

RIDGE

PROPERTY & CONSTRUCTION CONSULTANTS

TRANSPORT STATEMENT

Pegasus Group – Darwin Close

Prepared for

Pegasus Planning Group

The Columbia Centre
Station Road
Bracknell
Berkshire
RG12 1LP

Tel: 01344 667375

Prepared by

Ridge and Partners LLP

Partnership House
Moorside Road
Winchester
Hampshire
SO23 7RX

Tel: 01962 834400

Project Name Pegasus Group – 1 Darwin Close – Reading

Project No. 5004527

DLM No. 5004527-RDG-XX-ST-DOC-C-0001

Ken Dudley
I am approving this
document
2017.09.29 14:31:20
+01'00'

CONTENTS

1. INTRODUCTION	4
1.1 Overview	4
2. PLANNING POLICY	5
2.1 National Planning Policy Framework	5
2.2 Reading Borough Council Local Transport Plan (2011-2026)	5
3. EXISTING CONDITIONS	6
3.1 Overview	6
3.2 Public Transport – Bus	6
3.3 Public Transport – Rail	7
3.4 Public Transport – Walking & Cycling	8
3.5 Site Sustainability	8
3.6 Traffic Collision Data	8
4. PROPOSED DEVELOPMENT	10
4.1 Overview	10
4.1 Access	10
4.2 Parking Provision	11
4.3 Trip Generation	12
5. SUMMARY AND CONCLUSIONS	14
5.1 Summary	14
5.2 Conclusion	14

1. INTRODUCTION

1.1 Overview

1.1.1. Ridge and Partners LLP has been commissioned by Pegasus Planning Group to produce a Transport Statement to assess the transport and highway implications that may arise from the redevelopment of a vacant industrial building off Commercial Road/Darwin Close into a 2,148 sqm industrial B1 unit.

1.1.2. The proposed development site is situated in a primarily industrial area, approximately 4km south of Reading city centre and is bounded by residential housing to its north and industrial properties to the east, west and south. The red line boundary for the development is shown in Figure 1 below.



Figure 1. Site Location. (Source: Ordnance Survey)

1.1.3. This Transport Statement is structured as follows:

- Chapter 2 provides a summary of the relevant policies from the NPPF and the Reading Borough Council Local Transport Plan (2011-2026) in relation to the proposed development.
- Chapter 3 summaries the baseline highway network and public transport conditions surrounding the site and undertakes an overview of traffic collision data obtained from CrashMap
- Chapter 4 provides an outline of the proposed development, discussing access, parking arrangements and the impact of the development on the local highway network
- Chapter 5 presents the summary and conclusions of the Transport Statement

1.1.4. An Architects layout drawing for the proposed development is included as Appendix A.

2. PLANNING POLICY

2.1 National Planning Policy Framework

2.1.1. The National Planning Policy Framework (NPPF) was published by the Department for Communities and Local Government in March 2012 to replace National Planning Policy Guidance Notes and Planning Policy Statements.

2.1.2. The document states the need to promote sustainable transport with the requirement that local planning authorities should support a pattern of development which facilitates the use of sustainable modes of transport. However it is also recognised that opportunities for using sustainable modes vary in different locations.

2.1.3. Also indicated is that encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. In preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport.

2.1.4. Lastly the NPPF writes that local authorities should work with neighbouring authorities and transport providers to develop strategies for the provision of viable infrastructure necessary to support sustainable development, including large scale facilities such as rail freight interchanges, roadside facilities for motorists or transport investment necessary to support strategies for the growth of ports, airports or other major generators of travel demand in their areas. The primary function of roadside facilities for motorists should be to support the safety and welfare of the road user.

2.1.5. The proposed development will not generate a significant number of movements. The site can be considered to be sustainable, with very good links to local bus services, good pedestrian links, and a number of facilities and amenities located within walking and cycling distance of the site.

2.2 Reading Borough Council Local Transport Plan (2011-2026)

2.2.1. The Council's core objectives relating to transport and development as set out in the Local Transport Plan (2011-2026) are:

- *To improve personal safety on the transport network*
- *To align transport and land use planning to enable sustainable travel choices, improve mobility, reduce the need to travel and preserve the natural environment*
- *To reduce carbon emissions from transport, improve air quality and create a transport network which supports a mobile, affordable low-carbon future*
- *To improve journey times and journey reliability*

2.2.2. The proposed site is a redevelopment of a vacant industrial building last used as a laundry building located within an existing industrial area. It would therefore be promoting development in areas where the negative impacts of increased traffic generation are minimised and supporting the objectives set out within the Local Transport Plan.

3. EXISTING CONDITIONS

3.1 Overview

3.1.1. The proposed development site is located off Commercial Road/Darwin Close within a primarily industrial estate situated approximately 4km south of Reading city centre. Commercial Road is a 6.7m wide two-way single carriageway road running in an approximate east-west alignment and is subject to a 30mph speed limit. It primarily serves as an access to residential properties to its north and industrial properties to the south. There are footways and streetlighting present for the length of the road, with double yellow lines on both sides of the road for the length of the carriageway. The existing access from the proposed development onto Commercial Road is 7.4m at its maximum point and 4.8m at its minimum.

3.1.2. Darwin Close is a 6.6m wide two-way single carriageway road which serves as an access to several industrial properties. The road runs in a north-south alignment with 3.6m footways present on both sides of the carriageway. The existing access from the site onto Darwin Close is 11.8m wide at its maximum point and 7.5m wide at its minimum point.

3.1.3. In terms of the wider highway network Commercial Road links to Bennet Road approximately 350m to the south of the site, which in turn provides access to the A33 and B3031. To the north the A33 and B3031 links to Reading city centre approximately 4km from the development site, whilst in the south links to the M4 approximately 3km from the development.

