



Technical Note

Sapphire Centre

July 2025

Prepared for:
Apacor Ltd

Prepared by:
Stantec Hydrock Limited

Project Number:
18740

Registered Office: Stantec House, Kelburn Court,
Birchwood, Warrington, WA3 6UT

Office Address: Merchants House North, Wapping
Road, Bristol BS1 4RW
T: 0117 945 9225 E: askstantec@stantec.com

Document control sheet

Issued by	Stantec Hydrock Limited Merchants' House North Wapping Road Bristol BS1 4RW UNITED KINGDOM stantec.com	+44(0) 1179 459225 stantec.com
Client	Apacor Ltd	
Project name	Sapphire Centre	
Title	Technical Note	
Doc ref	18740-STN-XX-RP-TP-1001	
Project number	18740	
Status	S3	
Date	23 July 2025	

Document production record

Issue number	P02	Name
Prepared by		Alice Reid MA (Hons) GradCIHT
Checked by		Rusne Bagdanaviciute, BSc (Hons) MSc MCIHT
Approved by		Lizzie Clark, BSc (Hons) MSc MCIHT

Document revision record

Issue number	Status	Date	Revision details
P01	S3	09.07.2025	Suitable for review and comment
P02	S3	23.07.2025	Suitable for review and comment

Stantec Hydrock Limited has prepared this report in accordance with the instructions of the above named client for their sole and specific use. Any third parties who may use the information contained herein do so at their own risk.



1 Introduction

1.1 Overview

- 1.1.1 Stantec Hydrock Consultants Ltd have prepared this Technical Note (TN) on behalf of Apacor Ltd to address the comments raised by Wokingham Borough Council Highways in relation to the proposed redevelopment of the existing Sapphire Centre on Fishponds Road, Wokingham (planning ref. 251105).
- 1.1.2 The Highways Consultation Response is set out in Appendix A.

1.2 Background information

- 1.2.1 Hydrock provided transport support in 2011 as part of a Planning Application (212350) for the demolition of an existing commercial premises (known as The Sapphire Centre, Fishponds Road), to provide a new larger employment/commercial premises. The development consisted of the erection of a new three-storey commercial building and reconfiguration of the site to include additional parking.
- 1.2.2 The existing points of access from Fishponds Road (entrance point) and Eastheath Avenue (at the rear) were retained and unaltered by the proposals and provide the main access to the new commercial building. Planning permission for this development was granted in 2022, which is now completed and fully operational.

1.3 Development proposals

- 1.3.1 A Transport Statement (ref: 18740-HYD-XX-XX-RP-TP-4001) has been produced in support of a Planning Application (251105) for a Phase 2 development, located to the rear of the existing Sapphire Centre (presented in full in Appendix B). As part of this planning application, it is proposed to 'link' the current building with a proposed extension located to the rear.
- 1.3.2 As part of this planning application, there will no changes to the existing staff numbers or intensification of use. The existing access arrangements from Fishponds Road and to the rear off Eastheath Avenue, will be utilised and remain unchanged.

1.4 Highway comments

- 1.4.1 Highway comments were received from Wokingham Borough Council Highways on the 19th June 2025, with a recommendation for refusal due to:

'intensification of an access with substandard visibility, poor car parking provision and poor delivery and servicing provision. The application is contrary to Wokingham Core Strategy Policy CP6, Policy CC07 of the Managing Development Framework, Policy TB20 of the Managing Development Delivery Framework and NPPF Paragraphs 115, 116 and 117.'

- 1.4.2 The purpose of this note is to respond to the highway authority's comments received in relation to visibility splays, parking provision and delivery and servicing facilities.



2 Response to the Local Highway Authority comments

2.1.1 This section provides a response to the three reasons for refusal.

2.2 Visibility splays at existing access

2.2.1 The LHA addressed the visibility splay of the existing site:

"The existing access is at a point where the visibility is substandard due to the presence of on-street parking, and visibility cannot be provided in accordance with the Manual for Streets visibility standards for a 30mph road. No mitigation has been proposed to reduce vehicle speed and the lack of appropriate visibility at the intensified access junction would cause a highway safety problem which would create conflicts between vehicles and other highway users. Therefore, the development is contrary to Wokingham Core Strategy Policy CP6 and Paragraphs 115, 116 and 117 of the National Planning Policy Framework"

Response to highway comments

2.2.2 The existing access into the site is existing, and there are no changes proposed to this access as part of the proposals. It is anticipated that the floor area will increase by approximately 1100 m² for the link, but there will be no increase in the number of staff. Therefore, it is likely that there will be no change in the number of movements, despite the net increase in the floor area. It is, therefore, considered that the development will not result in the intensification of use.

2.2.3 It is stated in Manual for Streets 2, paragraph 10.7.1 that:

'parking in visibility splays in built-up areas is quite common, yet it does not appear to create significant problems in practice....in some circumstances, where vehicle speeds are low, some encroachment may be acceptable.'

2.2.4 It also stated that:

'at urban junctions, where visibility is limited by buildings and parked cars, drivers of vehicles on the minor arm tend to nose out carefully until they see oncoming traffic and vice versa'

2.2.5 And that:

'drivers on the major route will also be able to see the vehicle pulling forward slowly and may slow down or stop to allow it to pull out'.

