

Unit B4, Worton Drive, Worton Grange, Reading

Transport Technical Note

Introduction

1. Vectos is appointed by Canmoor to provide transport advice in relation to development proposals at Unit B4, Worton Drive, Worton Grange, Reading.
2. Unit B4 is located within an established employment location of Worton Grange Industrial Estate, situated to the south of Reading and nearby to Junction 11 of the M4.
3. Access to the site is provided by a standard priority junction adjoining Worton Drive, located to the south of the site.
4. The strategic location of the site is shown in **Figure 1**, while the local context of the site is shown in **Figure 2**.
5. The site currently comprises of an existing industrial unit (1,027sqm GFA) which previously operated as a cash and carry unit (Use Class B8) and is currently vacant. The proposals involve a change of use from the previously consented use (Use Class B8) to flexible industrial uses (Use Class B2 and B8). The floorspace and parking provision will not change as a result of the proposals.
6. The access arrangement will also be retained as per the existing layout.
7. The proposed site layout is included at **Appendix A**. A tracking exercise has also been undertaken of a 16.5m articulated vehicle both accessing and egressing the site and is shown in **Appendix B**.
8. Following the submission of a planning application (Ref: 211347) the following comment was received from Reading Borough Council (RBC) highway's officer:

'The proposal does appear to require a further review given our parking standards stipulate additional car and cycle parking for a B2 use. I would also add that B2 uses usually attract a greater level of trips to that of a B8 use and as such this would need to be reviewed in further detail. The new occupier is also providing maintenance and diagnostic repairs on commercial vehicles from 3 to 44 tonnes and so I fail to see how HGV movements would not be generated, given vehicles of this size are HGVs in their own right or are likely to be transported on one. Ultimately, this may prove to be acceptable but at this stage I cannot confirm that the development would be acceptable.'
9. This Technical Note has therefore been prepared to address the comment received by the Highway's Officer in regard to the anticipated trip generation and review of the proposed parking and car parking standards stipulated by local policy.

Trip Generation

10. In order to try to quantify the change in the number of vehicle trips that are likely to be attracted to the site as a result of allowing the entire unit to be in B2 use the TRICS database (version 7.8.3) has been interrogated.
11. Whilst the consented use at the site (Use Class B8) generates an array of suitable surveyed sites which are considered comparable to the existing use at the site, when determining trip rates for the proposed use (Use Class B2), it was determined that there was a lack of suitable and comparable surveyed sites generated by TRICS.
12. Due to the lack of comparable surveyed sites in TRICS, and since it is predominately staff trips that occur during the weekday AM and PM peak hours, an exercise was undertaken to establish the potential difference in employee numbers if the unit were entirely in B2 use rather than B8 use.
13. Reference has been made to the Homes and Communities Agency Employment Density Guide (3rd Edition) which provides typical employee densities by land use class.
14. For the existing uses at the site (Use Class B8), the HCA guidance indicates a density of 1 employee every 70-95 sqm. This equates to 11 employees taking the lower end of the range to be conservative.
15. Following this, for the proposed use at the site (Use Class B2), a typical density would be 1 employee every 36 sqm. This equates to 28 employees.
16. If it was assumed all employees arrive in the weekday AM peak and depart in the PM peak, there would 17 additional trips to the site in both of these hours.
17. Not all of these trips would be by car. The 2011 Census data has been interrogated in order to establish the method of travel to a place of work with employees working in 'Reading 018'. The results of this assessment are summarised in **Table 1** below with full details contained within **Appendix C**.

Table 1: Method of Travel to Work

Method of Travel to Work	Census Output Area (Reading 018)
Underground	0%
Train	3%
Bus	6%
Taxi	0%
Motorcycle	1%
Car Driver	77%
Car Passenger	4%
Bicycle	3%
On foot	5%
Other method of travel to work	0%
Total	100%

18. Applying the car driver mode share to the additional trips, there would be 13 extra inbound cars in the weekday AM peak hour and 13 extra outbound cars in the weekday AM peak hour.
19. Clearly the above is simplistic, but it highlights that the additional cars generated by the proposal to allow the entire Unit to be B2 use are unlikely to have a significant impact on the local highway network.
20. When it comes to goods vehicles, both B8 and B2 uses will generate movements by these vehicles but only a proportion are likely to be HGV. Typically, the largest goods vehicles are scheduled to arrive outside of the weekday AM and PM peak hours. As such, the proposal is unlikely to result in a significant change in the number of goods vehicles accessing the site at the times when the local road network is at its busiest.

