A Planning Application by

BEECHWOOD ESTATES

In respect of

551 – 555 Newmarket Road
CAMBRIDGE

Technical Note: Transport

February 2015

www.tpa.uk.com

DOCUMENT SIGNATURE AND REVIEW SHEET

Project Details

Project Title:	551 – 555 Newmarket Road CAMBRIDGE		
Project No.:	1502-71	**Report No.:**	1502-71/TN/01
Client:	Beechwood Estates		

	Prepared By:	Checked By:	Approved for issue
Name	S. Simpson	S. Simpson	J. Clarke
Signature			
Date	20/02/2015	20/02/2015	20/02/2015

Document Review

Revision	Date	Description	Checked By

Issued by:

Bristol
Cambridge
Cardiff
London
Welwyn Garden City

Transport Planning Associates
Sheraton House
Castle Park
Cambridge
CB3 0AX

01223 370135
cambridge@tpa.uk.com
www.tpa.uk.com

CONTENTS PAGE

LIST OF APPENDICES

1 INTRODUCTION

1.1 Transport Planning Associates has been instructed to provide transport planning advice relating to the proposed residential development at 551 – 555 Newmarket Road in Cambridge.

1.2 It is proposed to provide a small development of three new dwellings at the site. These units would be served via a new access road via Newmarket Road.

1.3 Car parking is to be provided on site for each of the three new dwellings but also 1 space will be allocated for 553 Newmarket Road.

1.4 Cycle parking will also be provided at each of the new units in a store adjacent to each dwelling.

1.5 The plan at **Appendix A** shows the proposed layout of the development.

1.6 Application 14/1653/FUL has been submitted and was taken to planning committee. It is understood that specific issues were raised by committee members in relation to the site's access arrangements. This Technical Note has therefore been provided to address those questions raised, namely:

- Does the access road allow for the safe passage of construction vehicles and emergency vehicles?
- Will efficient and convenient collection of waste and recycling be enabled with the design?
- Does the layout allow for the safe passage of cycles and pedestrians?
- Is there any conflict with the safe operation of the signal-controlled pedestrian crossing on Newmarket Road?
- Is there any hazard to highway safety from its proximity to the bus stop to the west?

2 ACCESS TO THE SITE

2.1 The site access road is a shared surface, 5.0m in width for the first 10m into the site from its junction with Newmarket Road. This width reduces to 4.75m as it passes between the end walls of 553 and 555 Newmarket Road, and then to 4m as it emerges into the main courtyard by the dwellings.

Construction Vehicles

2.2 The access road has been tested for its ability to accommodate a range of vehicles through its construction and then once occupied. **Appendix B** provides swept path analysis of a range of construction vehicles appropriate to the likely build processes at this site:

- 7.5t panel van;
- Small skip lorry;
- Concrete mixer vehicle; and a
- JCB Backhoe loader.

2.3 The drawings at Appendix A demonstrate that there is sufficient working room between the boundaries of 553 and 555 Newmarket Road to accommodate all the likely vehicle movements associated with the construction of the development.

Emergency Vehicles

2.4 Swept path analysis has also been carried out to ensure that a fire tender and an ambulance may safely access all of the dwellings at the site.

2.5 The associated drawing is provided at **Appendix C** and it demonstrates that both vehicles may turn in the site, ensuring access and egress in forward gear.

2.6 The fire tender is the largest of the emergency vehicles therefore the fact that this can access all dwellings satisfactory means that the development will be fully accessible by all emergency vehicles.

3 SERVICING ARRANGEMENTS

3.1 Waste collection arrangements at the site are required to be provided in accordance with the Cambridge City Council waste and recycling provision checklist, and to use the RECAP Partnership Waste Management SPD (February 2012) for additional information. The key factors to be taken into consideration in new developments are that:

- Residents should have to move waste no more than 30m to storage areas;
- Waste storage should be no more than 25m from the collection point;
- The distance from the collection point and the collection vehicle should be no more than 25m; and
- The refuse vehicle should make reversing manoeuvres no greater than 12m in distance.

3.2 The locations of the bins on the site are in accordance with the above requirements. The bin store is located as close as possible to the end of the access road, by reversing no more than 12m, the refuse vehicle will be situated approximately 17m from the bin store.

3.3 A swept path showing the required manoeuvre by the refuse vehicle is provided at **Appendix D**.

3.4 The proposed development layout combined with the servicing methodology set out above, means the development will be provided in accordance with the Cambridge City Council requirements.

4 PEDESTRIAN AND CYCLIST ACCESS

Access Road

4.1 The access road at its narrowest point will be 4.0m in width. A concern has been raised by Committee members in relation to the safety of the route for pedestrians and cyclists.

4.2 There will be only 6 car parking spaces provided across the whole development which will naturally limit the number of vehicular movements that are likely to be generated by the development.

4.3 By contrast, cycling and walking are popular travel choices in Cambridge and it is highly likely that these active travel movements will dominate the access route to Newmarket Road.

4.4 Although the access route is narrower than would typically be preferred, there will be sufficient space for a car to safely pass a pedestrian. In addition, the forward visibility from Newmarket Road will be good, and the narrow width will reinforce the need to drive slowly through the area.