2.2.6 There have been no collisions that occurred at the existing access within the latest five-year period which would indicate safety issues associated with this current access.



- 2.2.7 This access was considered acceptable as part of the previous proposals for the Sapphire Centre development (planning ref. 212350). As there will be no increase in the number of movements, there will be no intensification of use.
- 2.2.8 In addition, it is also arguable that the existing on-street parking acts as vehicle calming, meaning that vehicles are likely to travel at lower speeds as a result. The existing visibility splays are in line with the Manual for Streets guidance on visibility splays in urban areas and are acceptable.

2.3 Parking provision

- 2.3.1 In relation to parking, the Local Highway Authority states:

'The proposed development fails to provide a suitable number of car parking spaces in accordance with the adopted Wokingham Council Parking Standards. The development would lead to additional on-street car parking which would result in obstruction of footways, visibility splays, turning heads, access for emergency vehicles and/or block the freeflow of traffic to the detriment of Highway users' safety. The development is contrary Wokingham Core Strategy Policy CP6 and NPPF Paragraphs 115, 116 and 117 of the National Planning Policy Framework.'

Response to highway comments

- 2.3.2 The Wokingham Borough Council Managing Development Delivery (MDD) Local Plan (adopted 2014) document states Appendix 2, paragraph 0.2 that:

It will be the responsibility of the developer to prove that parking provision has been adequately catered for on a proposed site.

- 2.3.3 And at paragraph 0.3 that:

'The parking standards should be regarded only as a starting point in any discussions with the Borough Council as it should be recognised that each development site will need to be assessed on its own merits, within the wider context of the area in which the development sits.'

- 2.3.4 Parking provision for the Sapphire Centre site (planning application 212350) was based on the assumption that there will be 50 staff on site. As part of the previously submitted Transport Statement (TS), 2011 Census 'Method of Travel to Work data' was applied, resulting in a requirement for 35 spaces. The previous proposals for 46 spaces was intended to accommodate and visitors and provide flexibility for staff trips.
- 2.3.5 As stated above, whilst there is a minimal net increase in the floor area associated with the proposed development (approximately 1100 m²), there will be no change in the number of staff on site, as the warehouse space is only for factory use and will be filled with machines that operate by themselves. Therefore, the parking demand is unchanged compared to the existing use.
- 2.3.6 Given that parking is based on the likely occupation of the site, it is unlikely that there will be additional on-street parking.

2.4 Deliveries and servicing

'The proposed development does not provide adequate parking, loading, unloading and manoeuvring space for delivery vehicles associated with B2 industrial and B8 Distribution uses. The proposals would result in delivery vehicles being stationed on the public highway or reversing onto the public highway to achieve ingress/egress to the site. The proposals are contrary to Core Policy CP6, Policy TB20 of the Wokingham MDD Framework and Paragraphs 116 and 117 of the NPPF. '

Response to highway comments

- 2.4.1 As stated above, despite the increase in the floor area, we are not increasing the intensification of the site. Access onsite by 16.5m long articulated vehicle is not currently required for the proposed development type.
- 2.4.2 The development proposals would adopt, and not intensify, the existing delivery and servicing arrangements. The swept path analysis of a 10m rigid and an 11.3m refuse vehicle were carried as part of the 2011 approved planning application. This shows that large vehicles can reversing from Fishponds Road, into the site and exiting in forward gear. These swept paths are included in the Transport Statement attached at B and were considered acceptable to the local highway authority.
- 2.4.3 As there will be no intensification to the existing site, the likely number of delivery and servicing vehicles will remain unchanged compared to the existing proposals.

2.5 Summary

- 2.5.1 As set out above and as part of the supporting planning documents, the proposed extension to Sapphire Centre will not result in an intensification of use at the existing Fishponds Road access.

Appendix A Consultation Response



MEMORANDUM

From:	Ben Amey Development Control		
Service	WBC Highways	App No:	251105
Address:	The Sapphire Centre, Fishponds Road, Wokingham, RG41 2QL		
Proposal:	Proposed Extension to the Rear of the Existing APACOR Facility by Connecting with an Existing Commercial Building to the Rear with associated works		
Site Visit Made:	Yes (10 th and 11 th June 2025)		

- ☐ No comment
- ☐ No objection
- ☐ No objection subject to conditions (and reasons) **stated below**
- ☐ Request further information before determination as **stated below**
- ☒ Objection due to the reason(s) **stated below**

Consultation Response

Introduction

This document provides the Local Highways Authority (LHA) Consultation response to application no. 251105 at The Sapphire Centre on Fishponds Road, Wokingham, RG41 2QL.

The forms state permission is sought for an additional 1,100sq.m of B2 & B8 Land Use.

It is recommended that planning permission is refused due to a lack of Car Parking provision and a lack of parking and turning space for Delivery and Servicing Vehicles.