3.2 Public Transport – Bus

3.2.1. The development site is situated within close proximity to a number of bus stops. The closest stops that serve the site are on Gweal Avenue, approximately 400m from the centre of the development, as shown in Figure 2 below. The site is also located within similar proximity to bus stops on the B3031 Basingstoke Road. There are continuous footways present between the proposed development and the bus stops, ensuring connective public transport infrastructure. A summary of the bus services operating from these stops is presented in Table 1 overleaf.



Figure 2. Bus stop located on Gweal Avenue.

Bus Stop	Service	Route	Approximate Frequency	Bus Operator
Gweal Avenue (East Bound)	Greenwave 60a	Central Piazza – Rivermead Leisure Centre	(Sunday Only) 1 per hour	Reading Buses
	Greenwave 40/50a/53a/60a/60e	Central Piazza – Central Reading and Reading Station	3 per hour	Reading Buses
Gweal Avenue (West Bound)	Greenwave 60a	Central Piazza – Mere oak Park and Ride	3 per hour	Reading Buses
	Greenwave 53a/62a	Central Piazza – Green Park	2 per hour	Reading Buses
	Greenwave 50a/60e	Central Piazza – Madejski Stadium	2 per hour	Reading Buses
	Greenwave 60c	Central Piazza – Central Reading	6 per day	Reading Buses
	Greenwave 53b	Central Piazza – Tesco Distribution Centre	5 per day	Reading Buses
Basingstoke Road (Northbound)	7	Aldershot - Reading	Hourly	Stagecoach
	8	Farnborough - Reading	Twice per day	Stagecoach
	Emerald 6/6a	Whitley Wood – Central Reading	10 minutes	Reading Buses
Basingstoke Road (Southbound)	7	Reading - Aldershot	Hourly	Stagecoach
	8	Reading – Farnborough	Twice per day	Stagecoach
	154	Reading – Beech Hill Village	Thursday Only (Once per day)	Horseman Coaches
	Scarlet 9	Whitley Wood – Royal Berkshire Hospital – Reading Station	Hourly	Reading Buses
	Emerald 6/6a	Central Reading – Whitley Wood	10 minutes	Reading Buses

Table 1. Bus stops within close proximity of the proposed development.

3.3 Public Transport – Rail

3.3.1. The closest rail station to the development is Reading Station, which is located approximately 4.7km north of the site. Reading station is managed by Network Rail and operates regular services between Reading and Bournemouth/Newcastle/London Waterloo, Newbury and Oxford. The station has capacity for the secure (CCTV) storage of 344 bicycles with PLUSBUS ticketing also being available for the station.

3.3.2. The proposed development is also located in similar proximity to the Reading West rail station, approximately 4.8km north-west of the site. Reading West station does not provide any cycle parking facilities. The station provides regular services between Reading to Basingstoke and Newbury.

3.4 Public Transport – Walking & Cycling

3.4.1. There are footways and street lighting present on all roads within the vicinity of the development and to bus stops on Gweal Avenue, which enables connective public transport between the site and a number of locations.

3.4.2. The development is situated approximately 3.5km from south of the National Cycle Network 4, which is a 432-mile route between London and Fishguard via Reading, Bath, Bristol, Newport, Swansea and St David's.

3.5 Site Sustainability

3.5.1. The development site is located within reasonable walking and cycling proximity to several public transport and supermarket/food outlets, therefore potentially minimising traffic generation to/from these places by workers at the proposed development. The approximate walking/cycling distances between these amenities and the centre of the proposed development is summarised within the table below.

Name	Distance (m)	1km walking ¹	4km cycling ²
Public Transport			
Manor Farm Road Bus Stops	400	✓	✓
Reading Rail Station	4700	×	×
Reading West Rail Station	4800	×	×
Retail			
Morrisons	900	✓	✓
Reading Gate Retail Park	920	✓	✓
The Oracle	3700	×	✓
Healthcare			
Circle Reading Hospital	120	✓	✓
Royal Berkshire Hospital	3500	×	✓

Table 2. Distance from the proposed development and local amenities.

¹Guidelines for Providing Journeys on Foot, IHT 2000

²LTN 1/04 Policy, Planning and Design for Walking and Cycling

3.6 Traffic Collision Data

3.6.1. Traffic Collision Data for the highway network within the vicinity of the development has been obtained from CrashMap for the latest 5-year period available (2012-2016). The red line site boundary and the data obtained from CrashMap is displayed in the figure overleaf.

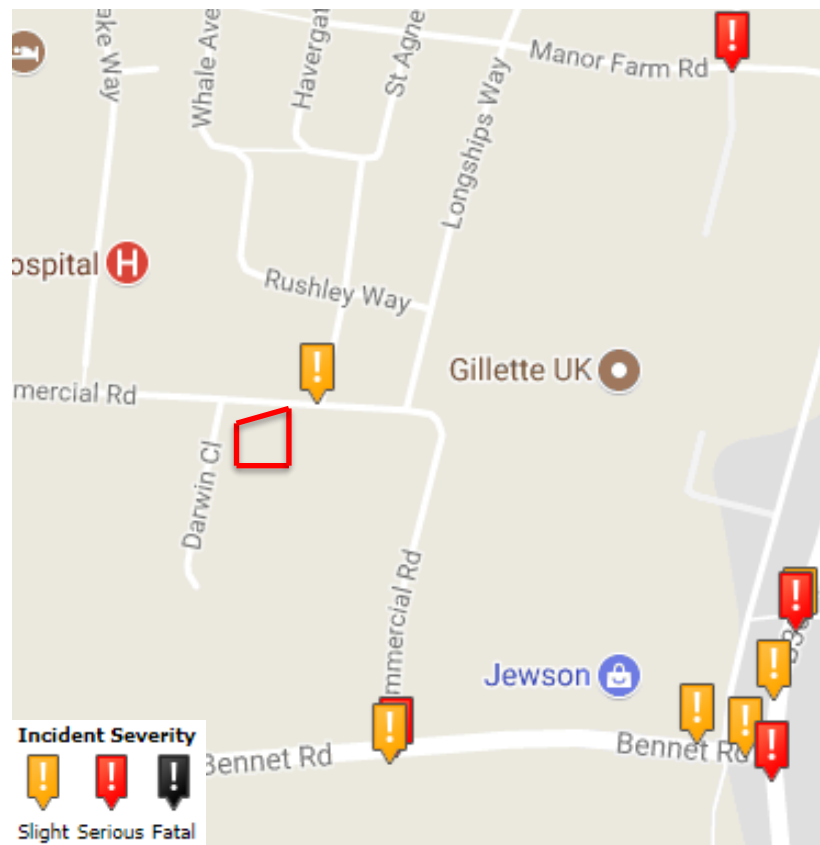


Figure 3. Traffic Collision Data for highway network within the vicinity of the site. Source: (CrashMap).