4.5 Overall, the proposed layout is considered appropriate for pedestrian and cyclist movements, taking in to account the development's size and location.

Off-Site Infrastructure

4.6 Queries have also been raised relating to the proximity of the Pelican crossing to the east of the application site, and the bus stop immediately to the west.

4.7 Although the application site is located between these two elements of infrastructure, it is worth noting that Newmarket Road is subject to extensive frontage access in the vicinity of the site, with private drives being accessed through the bus laybys to the west of the site, and within 2m of either side of the pedestrian crossing.

4.8 Examining the road traffic accident data on the Cambridgeshire Count Council website for the length of Newmarket Road in the immediate vicinity of the application site indicates that there have been only 4 accidents in the past 5 years.

4.9 The three accidents resulting in slight injury accidents occurred in 2009. The first involved two cyclists, the second involved a motorcycle and a car, and the third involved two cars.

4.10 The serious accident occurred in 2012 and involved a lone motorcycle traveling in wet and dark conditions.

4.11 Having reviewed the accident data for the area it is clear that there is no pattern of causation of the accidents relating to either the pedestrian crossing or the bus stops, No accidents have been recorded involving either pedestrians or bus movements over the past 5 years.

4.12 Overall it can be seen that Newmarket Road is a corridor in which frontage access is expected and the norm. The bus stops and pedestrian crossings are already subject to cross-over access either close to, or through the facilities, and there is no evidence that these movements have impacted on road safety.

4.13 It is therefore concluded that the provision of an additional private access in the vicinity of the bus stops and pedestrian crossing will not result in any undue conflict with existing users of either facility.

5 CONCLUSIONS

5.1 This Technical Note has been provided to directly address the key concerns raised by Planning Committee members in relation to the proposed residential development at 551 – 555 Newmarket Road in Cambridge.

5.2 The potential access requirements during the construction phase have been examined, and it has been demonstrated that the vehicles which are likely to be required are able to turn within the site, enabling access and egress in forward gear.

5.3 A similar analysis has been carried out for a fire tender and ambulance vehicle, ensuring that the site is suitably accessible by the full range of emergency vehicles.

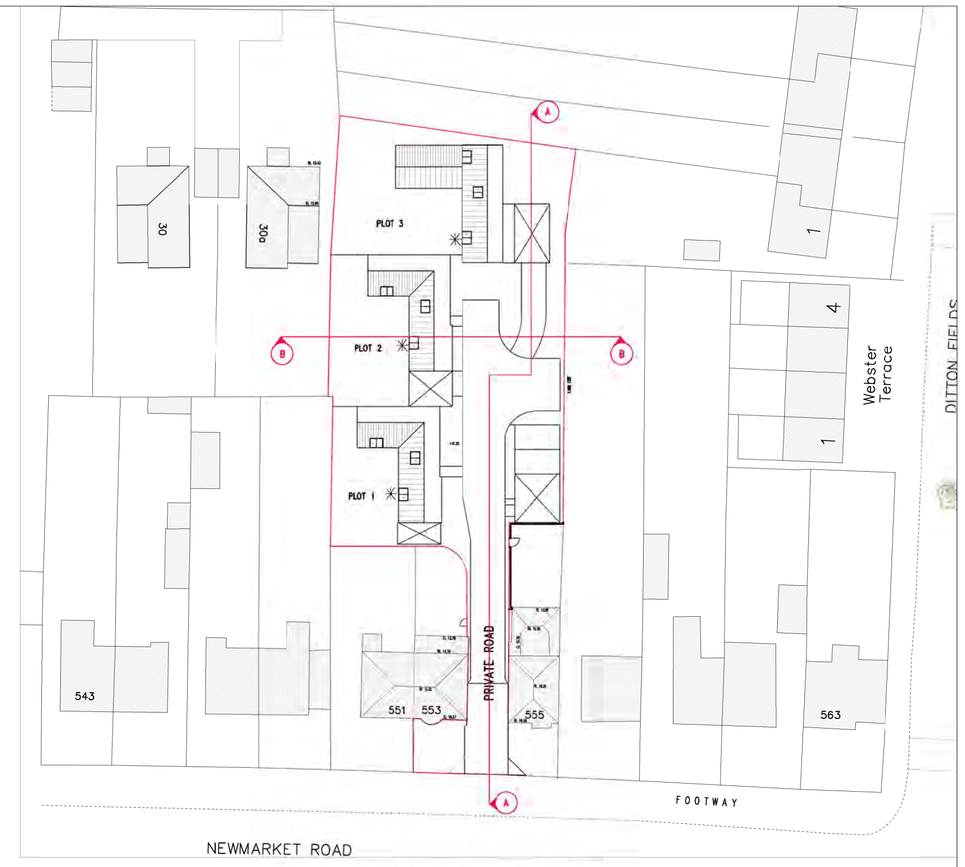
5.4 Cambridge City Council's requirement for waste and refuse servicing have been taken into account for the proposed development, as have the RECAP Partnership's Waste Management SPD document. The requirements of both have been discussed and it has been demonstrated that the proposed development is in accordance with both documents.