Vehicle Access, Visibility and Speed Control Measures

1. Due to insufficient visibility being demonstrated, the LHA would require the provision of speed bumps on Fishponds Road every 60 – 70m to control vehicle speeds. A drawing displaying the improvement should be submitted in support of the application. During a site visit vehicles passing the site were adjudged to be travelling at 20 – 30mph (although no speed survey has been undertaken).

The application demonstrates a visibility splay for vehicle speeds of **10mph** or 2.4m x 12.5m from the proposed site access (due to the presence of on-street parking). Manual for Streets Table 7.1 indicates that a visibility splay of 2.4m x 12.5m is only suitable for a vehicle speed of 10mph. Paragraph 7.5.8 of the Manual for Streets states that: *'Below around 20m, shorter SSDs themselves will not achieve low vehicle speeds: speed-reducing features will be needed'*

Table 7.1 Derived SSDs for streets (figures rounded).

Speed	Kilometres per hour	16	20	24	25	30	32	40	45	48	50	60
	Miles per hour	10	12	15	16	19	20	25	28	30	31	37
SSD (metres)		9	12	15	16	20	22	31	36	40	43	56
SSD adjusted for bonnet length. See 7.6.4		11	14	17	18	23	25	33	39	43	45	59
Additional features will be needed to achieve low speeds												

- The LHA require the vehicle barrier to be setback 5.5m from the back edge of the footway to ensure that vehicles do not block the footway whilst waiting for the barrier to open. If this cannot be achieved; then the LHA require agreement of a condition that the barrier shall be left open during hours of operation and only closed at night time.

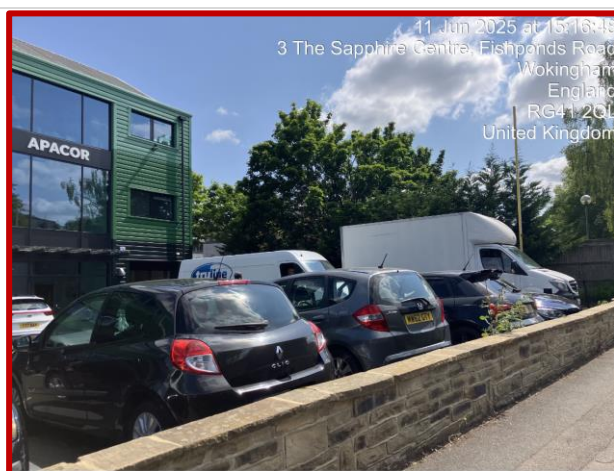


Swept Path Analysis

- The LHA require swept path analysis which demonstrates that the site can accommodate a 16.5m long articulated vehicle, although there does not appear to be suitable turning space within the site to accommodate a vehicle of this size. The LHA/LPA would have no control over use of 16.5m articulated vehicles on site and vehicles of this size are often used in association with B8 Warehousing land use.
- The application includes swept paths of a 10m long rigid lorry. The swept paths show there is not suitable turning space within the existing car park for delivery vehicles. A rigid lorry would need to reverse into the site to exit in a forward gear; or enter in a forward gear and then reverse out. These manoeuvres were not supervised/controlled by a qualified banksman.

Lorry Parking

- The LHA require dedicated parking bays for lorries/vans on site. The site does not appear to have suitable capacity to accommodate a greater number of deliveries associated with a larger warehouse and increased no. of goods on site (or larger vehicles). On a site visit, two delivery vans were observed blocking the access and were required to reverse into the site. This is shown in the photo below:



6. Policy TB20 (Deliveries for Employment and Retail Use) of the Managing Development Delivery (MDD) Framework states that '*Planning permission will only be granted for commercial development proposals that demonstrate there is no significant impact on highway safety*'. The NPPF Para 117 states that: '*Applications for development should allow for the efficient delivery of goods, and access by service and emergency vehicles*'.

Car and Motorcycle Parking

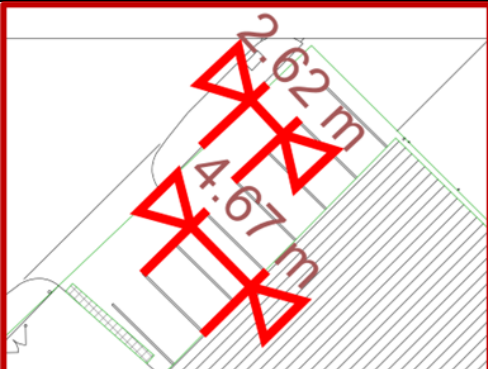
7. There is a shortfall in proposed number of car parking spaces when measured against the WBC Parking Standards for B2 Industrial Use. It has not been demonstrated that the site would accommodate expected level of parking and prevent overspill of parked vehicles onto the surrounding roads. The additional 1010sq.m of B2 Industrial floorspace requires an additional 25 car parking spaces, 5 cycle parking spaces and 2 motorcycle spaces.