3.6.2. Of the 10 accidents that occurred within the study period 6 were classified as being slight with 4 classified as being serious. No fatal accidents occurred within the study period. Based on the above analysis the data presented does not suggest that there are any operational safety issues with the highway network immediately local to the site.

4. PROPOSED DEVELOPMENT

4.1 Overview

4.1.1. The development proposal relates to the redevelopment of an existing vacant industrial unit on land off Darwin Close/Commercial Road to be replaced with a two-storey B1 Light Industrial building which will be used for the assembly of roller shutter and the fitting out of offices, with some ancillary office space on the first floor.

4.1.2. The ground floor area floorspace is 1413 sqm and the first floor 735 sqm and will dictate the level of car and cycle parking required for the development as outlined within the Reading Borough Council Revised Parking Standards and Design.

4.1 Access

4.1.1. It is proposed that the access for the development will utilise the existing access from Commercial Road and Darwin Clos. An AutoCAD tracking analysis has been undertaken using a Rigid Truck (12.0m), a Light Van (5.9m) and a Large Car (5.079m) to show that the vehicles can enter the site, manoeuvre into bay parking/servicing areas and exit the proposed development safely. The AutoCAD tracking analysis is included as Appendix B.

4.1.2. The existing access points off Commercial Road and Darwin Close are shown in Figures 4 and 5 below.



Figure 4. Existing access off Commercial Road.



Figure 5. Existing access off Darwin Close.

4.2 Parking Provision

4.2.1. The Reading Borough Council Revised Parking Standards and Design (Adopted 31st October 2011) is outlined below. The car and cycle parking provisions for the proposed development will need to meet the requirements outlined within this guidance.

	Maximum Parking Standards			
	Zone 1	Zone 2	Zone 3	Zone 4
Commercial 1 space per m²				
B1(a) Office	250m ²	100m ²	50m ²	*
B1(b) Research & High Tech	250m ²	100m ²	50m ²	*
B1(c) Light Industrial	250m ²	125m ²	100m ²	*
B2 – B7 General & Specific Industrial	250m ²	125m ²	100m ²	*
B8 Storage & Distribution	250m ²	200m ²	150m ²	*

Figure 6. Reading Borough Council Car Parking Standards. (Source: Reading Borough Council)

4.2.2. As the total GFA of the proposed development is 2,148sqm and the site is situated within Zone 3 the parking standards state that a maximum of 21 parking spaces can be provided for the site.

Minimum cycle parking standards	
	Zone 1 - 4
Commercial 1 per m²	
B1(a) Office	200m ²
B1(b) Research & High Tech	250m ²
B1(c) Light Industrial	250m ²
B2 – B7 General & Specific Industrial	350m ²
B8 Storage & Distribution	450m ²

Figure 7. Reading Borough Council Cycle Parking Standards. (Source: Reading Borough Council)

4.2.3. As the total GFA of the proposed development is 2,148sqm a minimum of 9 cycle parking spaces will be required for the development. The development proposal meets the current standard requirements for car and cycle parking.

4.3 Trip Generation

4.3.1. A trip generation exercise has been undertaken utilising the TRICS database to determine the likely vehicular trip generation associated with the proposed development upon the local highway network. These trip rates, as set out in the table below, are based on the 'Employment – Industrial Unit' on TRICS. Sites outside England and Wales were excluded from the analysis. The full TRICS output is included as Appendix C.

		Arrivals	Departures	Total
Employment - Industrial Unit	08:00-09:00	0.115	0.038	0.153
	17:00-18:00	0.000	0.038	0.038
	All Day	0.267	0.344	0.611

Table 3. Trip Rates for Employment – Industrial Unit (100 sqm).

		Arrivals	Departures	Total
Employment - Industrial Unit	08:00-09:00	3	1	4
	17:00-18:00	0	1	1
	All Day	6	7	13

Table 4. Trip Generation for Employment – Industrial Unit (2,148sqm).

4.3.2. Table 4 shows that the proposed development is likely to generate 4 trips in the AM peak and 1 trip in the PM peak hour. This equates to approximately one vehicle every 15 minutes in the AM and only one

vehicle in the PM peak and will therefore have a negligible impact upon the operation of the existing highway network

5. SUMMARY AND CONCLUSIONS

5.1 Summary

5.1.1. Ridge and Partners LLP has been commissioned by Pegasus Planning Group to produce a Transport Statement to assess the transport and highway implications arising from the proposed redevelopment of a vacant industrial building off Darwin Road into a 2,148 sqm industrial B1 unit.

5.1.2. The proposed development site is in a primarily industrial area, approximately 3km south of the centre of Reading. The site is served by footways and streetlighting along Darwin Road and Commercial Road.

5.1.3. A review of the sustainability of the site has been undertaken to show that the proposed development is located within good proximity to several public transport services and other amenities.

5.1.4. A review of traffic collision data for the most recent 5-year period within the vicinity of the site was undertaken using CrashMap, and it was determined that there existed no operational safety problems within the local highway network.