5.5 Finally, consideration has been made of the appropriateness of the access road for pedestrians and cyclists, and the queries raised over potential conflict between the access road and the nearby bus stop and Pelican crossing have been addressed.

5.6 Consideration of the road traffic accident record for the past five years, as well as the high incidence of frontage access onto Newmarket Road in the vicinity indicates that there is no specific cause for concern in relation to the proposed access arrangements.

5.7 Overall, it has been concluded that the proposed layout is appropriate to accommodate the likely requirements during construction and during occupation of the dwellings, without causing undue conflict with existing users.

APPENDIX A



BLOCK PLAN 1:500 ✳ (INDICATES OBSCURE GLAZING TO FIRST FLOOR ROOFLIGHTS)

Rev B 17:12:14
Plot 2 bike store relocated.
Parking space to No.553 labeled.
Existing opening in N.553 on entrance drive shown.
Plot 2 ground floor window omitted

CLIENT
BEECHWOOD ESTATES LTD

PROJECT
PROPOSED DEVELOPMENT
LAND TO REAR OF 551–555
NEWMARKET ROAD, CAMBRIDGE

TITLE
SITE PLAN

DRAWING STATUS
PLANNING

DRAWN	MM	CHECKED
SCALE	1:200 @ A1	
DATE	SEP 2014	

THE GALLERY
96 KING ST
CAMBRIDGE
CB1 1LN

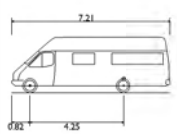
T: 01223 361803
F: 01223 361808
w: www.dpaarchitects.co.uk
e: info@dpaarchitects.co.uk

dpa architects

JOB NO.	DRAWING NUMBER	REV
352	P–01	A

APPENDIX B

A3
ORIGINAL
PLOT SIZE

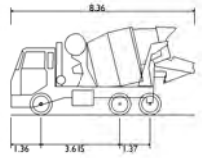


7.5t Panel Van

Overall Length	7.210m
Overall Width	2.192m
Overall Body Height	2.544m
Min Body Ground Clearance	0.316m
Track Width	1.865m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	7.400m

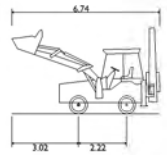
Small Skip Lorry

Overall Length	6.265m
Overall Width	2.390m
Overall Body Height	3.650m
Min Body Ground Clearance	0.396m
Max Track Width	2.435m
Lock to Lock Time	6.00s
Kerb to Kerb Turning Radius	6.340m



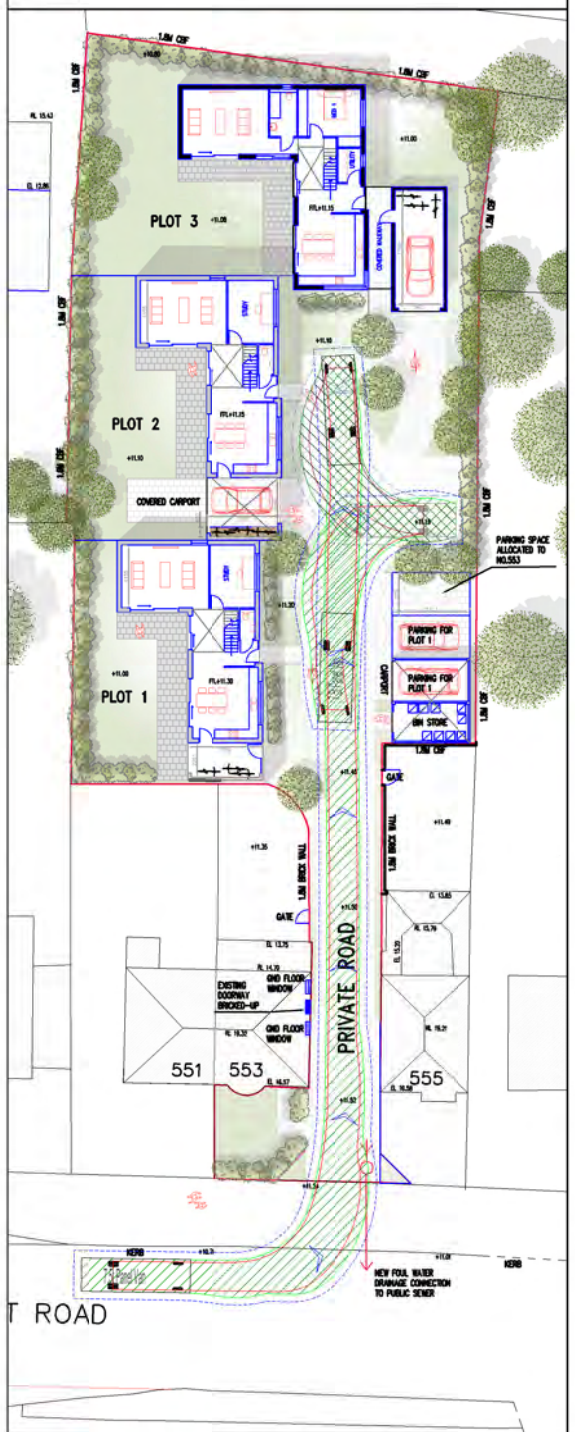
Concrete Mixer

Overall Length	8.360m
Overall Width	2.390m
Overall Body Height	4.027m
Min Body Ground Clearance	0.358m
Max Track Width	2.413m
Lock to Lock Time	6.00s
Kerb to Kerb Turning Radius	8.210m