WBC Parking Standards for the Sapphire Centre			
Use Class	Car Parking	Cycle Parking	Motorcycle (PTW)
B2 Use Class (1010sq.m)	25	5	2
B8 Use Class (1010sq.m)	14	5	2

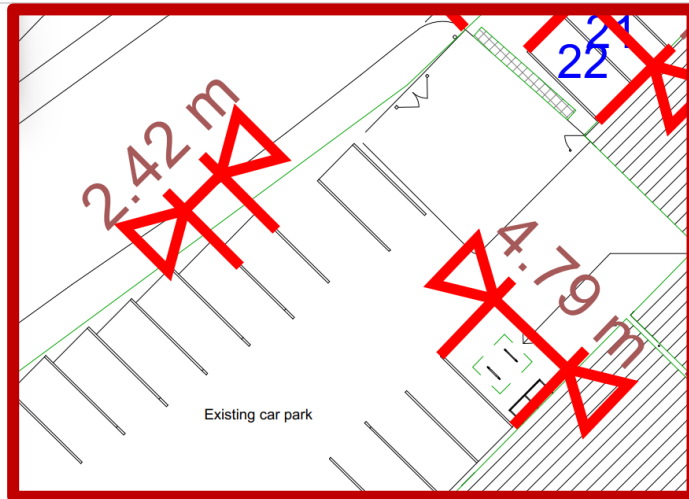
8. The existing car parking was observed to be fully occupied by existing staff during a site visit on 11th June 2025. Therefore, the LHA is concerned that the proposals do not provide car parking in accordance with the WBC Car Parking Standards, given an enlarged building could increase no. of staff and parking demand. Photos of car parking occupancy on 11th June 2025 are provided below:



9. Furthermore, 7 of the proposed car parking spaces on the proposed site plan do not provide suitable manoeuvring space to ingress/egress each of the car parking spaces. The aisle only measures 2.62m wide which will not be sufficient to allow vehicles in and out. An aisle width of 6.0m would be required (As per paragraph 8.3.51 of Manual for Streets).
10. The layout of these spaces also differs from the way they have been recently constructed on site.
11. A screenshot indicates this problem below. These spaces should be reconfigured otherwise they cannot be counted as useable parking spaces.

Aisle Manoeuvring Space)	Constructed Parking Layout
	

12. The spaces should be enlarged to 2.5m x 5.0m. The car parking spaces shown on the site plan measure 2.4m x 4.8m and do not appear to comply with the WBC Minimum Space standard of 2.5m x 5.0m, as is offered in the TS within Paragraph 4.5.6.



Trip Generation

13. The LHA would expect a more accurate forecast of trip generation to be completed based on more TRICS surveys of more closely comparable sites and a worst-case assessment of trip generation to be completed on the basis that staff numbers do increase with the expansion of the warehouse and operations.
14. The LHA do not consider the TRICS survey sites comparable with the existing/proposed land use on site. The survey sites include industrial production facilities such as metal processing, energy recovery, thermal processing, sheet metal fabrication x2) and industrial glass production. No evidence has been offered which demonstrates these sites are comparable with the proposed Medical Diagnostics Supplies use in terms of the staff occupancy per 100sq.m or shift patterns/shift length (both of which would affect the no. of staff arrivals/departures and the timing throughout the day).
15. The LHA cannot accept the assertion that car parking demand and trip demand will not increase due to staff numbers remaining the same. Whilst this maybe the case in the short-term; planning permission is granted 'In Perpetuity' and it would be possible for Apacor Ltd to increase staff numbers in future; should the company experience growth and success. It is also possible for the building to be occupied by another company in the future who would be able to accommodate more than 50 staff within the larger proposed building envelope.
16. The TS states that: *'Apacor Ltd have confirmed that the staff numbers are unlikely to increase as part of the proposed extensions, with a maximum of 50 staff working on-site at any one time, this would mainly be the Sapphire Centre building with 2-3 staff in the warehouse. Based on a recent staff travel survey, it is likely that a total of 35 staff would travel to work by car, with the rest by other means and therefore the 34 spaces proposed is appropriate'.*
17. The TS goes onto state that *'This approach confirms that operationally the level of car parking proposed is adequately catered for' within the development site and would not result in a 'increase in parking on the public highway' in line with paragraph 0.2 of Appendix 2 of the WBC MDD'.*

Cycle Parking

18. The TS states that a total of 14 cycle parking spaces are currently provided in the form of 7 Sheffield Type stands and this will remain for the proposed site. The TS states that although the size of the building is increasing; the number of staff is not and therefore the likely operations will not increase no. of cycle parking spaces required.

Recommendation

The LHA recommend refusal of the application due to intensification of an access with substandard visibility, poor car parking provision and poor delivery and servicing provision. The application is contrary to Wokingham Core Strategy Policy CP6, Policy CC07 of the Managing Development Framework, Policy TB20 of the Managing Development Delivery Framework and NPPF Paragraphs 115, 116 and 117.

Reason for Refusal: Visibility Splay at Existing Access

The existing access is at a point where the visibility is substandard due to the presence of on-street parking, and visibility cannot be provided in accordance with the Manual for Streets visibility standards for a 30mph road. No mitigation has been proposed to reduce vehicle speed and the lack of appropriate visibility at the intensified access junction would cause a highway safety problem which would create conflicts between vehicles and other highway users. Therefore, the development is contrary to Wokingham Core Strategy Policy CP6 and Paragraphs 115, 116 and 117 of the National Planning Policy Framework.