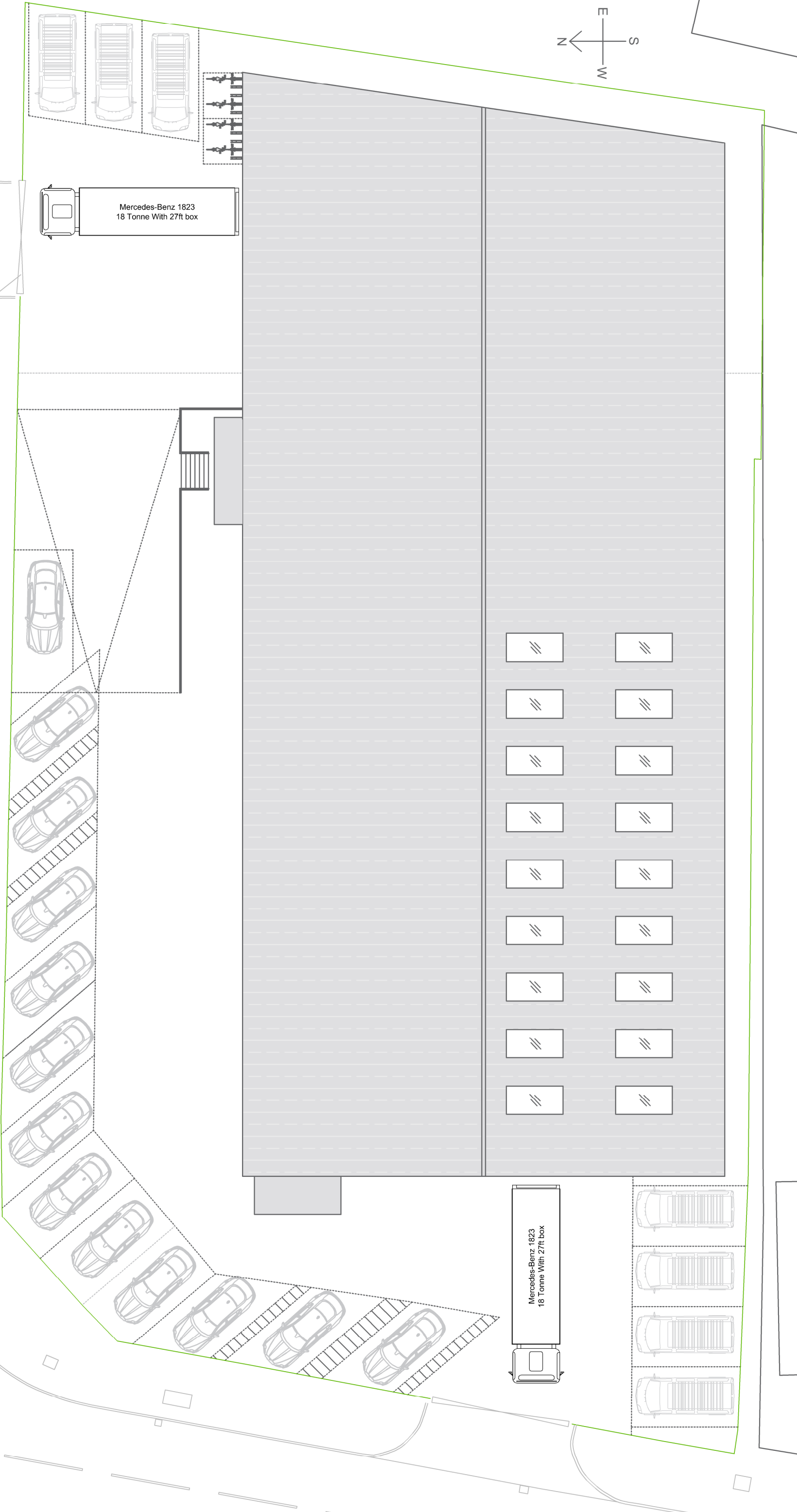
5.1.5. The TRICS database was analysed to determine that vehicle trips generated by the proposed development are small with 4 trips in the AM peak and 1 trip in the PM peak which will have a negligible impact on the surrounding highway network.

5.1.6. A review of the Reading Borough Council Parking Standards has been undertaken which shows that the site layout complies with the guidance for car, cycle and disabled parking.

5.2 Conclusion

5.2.1. Having regard to the scale of development, the resultant traffic generation and the existing local highway conditions it is considered that the proposed development would not have any significant impact upon the local highway network in terms of operation or safety.