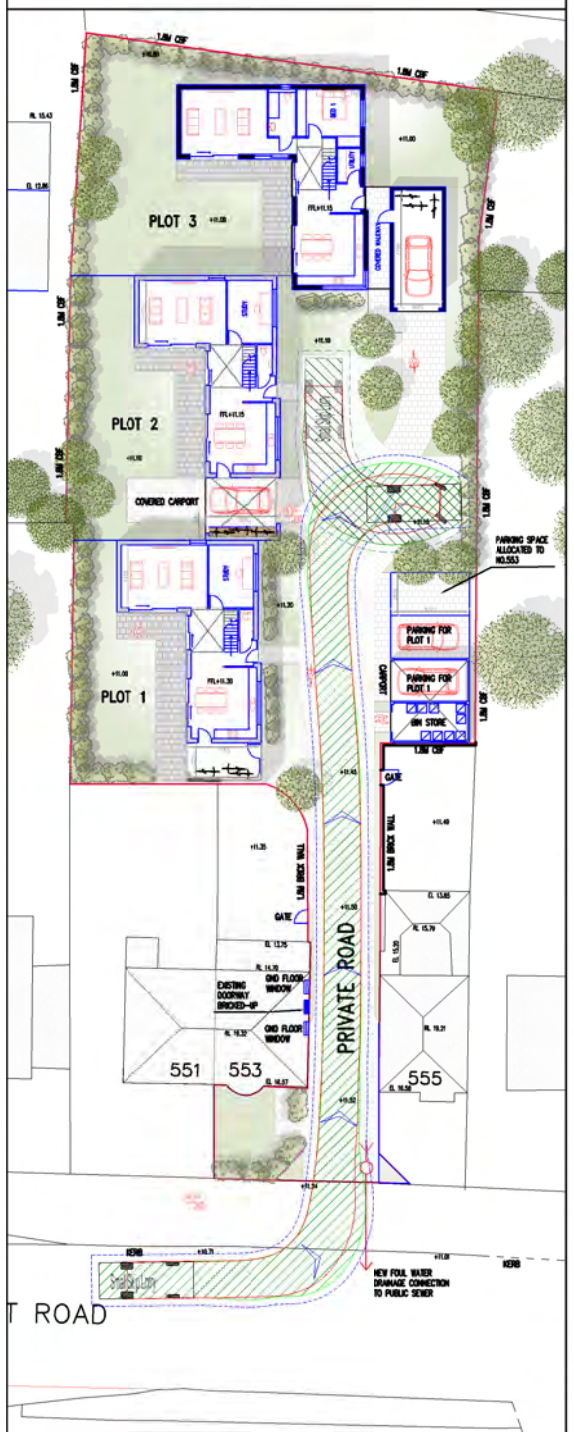


JCB Backhoe Loader 4CX Wastemaster

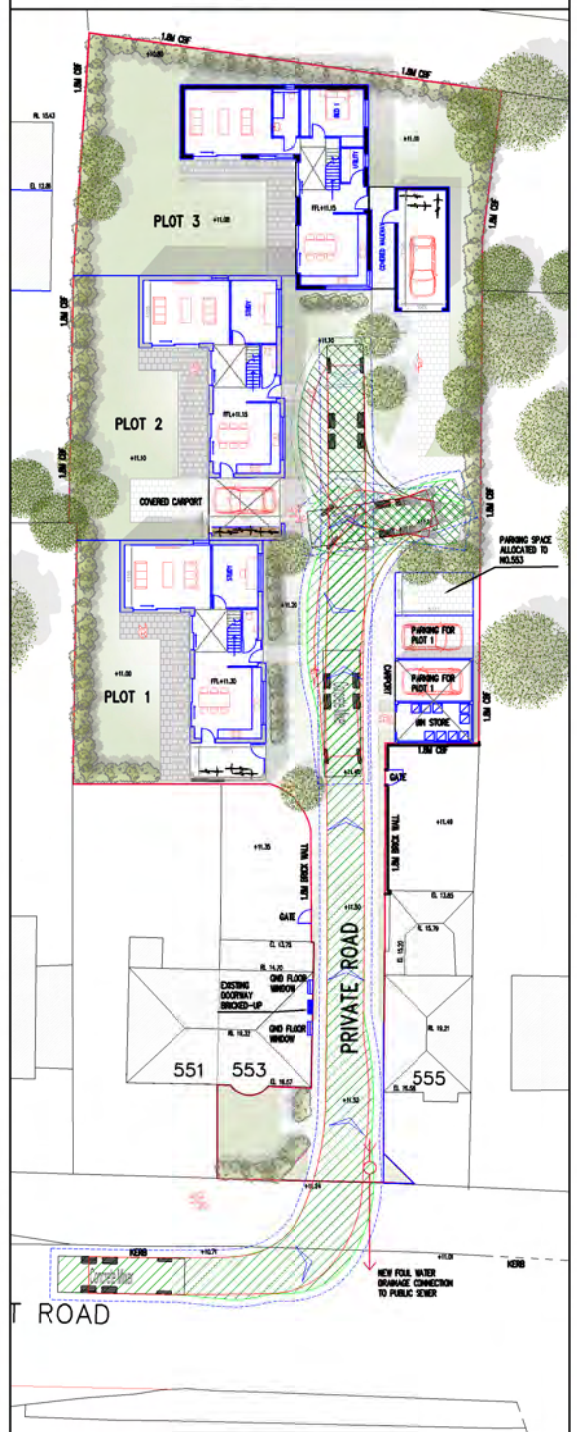
Overall Length	6.740m
Overall Width	2.360m
Overall Body Height	3.917m
Min Body Ground Clearance	0.350m
Track Width	2.360m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	4.550m



