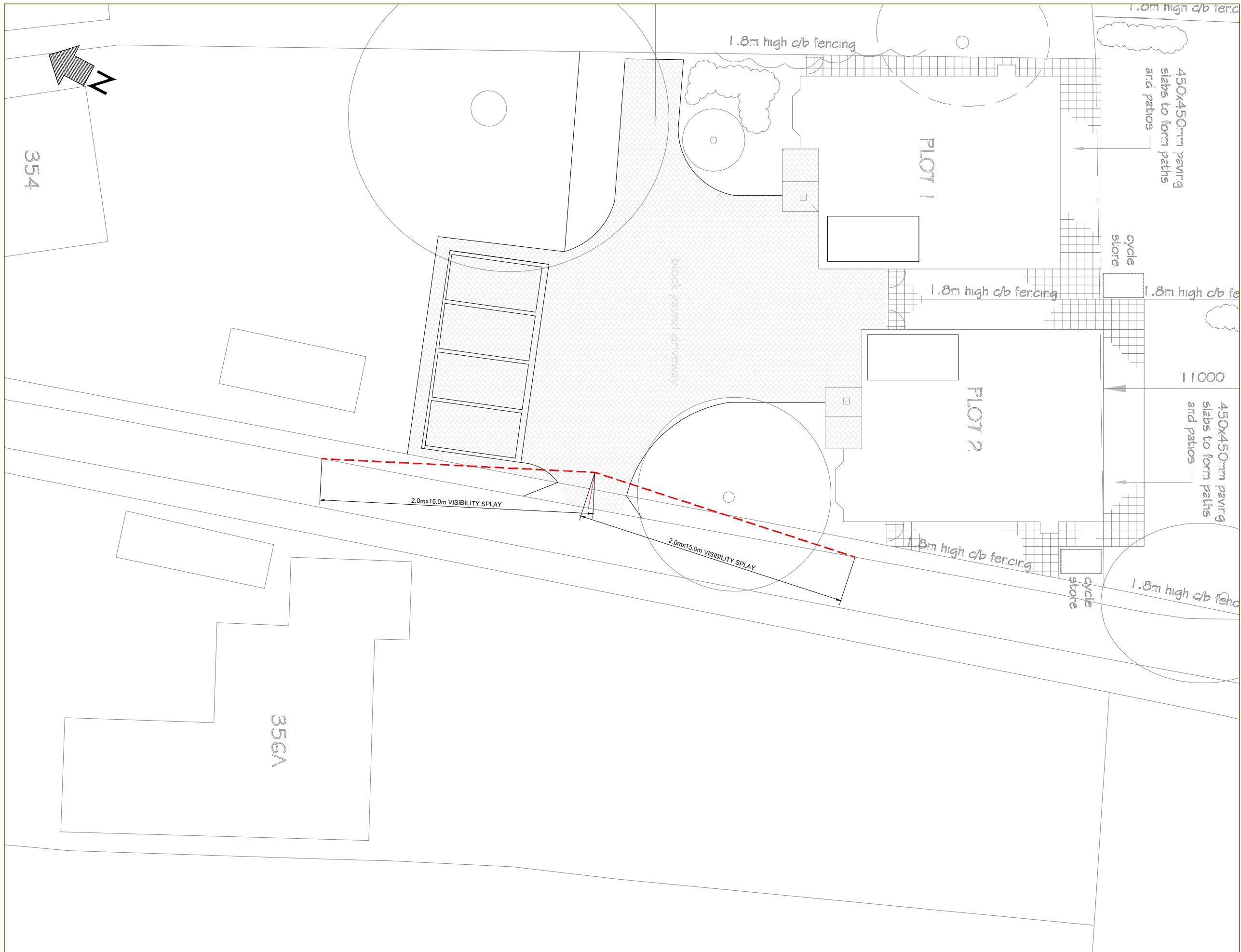
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Serious	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/faqTo subscribe to unlimited reports using CrashMap Pro visit: www.crashmap.co.uk/home/premium_services