Reason for Refusal: Car Parking

The proposed development fails to provide a suitable number of car parking spaces in accordance with the adopted Wokingham Council Parking Standards. The development would lead to additional on-street car parking which would result in obstruction of footways, visibility splays, turning heads, access for emergency vehicles and/or block the freeflow of traffic to the detriment of Highway users' safety. The development is contrary Wokingham Core Strategy Policy CP6 and NPPF Paragraphs 115, 116 and 117 of the National Planning Policy Framework.

Reason for Refusal: Deliveries and Servicing

The proposed development does not provide adequate parking, loading, unloading and manoeuvring space for delivery vehicles associated with B2 industrial and B8 Distribution uses. The proposals would result in delivery vehicles being stationed on the public highway or reversing onto the public highway to achieve ingress/egress to the site. The proposals are contrary to Core Policy CP6, Policy TB20 of the Wokingham MDD Framework and Paragraphs 116 and 117 of the NPPF.

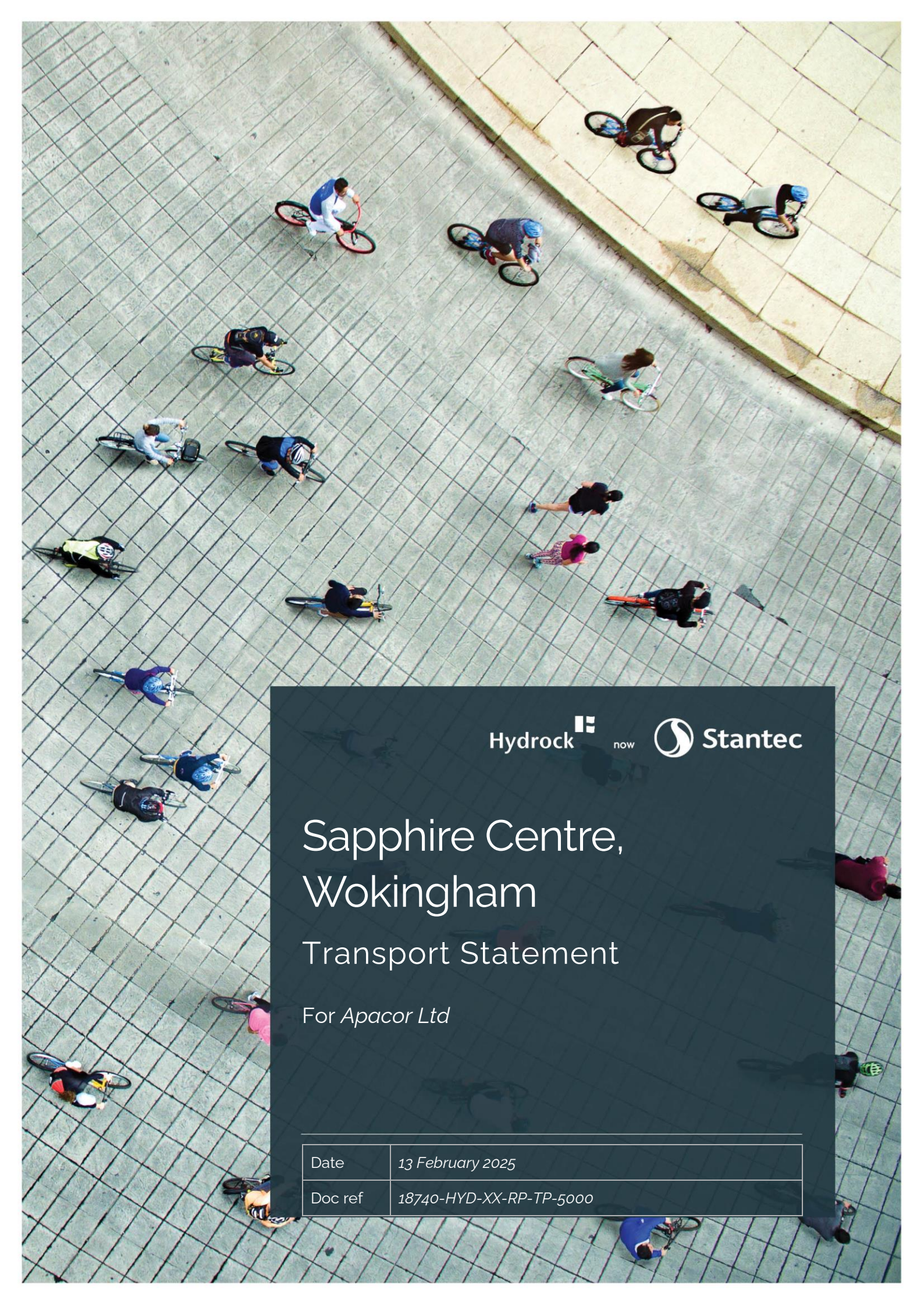
18th June 2025

Signed:

Ben Amey

Appendix B Transport Statement





Hydrock

now



Stantec

Sapphire Centre, Wokingham

Transport Statement

For *Apacor Ltd*

Date	13 February 2025
Doc ref	18740-HYD-XX-RP-TP-5000

Document control sheet

Issued by	Hydrock Consultants Limited Merchants House North Wapping Road Bristol BS1 4RW United Kingdom	T +44 (0)117 9459225 E bristolcentralreception@hydrock.com hydrock.com
Client	Apacor Ltd	
Project name	Sapphire Centre, Wokingham	
Title	Transport Statement	
Doc ref	18740-HYD-XX-RP-TP-5000	
Project number	18740	
Status	S4	
Date	13/02/2025	

Document production record		
Issue number	P01	Name
Prepared by	Alice Reid MA (Hons) Grad CIHT	
Checked by	Lizzie Clark BSc (Hons) MSc MCIHT	
Approved by	Ben Smith-Laing CEng MEng (Hons) MCIHT CMILT	

Document revision record			
Issue number	Status	Date	Revision details
P01	S4	13/02/2025	Suitable for review and comment

Hydrock Consultants Limited has prepared this report in accordance with the instructions of the above named client for their sole and specific use. Any third parties who may use the information contained herein do so at their own risk.

Contents

1.	Introduction	1
1.1	Aim of assessment	1
1.2	Wokingham Borough Council Local Development Framework	1
1.3	Pre-application discussions	2
1.4	Purpose of the report	2
1.5	Summary of structure of report	2
2.	Existing site context	3
2.1	Site location	3
2.2	Local highway network	3
2.3	Highway safety	5
3.	Site accessibility	6
3.1	Walking and cycling infrastructure	6
3.2	Pedestrian connectivity and accessibility	6
3.3	Cycle connectivity and accessibility	6
3.4	Public transport connectivity and accessibility	7
3.5	Existing method of travel to work	8
3.6	Accessibility summary	8
4.	Development proposals	10
4.1	Scheme overview	10
4.2	Proposed development	10
4.3	Access arrangements	11
4.4	Staff	11
4.5	Car parking provision	12
4.6	Servicing and delivery arrangements	14
5.	Traffic generation and impact assessment	15
5.1	Introduction	15
5.2	Existing trip generation	15
5.3	Proposed trip generation	16
6.	Summary and conclusions	17
6.1	Summary	17
6.2	Sustainability and accessibility	17
6.3	Development proposals	17
6.4	Conclusion	18

Tables

Table 3.1: Modal split of employees in Wokingham O16	8
--	---

Table 4.1: Wokingham Borough Council Car, Cycle and Motorcycle Parking Standards	12
Table 5.1: Existing vehicle trip generation.....	15
Table 5.2: CODAN existing vehicle trip generation	15
Table 5.3: Combined existing vehicle trip generation.....	16
Table 5.4: Vehicle trip generation: Proposed Link (168 sqm).....	16

Figures

Figure 2.1: Site Location.....	3
Figure 2.2: PIA Study Area.....	5
Figure 3.1: Wokingham Borough Cycle Routes.....	7
Figure 4.1: Site layout.....	11
Figure 4.2: Cycle parking.....	14

Appendices

Appendix A Road safety records
Appendix B Bus timetables
Appendix C Site layout
Appendix D Swept path analysis
Appendix E TRICS Outputs

1. Introduction

1.1 Aim of assessment

- 1.1.1 This Transport Statement (TS) has been produced by Hydrock, now Stantec, on behalf of Apacor Ltd in support of a planning application for the redevelopment of the existing Sapphire Centre on Fishponds Road, Wokingham.

Background information

- 1.1.2 Hydrock provided transport support in 2011 as part of a Planning Application (planning permission reference 212350) for the demolition of an existing commercial premises (known as The Sapphire Centre, Fishponds Road), to provide a new larger employment/commercial premises. The development consisted of the erection of a new three-storey commercial building and reconfiguration of the site to include additional parking.
- 1.1.3 The existing points of access from Fishponds Road (entrance point) and Eastheath Avenue (at the rear) were retained and unaltered by the proposals and provide the main access to the new commercial building. Planning permission for this development was granted in 2022, which is now completed and fully operational.

Development proposals

- 1.1.4 This TS has been produced in support of a Planning Application for a Phase 2 development, located to the rear of the existing Sapphire Centre. As part of this planning application, it is proposed to 'link' the current building with a proposed extension located to the rear.
- 1.1.5 As part of the proposed extension access will remain as existing, through the existing commercial premises, off Fishponds Road, or via the lane to the rear off Eastheath Avenue. The client has rights of access over both of these.

1.2 Wokingham Borough Council Local Development Framework

- 1.2.1 The Wokingham Borough Council adopted Core Strategy (January 2010) sets out the policy requirements and strategies for new development across the authority. Policy CP15, which covers employment and development states that business, industry and warehousing will be permitted, including the expansion or intensification of existing employment uses provided it is within the following identified core employment area:
- » "Green Park Business Park, Woodley;
 - » Headley Road East, Woodley;
 - » Hogwood Industrial Estate, Park Lane, Finchampstead;
 - » Molly Millars Industrial Estate, Wokingham;
 - » Ruscombe Business Park, Ruscombe;
 - » Sutton's Industrial Estate, Earley;
 - » Thames Valley Business Park, Earley;
 - » Toutley Industrial Estate, Wokingham; or
 - » Winnersh Triangle Business Park, Winnersh."
- 1.2.2 The development site is situated within the Molly Millars Industrial Estate as identified under Policy CP15 of the Core Strategy.