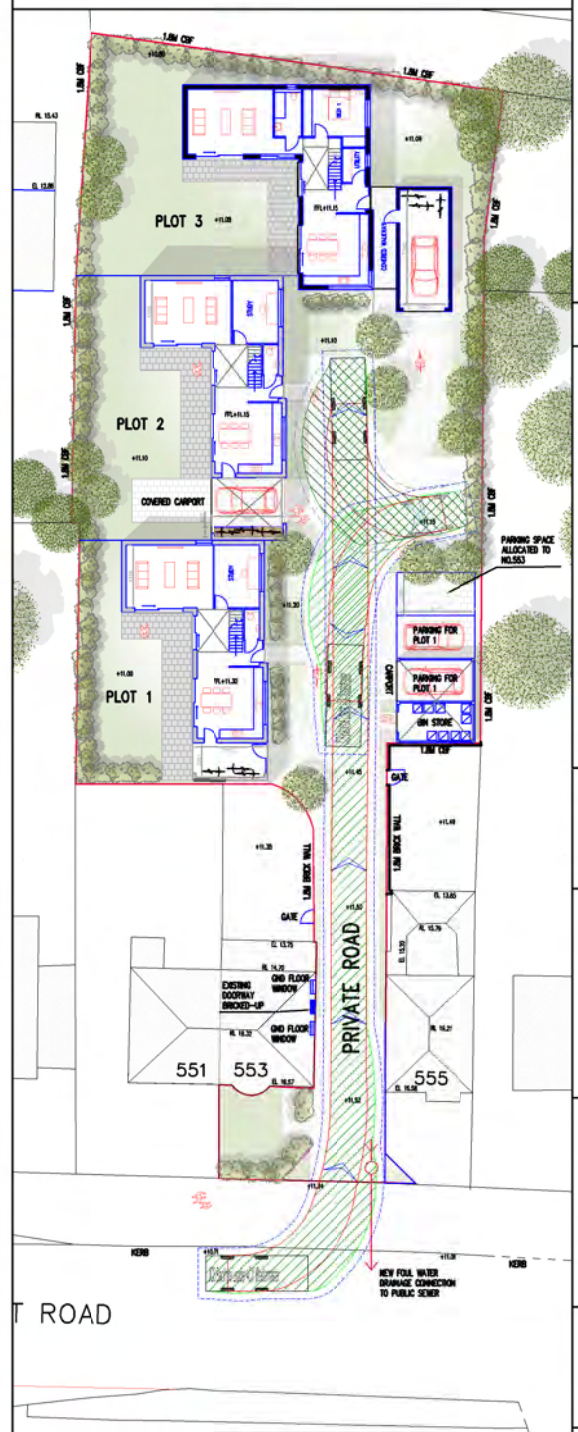
Swept Path Analysis of a
7.5t Panel Van Vehicle (AutoTrack Vehicle Reference No. 100096)



Swept Path Analysis of a
Small Skip Lorry Vehicle (AutoTrack Vehicle Reference No. 100034)



Swept Path Analysis of a
Concrete Mixer Vehicle (AutoTrack Vehicle Reference No. 100028)



Swept Path Analysis of a
JCB Backhoe Loader 4CX Wastemaster Vehicle (AutoTrack Vehicle Reference No. N/A)

INDICATIVE

NOTES:
1. Based on DPA Architects Drawing No. P-01 Rev A.