Appendix 2

Access and Visibility



Client



Project
RESIDENTIAL DEVELOPMENT ON LAND TO
THE REAR OF 354 BARKHAM ROAD

Drawing Title
ACCESS AND VISIBILITY

Drawing Status
FOR INFORMATION

Date APR 2025	Scale 1:100	Size A1
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Drawing No. NJC-001	Rev -
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Appendix 3

TRICS Data

Calculation Reference: AUDIT-305901-240711-0744

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use
: 03 - RESIDENTIAL

Category
: A - HOUSES PRIVATELY OWNED

TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	CT CENTRAL BEDFORDSHIRE	1 days
	ES EAST SUSSEX	1 days
	HC HAMPSHIRE	4 days
	HF HERTFORDSHIRE	1 days
	MW MEDWAY	2 days
	SC SURREY	2 days
03	SOUTH WEST	
	DC DORSET	2 days
	SD SWINDON	1 days
	SM SOMERSET	2 days
04	EAST ANGLIA	
	NF NORFOLK	4 days
	PB PETERBOROUGH	1 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
	WK WARWICKSHIRE	2 days
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	LS LEEDS	1 days
	NY NORTH YORKSHIRE	2 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
	LC LANCASHIRE	1 days
09	NORTH	
	DH DURHAM	1 days

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

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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: 8 to 50 (units:)
 Range Selected by User: 1 to 50 (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: 01/01/16 to 27/03/24

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	6 days
Tuesday	6 days
Wednesday	12 days
Thursday	3 days
Friday	6 days

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

Selected survey types:

Manual count	32 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)	7
Edge of Town	19
Neighbourhood Centre (PPS6 Local Centre)	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	27
Village	5
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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	12 days - Selected
Servicing vehicles Excluded	36 days - Selected

Secondary Filtering selection:**Use Class:**

C3 33 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

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Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	5 days
5,001 to 10,000	10 days
10,001 to 15,000	8 days
15,001 to 20,000	3 days
20,001 to 25,000	3 days
25,001 to 50,000	3 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	3 days
25,001 to 50,000	4 days
50,001 to 75,000	4 days
75,001 to 100,000	4 days
100,001 to 125,000	2 days
125,001 to 250,000	13 days
250,001 to 500,000	3 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	10 days
1.1 to 1.5	21 days
1.6 to 2.0	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:

Yes	14 days
No	19 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	33 days
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This data displays the number of selected surveys with PTAL Ratings.

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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	33	35	0.082	33	35	0.265	33	35	0.347
08:00 - 09:00	33	35	0.171	33	35	0.350	33	35	0.521
09:00 - 10:00	33	35	0.161	33	35	0.202	33	35	0.363
10:00 - 11:00	33	35	0.141	33	35	0.167	33	35	0.308
11:00 - 12:00	33	35	0.160	33	35	0.162	33	35	0.322
12:00 - 13:00	33	35	0.167	33	35	0.184	33	35	0.351
13:00 - 14:00	33	35	0.178	33	35	0.151	33	35	0.329
14:00 - 15:00	33	35	0.169	33	35	0.215	33	35	0.384
15:00 - 16:00	33	35	0.280	33	35	0.205	33	35	0.485
16:00 - 17:00	33	35	0.268	33	35	0.167	33	35	0.435
17:00 - 18:00	33	35	0.312	33	35	0.173	33	35	0.485
18:00 - 19:00	33	35	0.242	33	35	0.142	33	35	0.384
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.331			2.383			4.714