Parking Standards

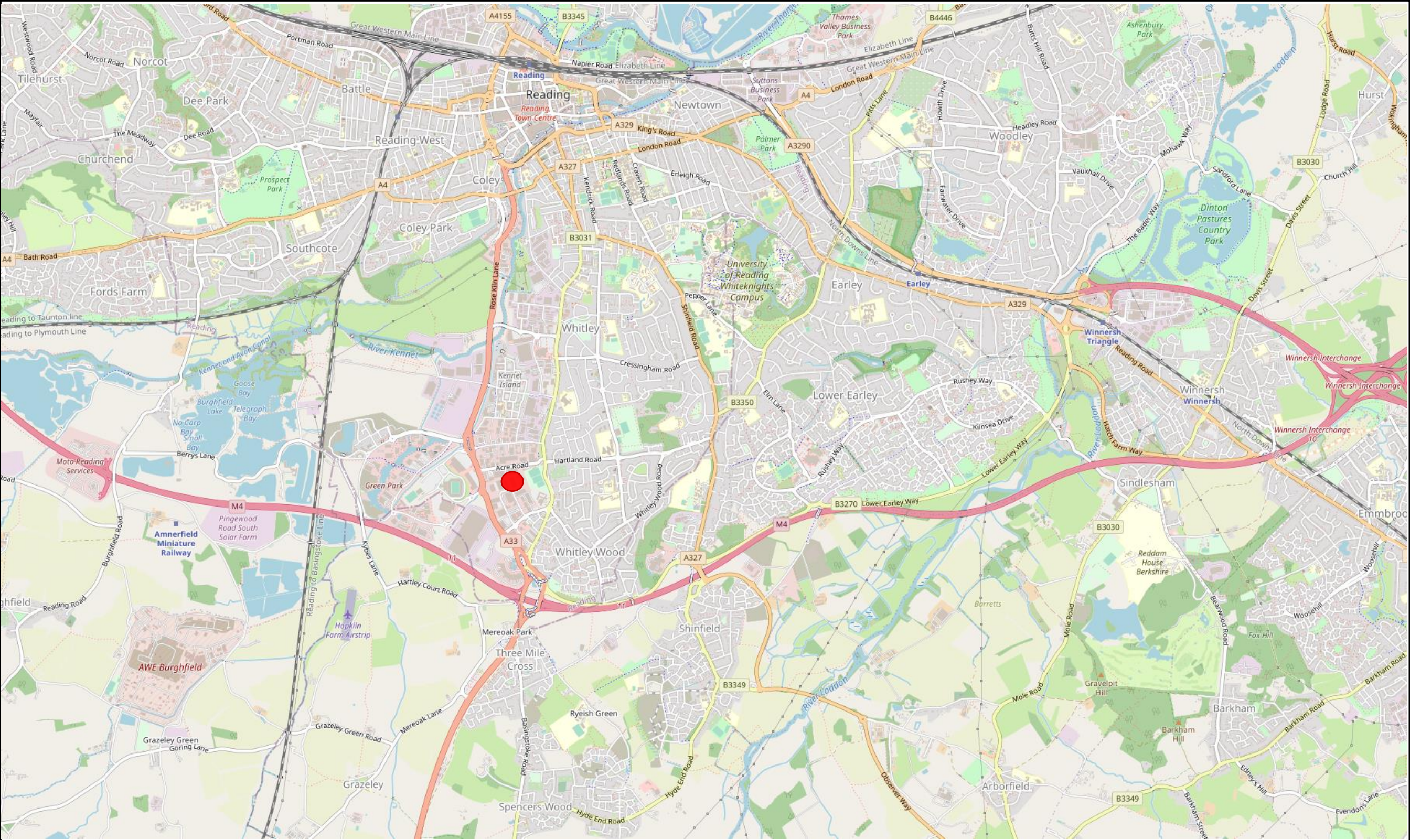
21. RBC Car and Cycle Parking Standards can be found within the *Revised Parking Standards and Design Supplementary Planning Document (Adopted October 2011)*, which provides a Supplementary Planning Document (SPD) alongside the Reading Borough Local Plan (Adopted November 2019).
22. For sites in zone 3, including the application site, the parking standard for B8 use (existing) allows for up to 1 space per 150 sq m of gross floor area whereas the parking standard for B2 use (proposed) allows for up to 1 space per 100 sq m of gross floor area.
23. Whilst it is acknowledged that the parking standards allow for more parking for B2 use than B8 use, they are maximum standards. Since they are not minimums there is no requirement for more car parking in relation to B2 use than B8 use.
24. The proposals will maintain the existing number of car parking spaces on site. Three spaces will be converted to blue badge spaces in accordance with RBC's parking standards. In addition, w 1 motorcycle space and 3 cycle parking spaces will also be provided in accordance with RBC's parking standards
25. Based on the applicants knowledge of the industrial market, and information provided by the intended tenant, we are of the opinion that 38 parking spaces strikes the appropriate balance between meeting likely demand and promoting sustainable travel to and from the site.