Rev	Date	Description	Drawn by	Checked by	Approved by

Bristol
Cambridge
Cardiff
London
Welwyn Garden City

tpa Transport Planning Associates

Sheraton House
Castle Park
Cambridge
CB3 0AX
0122 3370 135
www.tpa.uk.com

CLIENT:
Beechwood Estates and Development

PROJECT:
551-555 Newmarket Road
Cambridge

TITLE:
Swept Path Analysis of
Site Plan
Construction Vehicles

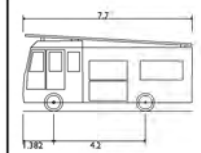
STATUS:
FOR INFORMATION

SCALE:	DATE:	DRAWN:	CHECKED:	APPROVED:
1:500	20/02/15	JA	SaSi	SaSi

JOB NO:	DRAWING NO:	REVISION:
1502-71	SP02	-

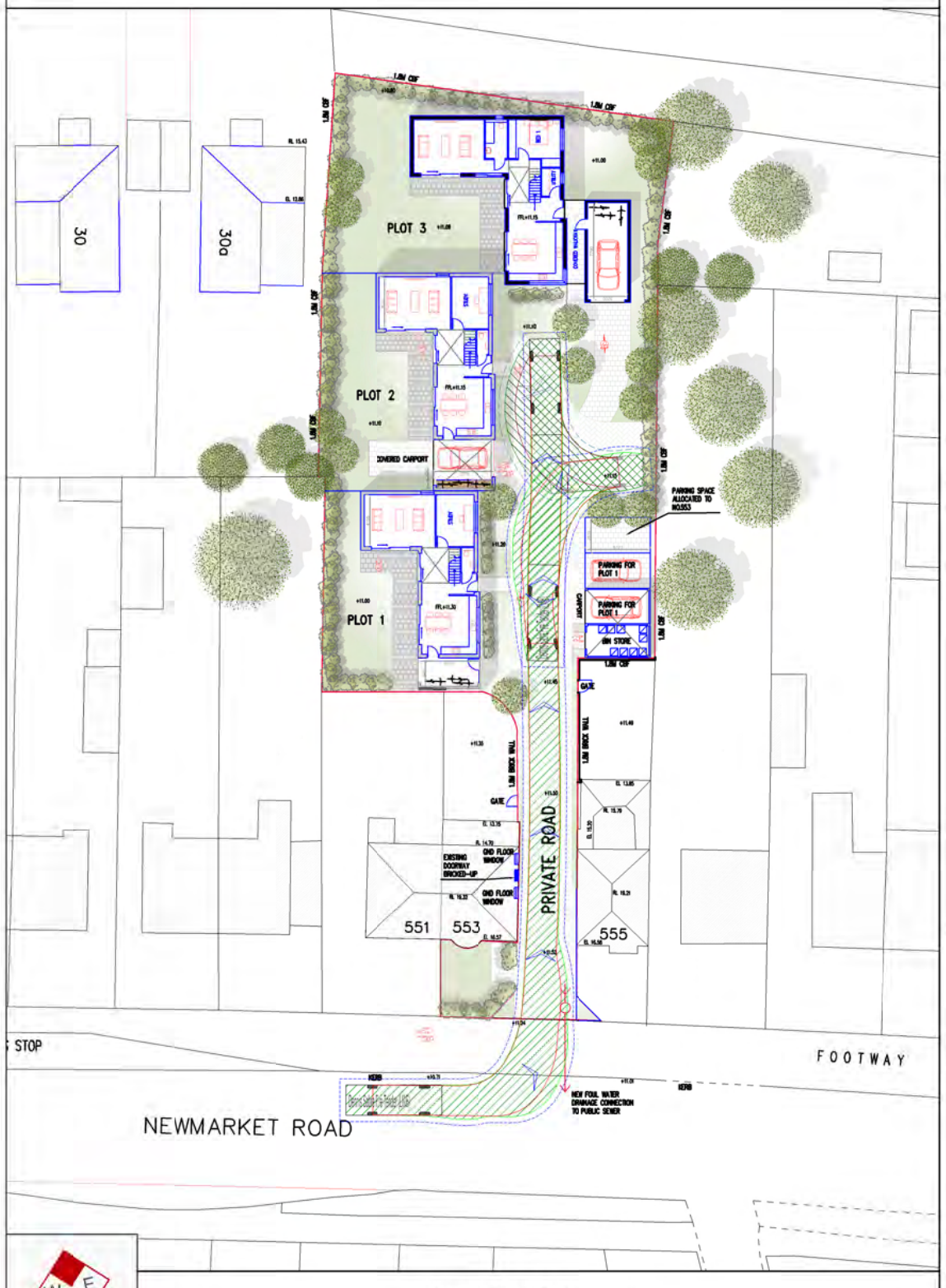
APPENDIX C

A3
ORIGINAL
PLOT SIZE



Dennis Sabre Fire Tender (LWB)

Overall Length	7.700m
Overall Width	2.430m
Overall Body Height	3.512m
Min Body Ground Clearance	0.397m
Track Width	2.380m
Lock to Lock Time	5.00s
Kerb to Kerb Turning Radius	7.400m