APPENDIX A – SITE LAYOUT



September 2017
DESIGN SCHEME

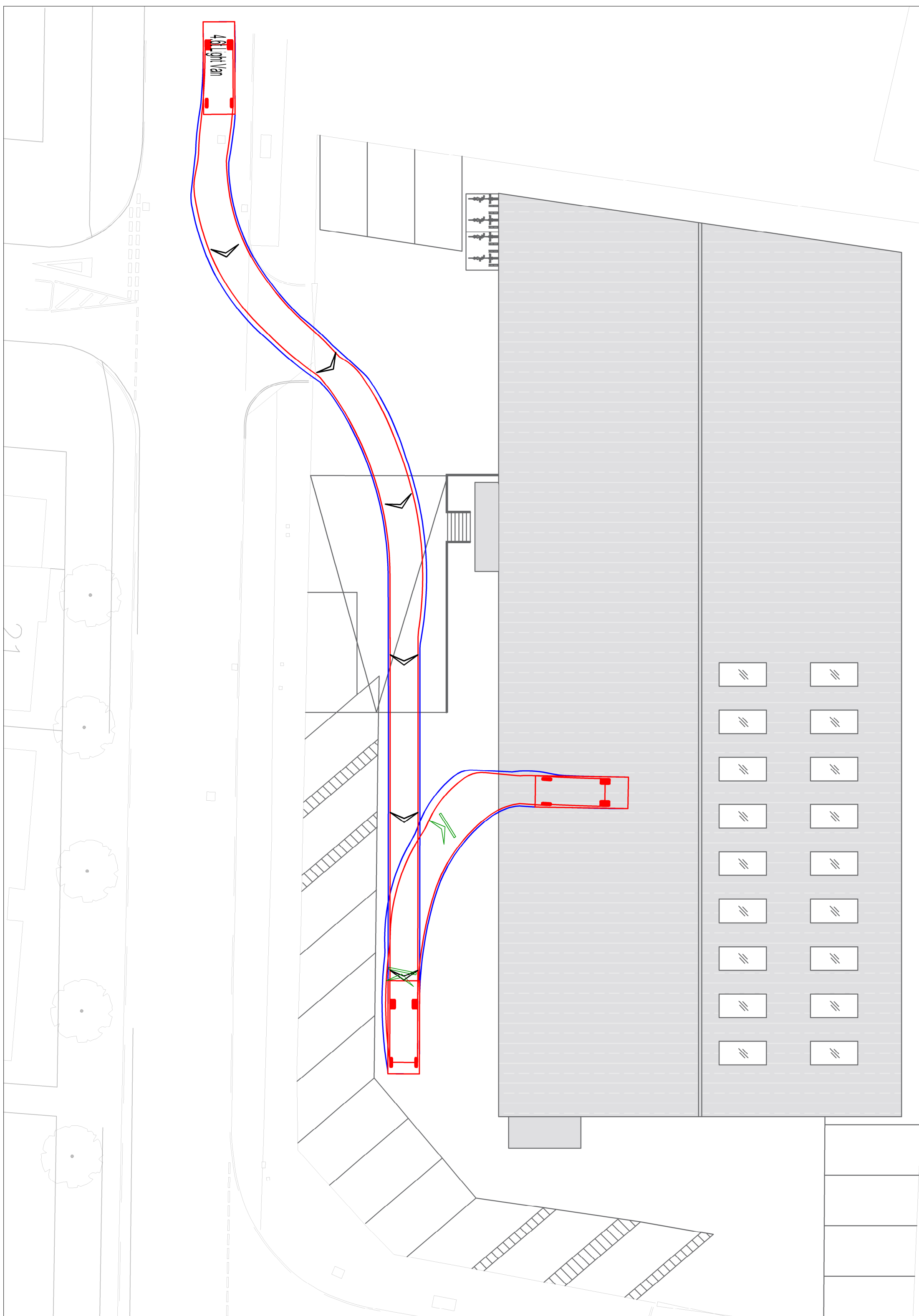
Site Roof Plan - Rev A

CLIENT	The White Partnership									
SITE:	Darwin Road Reading									
DWG TITLE:	Site Roof Plan - Rev A									
DWG NO.	10	SCALE:	1:200@A3							
DATE:	27-09-17	DRAWN BY:	GL							
REVISION:	A									