1.3 Pre-application discussions

- 1.3.1 Pre-application discussions have been held with Wokingham Borough Council (WBC) Local Highway Authority to agree on the principles of the proposed development and scope of the Transport Statement required for full planning submission. ,
- 1.3.2 A response to the Transport Scoping Note submitted to WBC was received on 5th September 2024, and the following points were raised:
- » As the rear car park to be reconfigured, the proposed dimensions of parking spaces will be expected to meet the council's requirements. Each parking space shall have minimum dimensions of 5.0m x 2.5m
 - » It is recommended that spaces for disabled people are generally located as close as possible to building entrances. Extra space will be required for disabled parking and recommended dimensions as indicated
 - » The location of the 14 cycle parking spaces (seven Sheffield stands) to be shown in the drawings. These cycle parking spaces would need to be convenient, secure and covered. The response states that highways would welcome the split of provisions at two access points
 - » The council are adopting an 8.6m fire tender. Revised swept path analysis will be required to support the formal planning application.

1.4 Purpose of the report

- 1.4.1 This TS has been prepared in accordance with industry standards and best practice. It sets out the transport considerations relating to the development site (existing conditions) and provides details of the development proposals, the sites accessibility and connectivity, an assessment of the traffic generation and the corresponding traffic impact on the surrounding local highway network.
- 1.4.2 This TS has been compiled to reflect guidance set out in the National Planning Policy Framework (NPPF) and accompanying National Planning Policy Guidance (NPPG). It also considers advice set out in various local and national guidance documents including; Transport Evidence in Plan Making (DfT), Manual for Streets (DfT), Providing for Journeys on Foot (CIHT), Local Transport Note 1/20: Cycle Infrastructure Design (DfT) and the Wokingham Borough Council (WBC) planning Policy documents and supplementary guidance.

1.5 Summary of structure of report

- 1.5.1 Following this introductory section, this TS is structured as follows:
- » Section 2 provides a detailed description of the site location, highway network and personal injury collision data within the vicinity of the site
 - » Section 3 sets out the connectivity of the site by walking, cycling and public transport
 - » Section 4 provides a description of development proposals including access arrangements, car and cycle parking provision, details delivery and servicing and the likely operational hours
 - » Section 5 calculates the likely trip attraction for staff of the proposed development
 - » Section 6 sets out the summary and conclusions.

2. Existing site context

2.1 Site location

2.1.1 The development site is located 1.2km south west of Wokingham town centre and within the ward known as Eastheath. Access to the Strategic Road Network (SRN) is available at the A329 3.5km north-east of the site. The A329 then offers access to the M4 at J10 approximately 3km north of the site.

2.1.2 The site's location in context to central Wokingham is situated within the Molly Millars Lane Industrial Estate and is bounded by:

- » Fishponds Road to the north;
- » Commercial and industrial to the east, south and west.