Summary

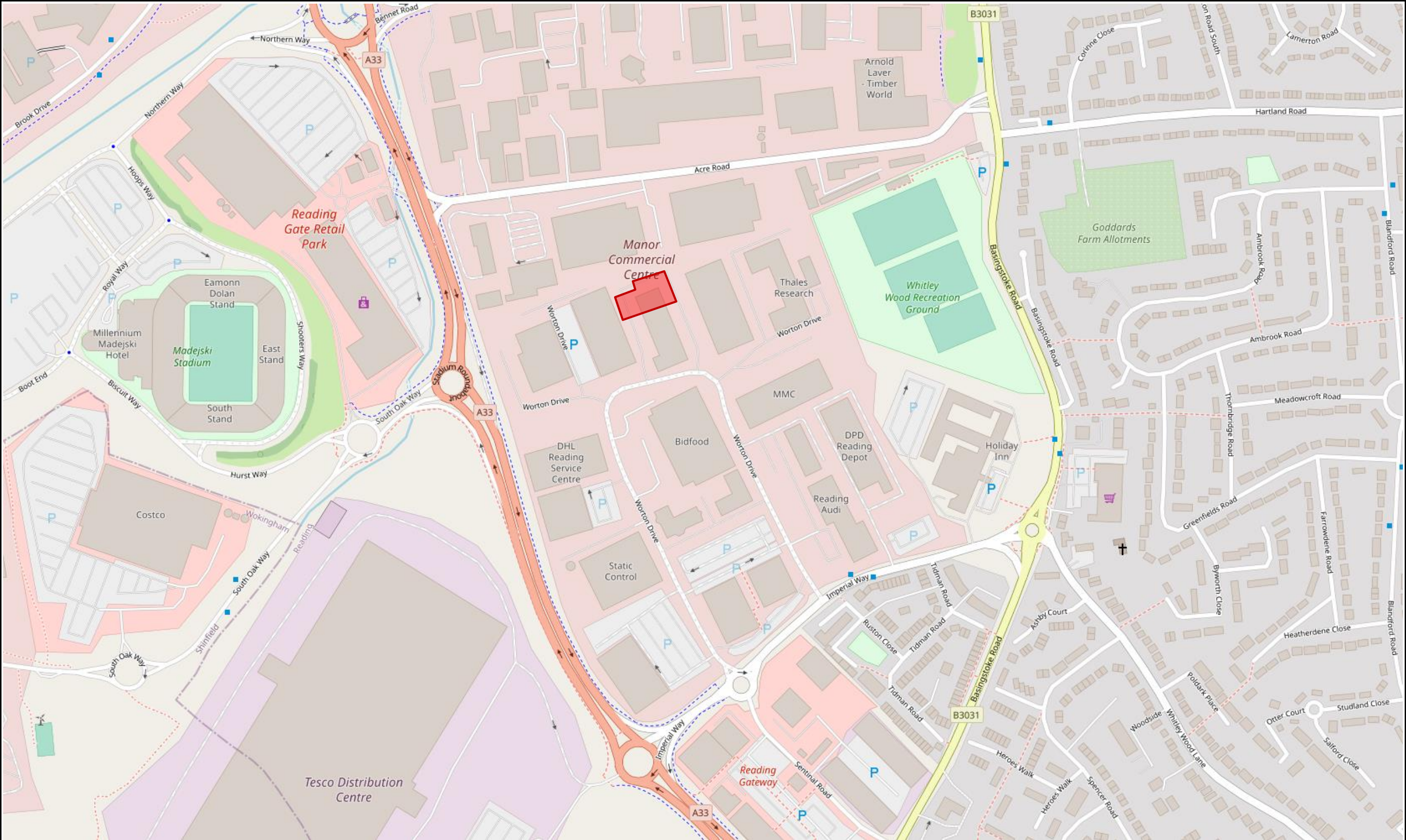
26. The RBC car parking standards are expressed as maximums and so it is not automatically necessary to increase car parking provision when changing the use of the unit on site from B8 to B2 as proposed. The existing car parking provision is considered appropriate to support the likely operator's needs.
27. Blue badge car parking, cycle parking and motorcycle parking will be provided in accordance with RBC's standards.