APPENDIX B – TRACKING

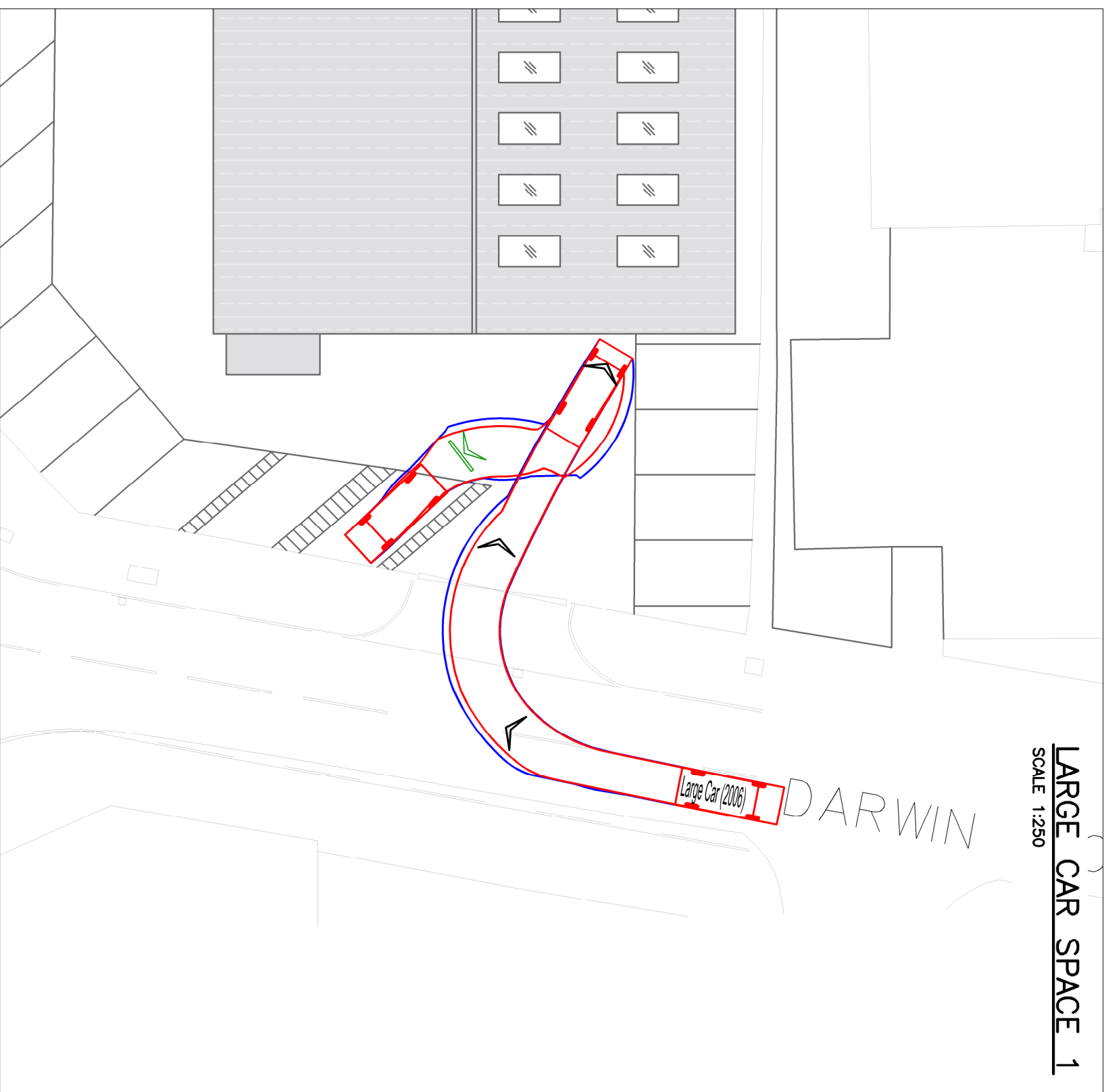
4.6T LIGHT VAN
SCALE 1:200

SCALE 1:200



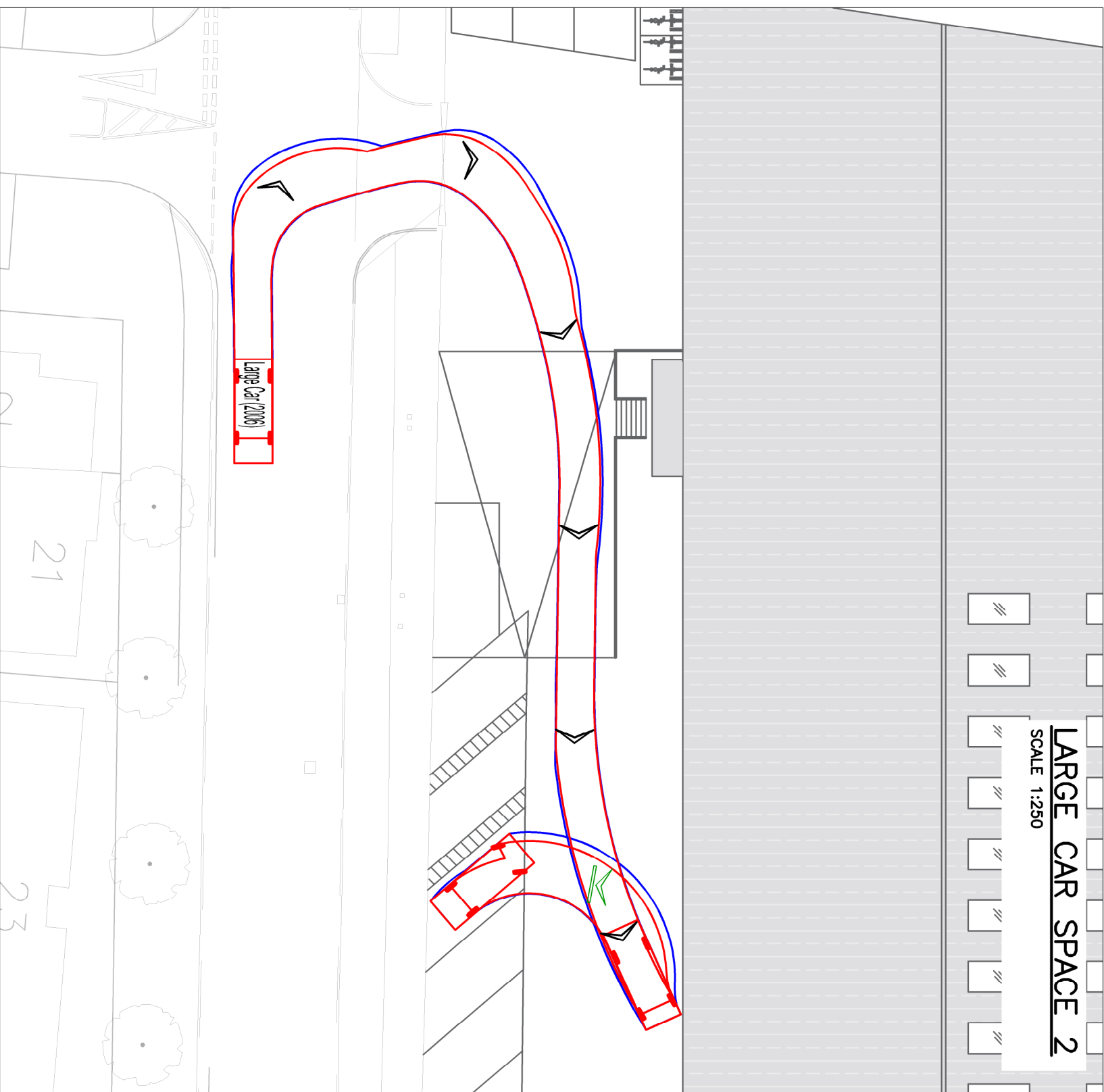
LARGE CAR SPACE 1

SCALE 1:250



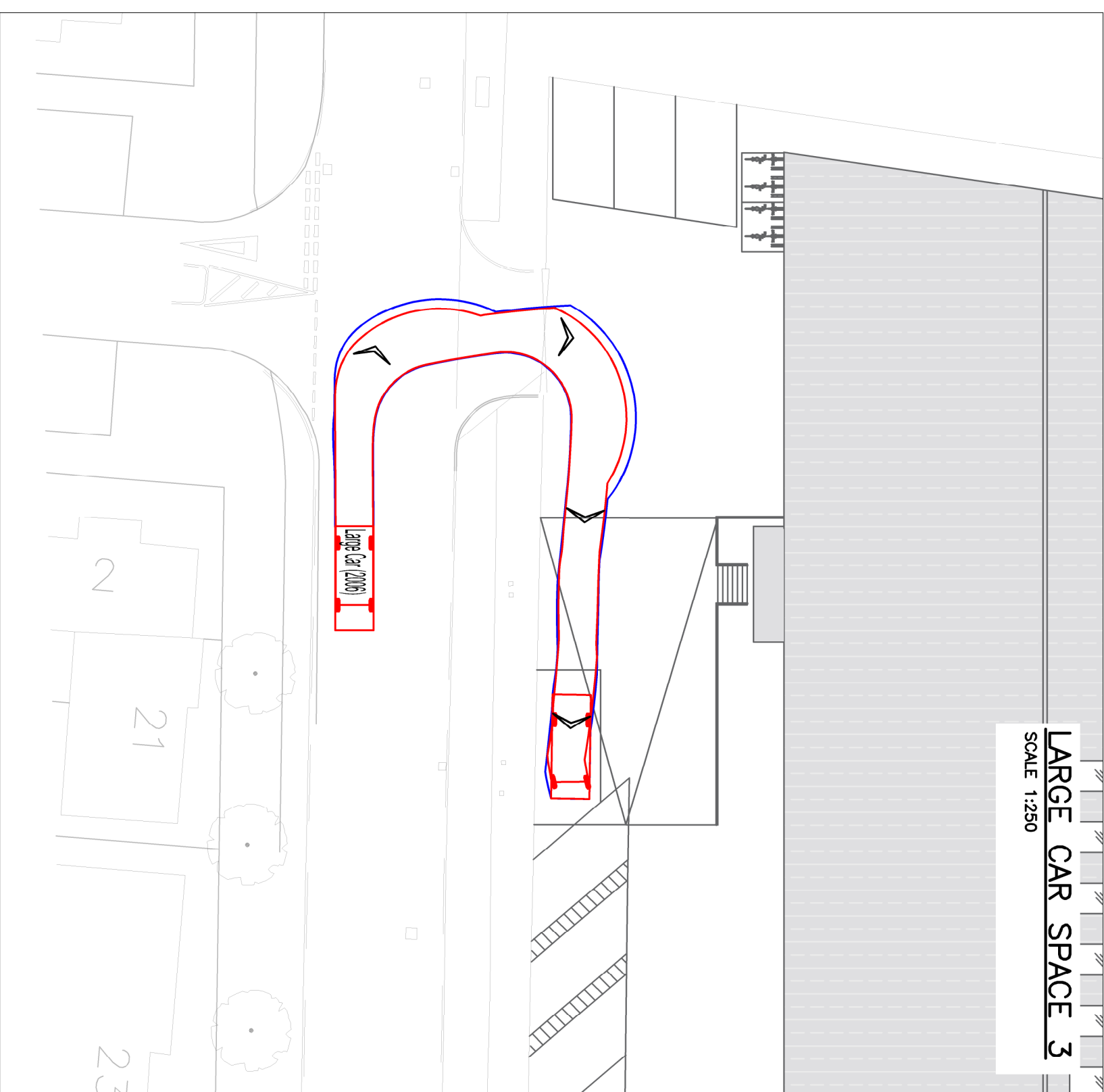
LARGE CAR SPACE 2

SCALE 1:250



LARGE CAR SPACE 3

SCALE 1:250



DISCLAIMER NOTES:

• THIS DOCUMENT IS COPYRIGHT OF THE ORIGINATOR AND MUST BE TREATED AS CONFIDENTIAL

- THE DOCUMENT MUST NOT BE ALTERED, REMOVED OR DESTROYED WITHOUT PRIOR WRITTEN CONSENT OF THE ORIGINATOR. THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR THE DOCUMENT BEING LOST, DAMAGED, MISFILED, OR THE ORIGINATOR INFORMATION BEING ALTERED BY OTHERS.
- NO DISSEMINATION OF INFORMATION CONTAINED HEREIN IS AUTHORIZED WITHOUT THE WRITTEN CONSENT OF THE ORIGINATOR.
- ANY DISSEMINATION MUST BE REPORTED TO THE ORIGINATOR.
- DO NOT SCALE THE DOCUMENT. USE FINGERED HANDS AND
- WORKS
- WORKS MUST BE FILED ON SEVEN (7) TO CORRESPONDENT OF ANY RELATED INFORMATION MUST BE FILED IN CONSULTATION WITH ALL SUPPORTING DOCUMENTS