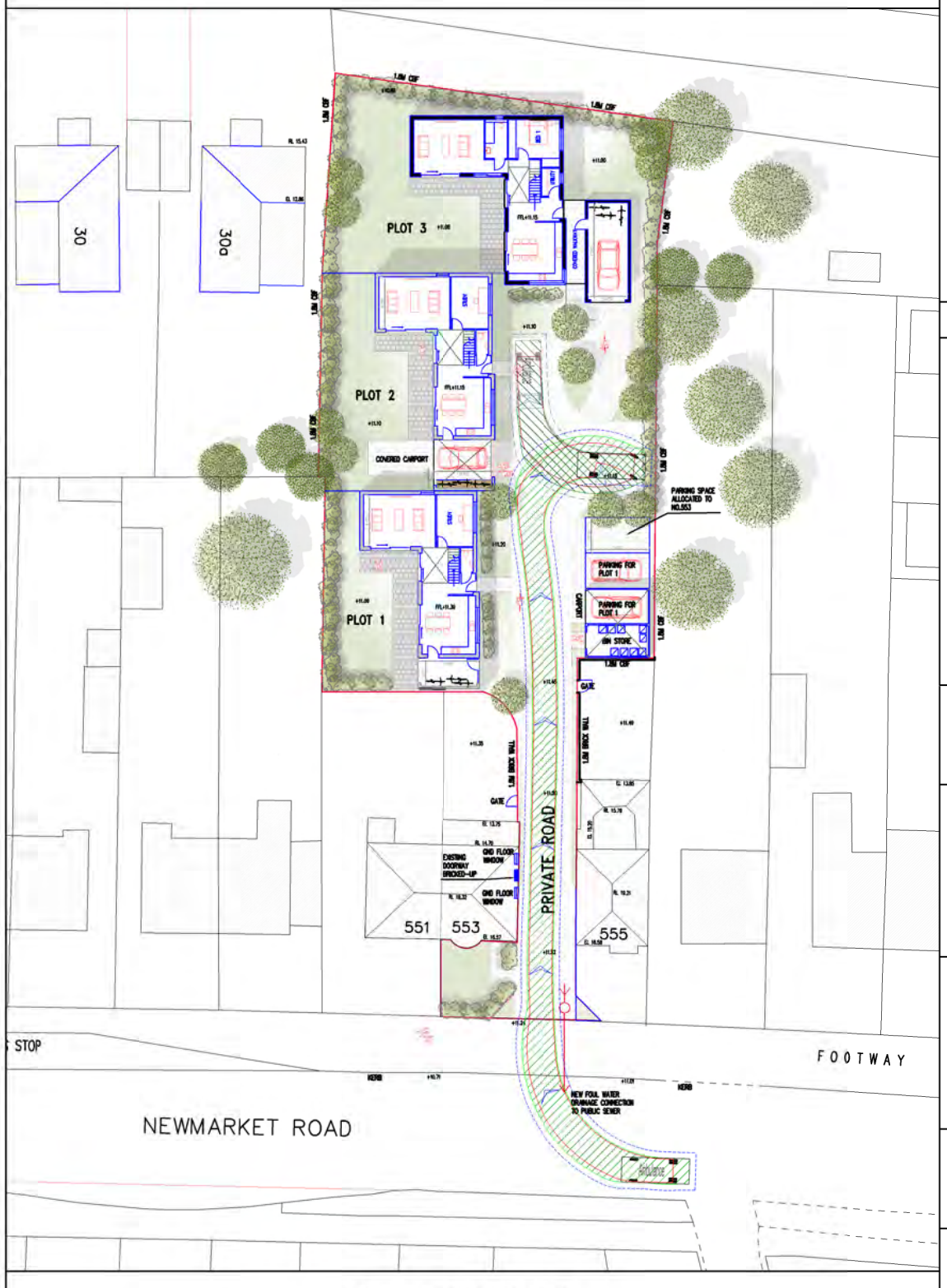


INDICATIVE

Swept Path Analysis of a
Dennis Sabre Fire Tender (LWB) Vehicle (AutoTrack Vehicle Reference No. 100120)

Ambulance

Overall Length	5.461m
Overall Width	2.020m
Overall Body Height	2.498m
Min Body Ground Clearance	0.225m
Track Width	1.860m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	6.500m



Swept Path Analysis of a
Ambulance Vehicle (AutoTrack Vehicle Reference No. 100112)

NOTES:
1. Based on DPA Architects Drawing No. P-01 Rev A.