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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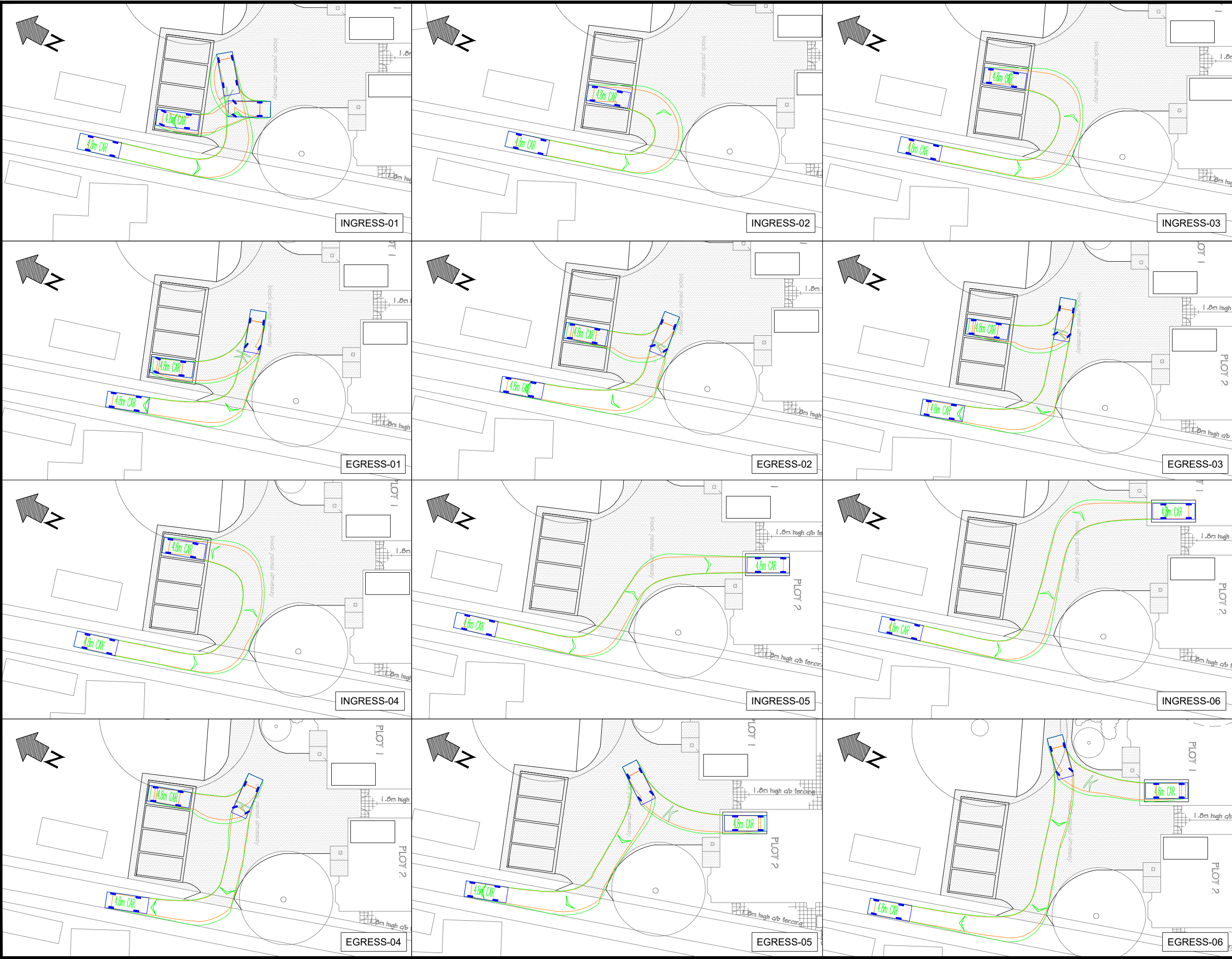
Parameter summary

Trip rate parameter range selected: 8 - 50 (units:)
 Survey date range: 01/01/16 - 27/03/24
 Number of weekdays (Monday-Friday): 33
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 5
 Surveys manually removed from selection: 8

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 – Cars



VEHICLE DETAILS:

4.8m CAR	Overall Length	4800mm
	Overall Width	1793mm
	Overall Body Height	1502mm
	Min Body Ground Clearance	287mm
	Track Width	1700mm
	Lock-to-lock time	4.00s
	Curb to Curb Turning Radius	4950mm
Design speed 16kph for all Forward movements		
Design speed 10kph for all Reverse movements		