- REPRODUCED BY THE ORIGINATOR AND OTHER PROTECT DISSEMINATION OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES. THIS MUST BE TREATED AS INDICATIVE ONLY.
- USERS OF THIS DOCUMENT ARE RESPONSIBLE FOR CHECKING WHENEVER IS
- THE DOCUMENT STATES INFORMATION ON "PENDING" INDICATES THAT THIS
- BRAVING FOR REFERENCE PURPOSES AND, THE ORIGINATOR WILL ACCEPT NO
- RESPONSIBILITY FOR THE COMPLETENESS OF INFORMATION UNDER THIS STATUS.
- UPON INFORMATION FURNISHED BY OTHERS, THAT THIS INFORMATION IS BELIEVED TO
- BE RELIABLE, THE ORIGINATOR ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF
- RECORD OR AS A RESULT, ORIGINATOR OF FOR ANY ERRORS OF OMISSIONS THAT MAY
- BE PRESENT IN THE DOCUMENT.
- THE ORIGINATOR DOES NOT WARRANT THAT THE INFORMATION CONTAINED
- HEREIN WILL BE OBTAINED IN THE RECORD OR AS A RESULT, DOCUMENT ARE
- ADDED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY.

DRAWING NOTES:

IDENTIFIED ON THIS DRAWING USING THE FOLLOWING SYMBOL. IDENTIFIED TO THE RIGHT WITH BRIEF ACCOMPANYING TEXT. FOR FURTHER DETAILS OF THE RISKS IDENTIFIED BY DESIGNERS, REFERENCE SHOULD BE MADE TO CON HAZARD REGISTER.