Rev	Date	Description	Drawn by	Checked by	Approved by

Bristol
Cambridge
Cardiff
London
Welwyn Garden City

Transport Planning Associates

Sheraton House
Castle Park
Cambridge
CB3 0AX
0122 3370 135
www.tpa.uk.com

CLIENT:
Beechwood Estates and Development

PROJECT:
551-555 Newmarket Road
Cambridge

TITLE:
Swept Path Analysis of
Site Plan
Emergency Vehicles

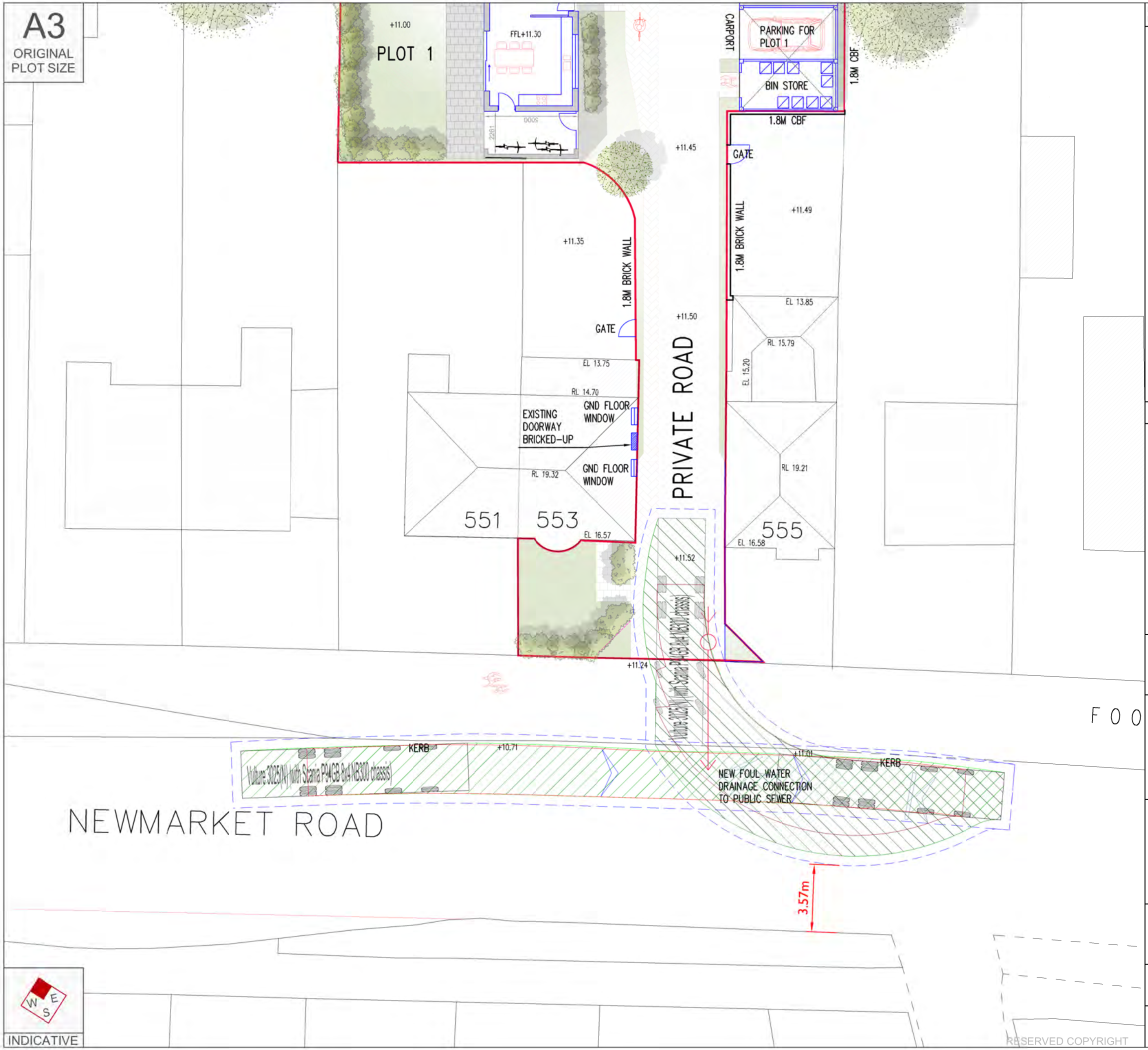
STATUS:
FOR INFORMATION

SCALE:	DATE:	DRAWN:	CHECKED:	APPROVED:
1:500	20/02/15	JA	SaSi	SaSi

JOB NO:	DRAWING NO:	REVISION:
1502-71	SP01	-

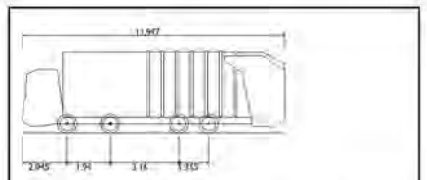
APPENDIX D

A3
ORIGINAL
PLOT SIZE



INDICATIVE

NOTES:
1. Based on DPA Architects Drawing No. P-01 Rev A.
2. Swept Path Analysis of a Vulture 3025(N) 4 Axle Refuse Vehicle. (Autotrack Reference No. N/A)



Vulture 3025(N) (with Scania P94GB 8x4 NB300 chassis)	
Overall Length	11.997m
Overall Width	2.500m
Overall Body Height	3.749m
Min Body Ground Clearance	0.302m
Track Width	2.490m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	10.800m

- 500mm Clearance envelope.

Rev	Date	Drawn	Checked	Approved
		by	by	by

Bristol
Cambridge
Cardiff
London
Welwyn Garden City

tpa
Transport Planning Associates

Sheraton House
Castle Park
Cambridge
CB3 0AX
0122 3370 135
www.tpa.uk.com

CLIENT:
Beechwood Estates and Development

PROJECT:
551-555 Newmarket Road
Cambridge

TITLE:
Swept Path Analysis of a Maximum Size Refuse Vehicle

STATUS:
FOR INFORMATION

SCALE:	DATE:	DRAWN:	CHECKED:	APPROVED:
1:200	20/02/15	JA	SaSi	SaSi

JOB NO:	DRAWING NO:	REVISION:
1502-71	SP03	-