Client

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Project

RESIDENTIAL DEVELOPMENT ON LAND TO
THE REAR OF 354 BARKHAM ROAD

Drawing Title

SWEPT PATH TRACKING

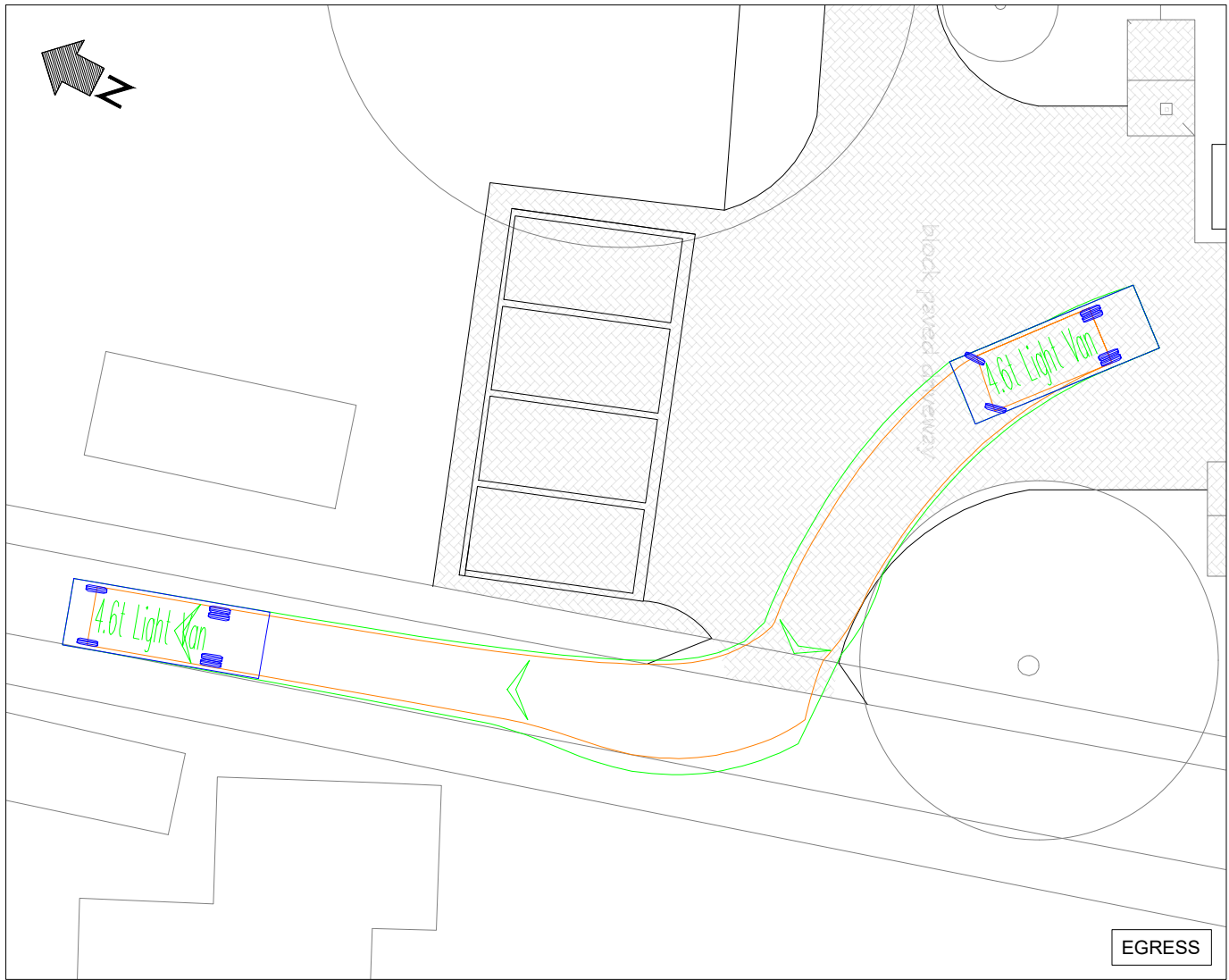
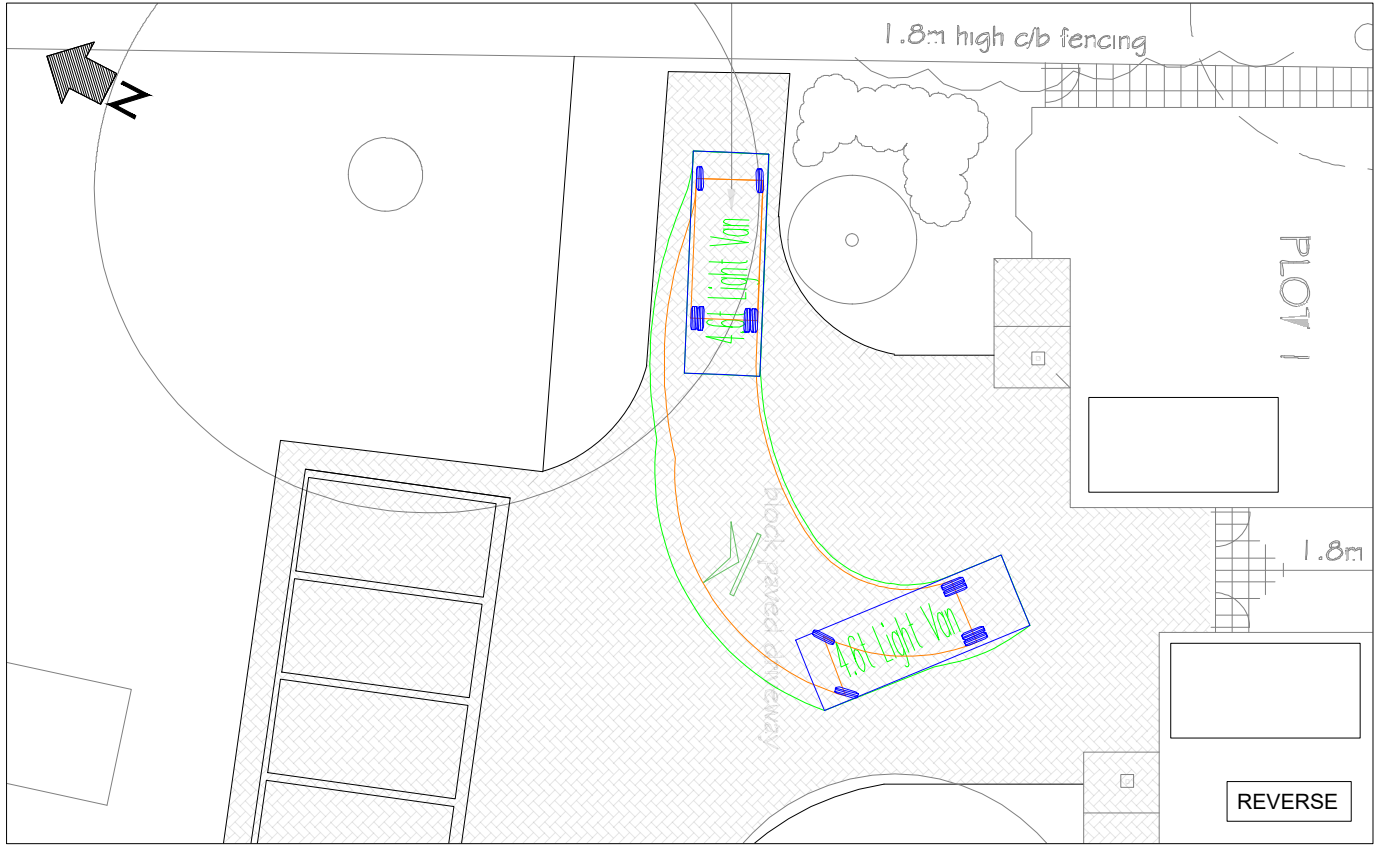
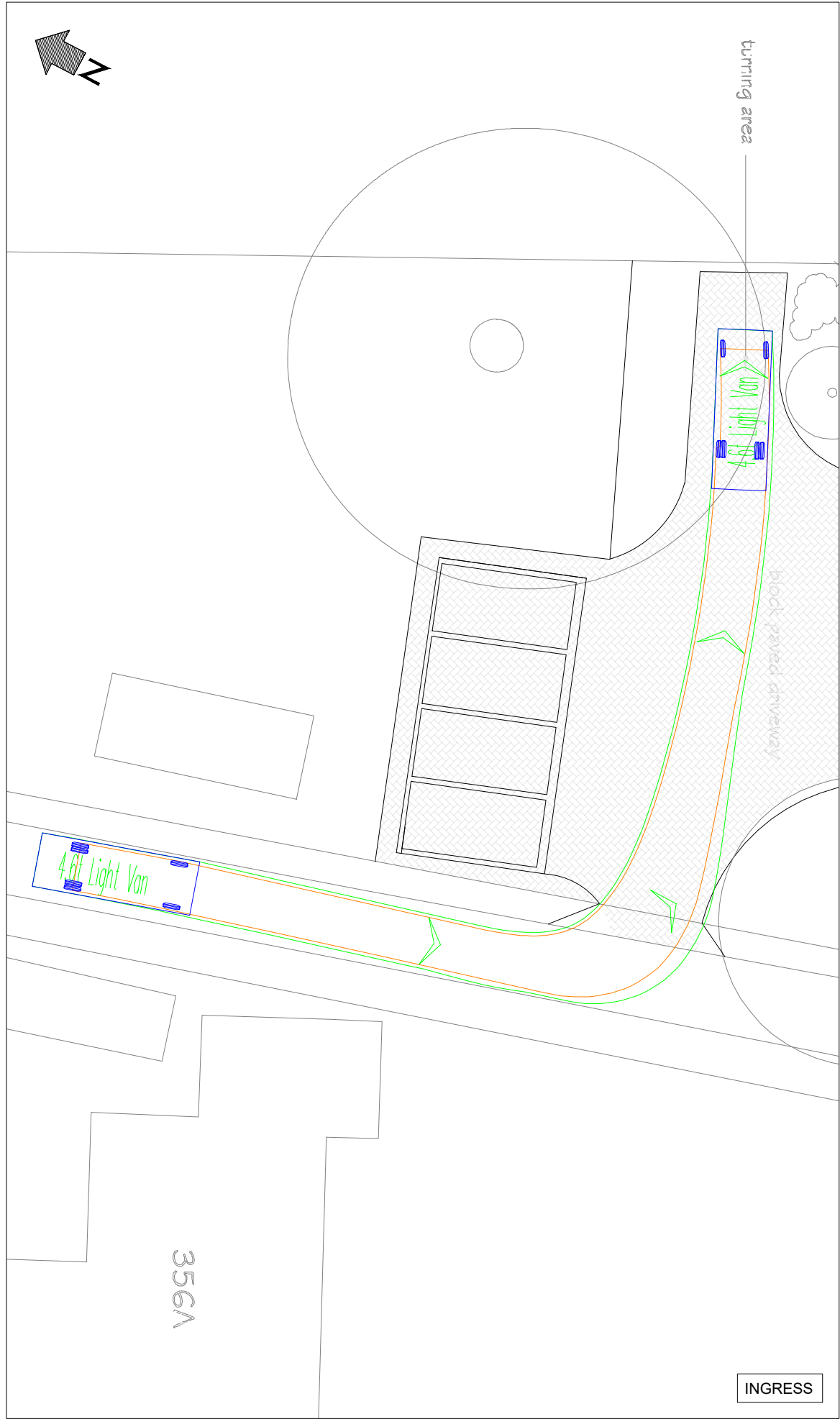
Drawing Status

FOR INFORMATION

Date	Scale	Size
APR 2025	1:200	A1
Drawing No.	NJC-002	Rev
		-

Appendix 5

Swept Path Tracking – Service Vehicle



VEHICLE DETAILS:

	Green line shows body
	Orange line shows axle/wheels
4.8m CAR	
Overall Length	4800mm
Overall Width	1793mm
Overall Body Height	1502mm
Min Body Ground Clearance	287mm
Track Width	1700mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	4950mm
Design speed 16kph for all Forward movements	
Design speed 10kph for all Reverse movements	

Client



Project
RESIDENTIAL DEVELOPMENT ON LAND TO
THE REAR OF 354 BARKHAM ROAD

Drawing Title
SWEPT PATH TRACKING - DELIVERY VAN

Drawing Status
FOR INFORMATION

Date APR 2025	Scale 1:100	Size A1
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Drawing No. NJC-003	Rev -
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