REV	DRN	DATE	DESCRIPTION	CSE	ICSE
-	MP	29/09/17	PRELIMINARY ISSUE		

ORIGINATOR:

RIDGE

PROPERTY & CONSTRUCTION CONSULTANTS

PARTNERSHIP HOUSE
MOORSIDE ROAD
WINCHESTER
SO23 7RX

TEL: 01962 834400
WWW.RIDGE.CO.UK

PEGASUS PLANNING GROUP

IN ASSOCIATION WITH:

1 DARWIN CLOSE
READING

TITLE: 4.6T LIGHT VAN AND LARGE CAR VEHICLE TRACKING

ENG: MP	CSE	ICSE:  10th English 10th Accountancy 1270132 041030	SCALE: AS SHOWN @ A1
INITIAL ISSUE 29.09.2017			

DRAWING No:						
PROJECT:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:
5004527	RDG	XX	XX	PL	C	2201 -

DISCLAIMER NOTES:

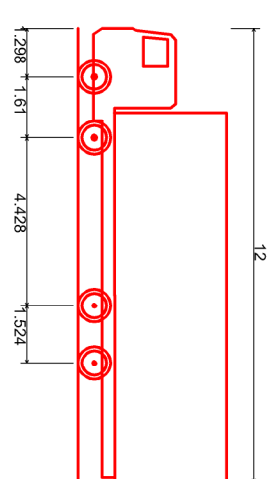
- THIS DOCUMENT IS COPYRIGHT OF THE ORIGINATOR AND MUST BE TREATED AS CONFIDENTIAL. IT MUST NOT BE ALTERED, REPRODUCED OR DISTRIBUTED WITHOUT PRIOR WRITTEN CONSENT OF THE ORIGINATOR.
- THIS DOCUMENT MUST NOT BE ALTERED. THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR ANY DISCREPANCIES ARISING AS A RESULT OF THE ORIGINATOR'S INFORMATION BEING USED FOR ANY OTHER PURPOSE.
- ANY DISCREPANCY MUST BE REPORTED TO THE ORIGINATOR.
- DO NOT SCALE THIS DOCUMENT - USE FIGURED DIMENSIONS ONLY.
- ALL DIMENSIONS MUST BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY RELATED WORK.
- THE DOCUMENT MUST BE READ IN CONJUNCTION WITH ALL SUPPORTING DOCUMENTS PRODUCED BY THE ORIGINATOR AND OTHER PROJECT DISCIPLINES.
- THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PROVIDED BY THIRD PARTIES. THIS MUST BE TREATED AS INDICATIVE ONLY.
- USERS OF THIS DOCUMENT ARE RESPONSIBLE FOR CHECKING WHICH REVISION IS CURRENT.
- THE ORIGINATOR'S STATUS INFORMATION OR "PRELIMINARY" INDICATES THAT THIS DRAWING IS FOR REFERENCE PURPOSES ONLY. THE ORIGINATOR WILL ACCEPT NO RESPONSIBILITY FOR THE COMPLETENESS OF INFORMATION UNDER THIS STATUS.
- THE DOCUMENT STATUS "RECORD" OR "AS BUILT" HAS BEEN PREPARED IN PART BASED ON INFORMATION PROVIDED BY THE ORIGINATOR AND OTHER PROJECT DISCIPLINES. THE ORIGINATOR ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS "RECORD" OR "AS BUILT" DOCUMENT FOR ANY ERRORS OR OMISSIONS THAT MAY HAVE BEEN INCORPORATED INTO IT AS A RESULT OF INCOMPLETE INFORMATION PROVIDED TO THE ORIGINATOR.
- THE ORIGINATOR DOES NOT WARRANT THAT THE INFORMATION IN THIS DOCUMENT WILL BE ADAPTED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY.

DRAWING NOTES:

OSM REGULATIONS 2015
STANDARD FOR NON-DESTRUCTIVE TESTING AND REPAIRS (NDR) ARE APPLICABLE TO DAMAGE TO THE ROAD SURFACE AND TO THE ROAD STRUCTURE. THE FOLLOWING STANDARDS IDENTIFY THE RIGHT WITH BRIEF ACCOMPANYING TEXT FOR FURTHER DETAILS OF THE RISKS IDENTIFIED BY DESIGNERS. REFERENCE SHOULD BE MADE TO OSM HAZARD RESOURCES.

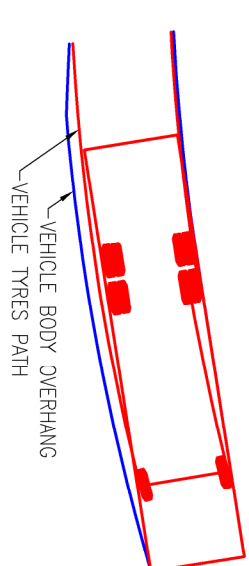


VEHICLE DETAILS



Rigid Truck
Overall Length 12.00m
Overall Width 2.50m
Overall Height 3.20m
Track Width 2.47m
Curb to Curb Turning Radius 11.900m

VEHICLE DIAGRAM



REVERSE MOVEMENT

REV	DATE	DESCRIPTION	CSE	ISSUE
-	10/09/17	PRELIMINARY ISSUE		

ORIGINATOR:

RIDGE
PROPERTY & CONSTRUCTION CONSULTANTS

PARTNERSHIP HOUSE
11, WOODSLEY ROAD
WINCHESTER
SO23 7BX
TEL: 01962 634400
WWW.RIDGE.CO.UK

CLIENT:
PEGASUS PLANNING GROUP

IN ASSOCIATION WITH:

PROJECT
1 DARWIN CLOSE
READING

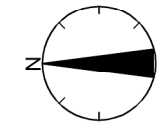
TITLE
RIGID TRUCK
VEHICLE TRACKING

ENG:	CSE	ISSUE:	SCALE:	1:200	@	A1
MP			INITIAL ISSUE:	29/09/2017		

STATUS:

PRELIMINARY

DRAWING NO.	ORIG	ZONE	LEVEL	TYPE	ROLE	NUMBER	REV
5004527	RDG	XX	XX	PL	C	2200	-



SCALE 1:200
0 2 4 6 8 10
m