28. Based on a simplistic exercise assuming that all employees arrive and depart the site during the weekday AM and PM peak hour, the increase in car trips as a result of the proposal would not have a significant impact on the local highway network.
29. Since most B2 and B8 operators typically schedule the largest goods vehicle movements outside of the weekday AM and PM peak hours, any change in trips by these vehicles is unlikely to have a significant impact on the local highway network when it is at its busiest.
30. Therefore, it is considered that the proposed development is acceptable in transport and highway terms.

Figures



Key: Site Location	Unit B4, Worton Grange, Reading				Canmoor	
	Site Location Plan (Strategic Context)				vectos. Network Building, 97 Tottenham Court Road, London W1T 4TP Tel: 020 7580 7373 Email: vectos@vectos.co.uk www.vectos.co.uk	
	DRAWN: EG	CHECKED: SE	DATE: 04.10.21	SCALES: NTS	DRAWING REFERENCE: Figure 1	



Key:  Site Location	Unit B4, Worton Grange, Reading				Canmoor	
	Site Location Plan (Local Context)				 Network Building, 97 Tottenham Court Road, London W1T 4TP Tel: 020 7580 7373 Email: vectos@vectos.co.uk www.vectos.co.uk	
	DRAWN: EG	CHECKED: SE	DATE: 04.10.21	SCALES: NTS	DRAWING REFERENCE: Figure 2	

Appendix A



Disclaimer:
Subject to survey.

0 2 5 10m
Scale bar - 1:250m @A1

N

Notes:

KEY

Approx Site Boundary
(2,117 m² / 0.52cres / 0.21 ha)

R Unit B4 Refuse Area

B	Site Boundary for refuse store	14.09.21	HT	HA
A	Annotation Amendments	17.08.21	HT	HA
-	First Issue	12.08.21	KH	HA
Rev:	Notes:	Date:	Dwn:	Iss:
Suitability Code:				

Client:

CANMOOR

hale
ARCHITECTURE
22c Leathermarket Street, London, SE1 3HP

Project:
Unit B4, Worton Grange, Reading

Drawing Title:
Proposed Internal Uses

Project No: 21081	Scale @ A1/A3: 1:250/1:500	Revision: B
Drawing No: PL003		

Appendix B



Notes:

- 1. This is not a construction drawing and is intended for illustrative purposes only.
- 2. White lining is indicative only.
- 3. Based on layout by Hale Architecture 'PL003B - Proposed Internal Uses'

Max Legal Length (UK) Articulated Vehicle (16.5m)	16.500m
Overall Length	2.550m
Overall Width	3.681m
Overall Body Height	0.411m
Min Body Ground Clearance	2.500m
Max Track Width	6.00s
Lock to lock time	6.530m

REV.	DETAILS	DRAWN	CHECKED	DATE
CLIENT: Canmoor				
PROJECT: Unit B4, Worton Grange, Reading				
DRAWING TITLE: Swept Path Analysis Servicing 16.5m Articulated Vehicle				
SCALES: 1:500 at A3				
DRAWN:	CD	CHECKED:	TF	DATE: 05.10.2021
vectos. Network Building, 97 Tottenham Court Road, London W1T 4TP t: 020 7580 7373 e: enquiries@vectos.co.uk				
DRAWING NUMBER: 216254/AT/A01				REVISION: .

Appendix C

WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

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population	All usual residents aged 16 and over in employment the week before the census
units	Persons
usual residence	England and Wales (country)
place of work	E02003406 : Reading 018 (2011 super output area - middle layer)

Method of travel to work	2011	
All categories: Method of travel	4,610	4610
Work mainly at or from home	0	0%
Underground, metro, light rail or	16	0%
Train	118	3%
Bus, minibus or coach	288	6%
Taxi	7	0%
Motorcycle, scooter or moped	50	1%
Driving a car or van	3,566	77%
Passenger in a car or van	178	4%
Bicycle	150	3%
On foot	222	5%
Other method of travel to work	15	0%

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.