2.1.3 The site location is shown at Figure 2.1 below:

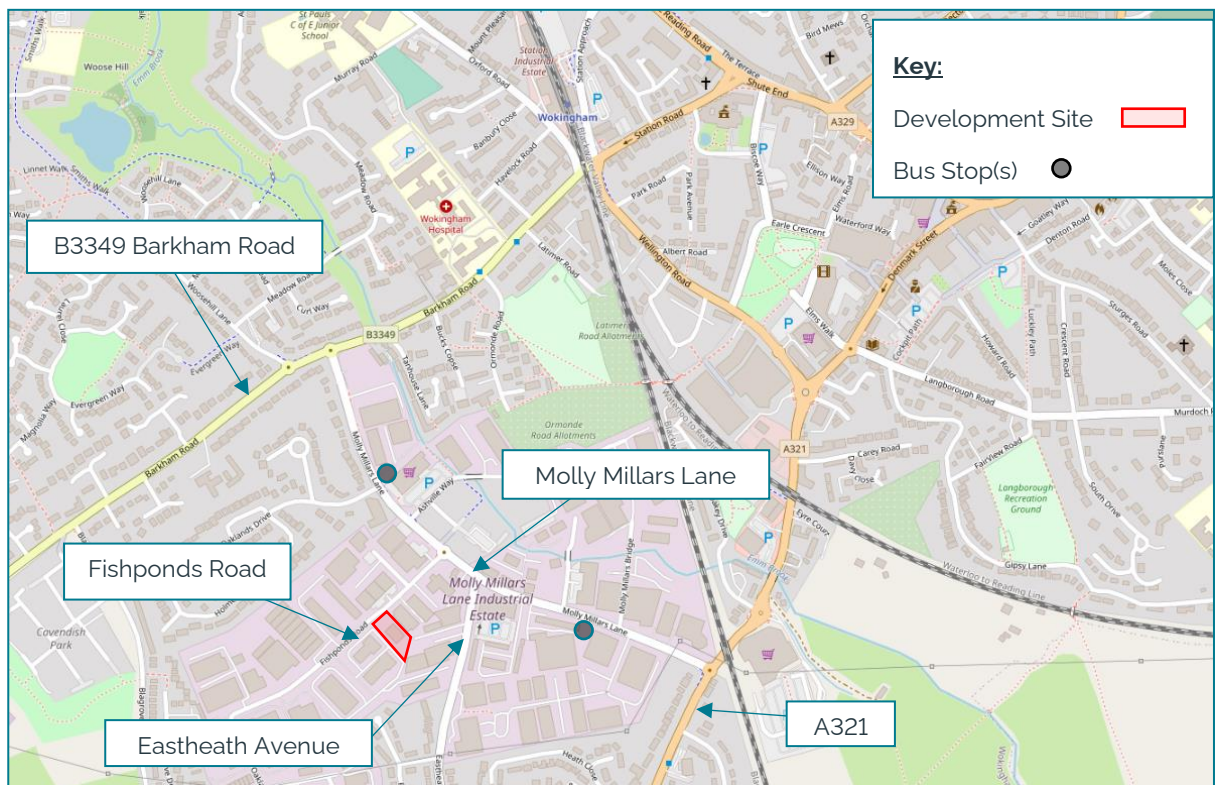


Figure 2.1: Site Location

2.2 Local highway network

Fishponds Road

2.2.1 Fishponds Road gives access to the Molly Millars Lane Industrial Estate and is subject to a 30mph speed limit. To the north Fishponds Road connects to Molly Millars Lane via a mini-roundabout junction, whilst to the south-west the road connects to Oaklands Park which offers access to more industrial units and warehouses to the south.

2.2.2 Within the vicinity of the site, Fishponds Road is approximately 6.5m in width with double yellow lines on both sides of the carriageway provided intermittently along its length.

2.2.3 Fishponds Road is provided with the pedestrian footway on both sides of the carriageway, includes on-street lighting and dropped kerb/tactile paving at crossing points.

Molly Millars Lane

- 2.2.4 Molly Millars Lane connects Fishponds Road and Eastheath Avenue to the B3349 Barkham Road to the north and the A321 Finchampstead Road to the south.
- 2.2.5 The road is single carriageway, measuring approximately 7.0m in width. It provides a number of pedestrian facilities, including signalised crossings, on-street lighting, dropped kerbs and tactile paving. Along the northern extent of the road is a shared footway/cycleway measuring approximately 2.8m wide north of the mini-roundabout with Fishponds Road.

A321 Finchampstead Road

- 2.2.6 The A321 Finchampstead Road connects to Molly Millars Lane to the south-east of the site via a mini-roundabout. To the north, the A321 provides access to Wokingham town centre whilst to the south it connects to the B3016 and on to Finchampstead some 4.0km south of Wokingham.
- 2.2.7 In the vicinity of the site, the A321 is single carriageway measuring approximately 6.3m wide and is subject to a 30mph speed limit. The A321 also provides pedestrian facilities, including 2.0m wide footways, signalised crossing points and street lighting.

B3349 Barkham Road

- 2.2.8 The B3349 Barkham Road runs in a north-east/south-west alignment, connecting to Molly Millars Lane at a mini-roundabout junction approximately 400m north of the site. To the north, the B3349 gives access to Wokingham train station and the town centre, whilst to the south it connects to Barkham on the edge of Wokingham.
- 2.2.9 The road is single carriageway in the vicinity of the site, approximately 6.0m in width. It is subject to a 30mph speed limit. The B3349 is provided with pedestrian facilities such as signalised crossing points, 2m-wide footways, crossings with dropped kerbs and tactile paving, and on-street lighting.

Eastheath Avenue

- 2.2.10 Eastheath Avenue is accessed via Molly Millars Lane 75m south-east of the junction with Fishponds Road or via the A321 to the south-east. From the Molly Millars Lane access, Eastheath Avenue primarily serves an access to existing industrial units.
- 2.2.11 Eastheath Avenue also provides rear access via a private access road to the Sapphire Centre via Citromech Ltd MOT and Service Centre. The client has an access right over this section of land for vehicular traffic.
- 2.2.12 In the vicinity of the site, towards the priority junction with Molly Millars Lane, Eastheath Avenue is single carriageway measuring approximately 5.6m wide, though approximately 150m south of the junction with Molly Millars Lane the road merges into a single lane before widening again further south giving access to the residential area of Eastheath.

2.2.13 Eastheath Avenue is provided with pedestrian facilities in the vicinity of the site such as 2.0m wide footways on either side of the carriageway, dropped kerbs and tactile paving crossing points at local junctions and street lighting.

2.3 Highway safety

2.3.1 A review of existing highway safety records has been undertaken using CrashMap.co.uk for the most recent five-year period between 1st January 2019 to 31st December 2023 within the search area highlighted in Figure 2.2. The proposed study area comprises the surrounding key local roads which includes Fishponds Road, Molly Millars Lane and Eastheath Avenue and associated junctions.

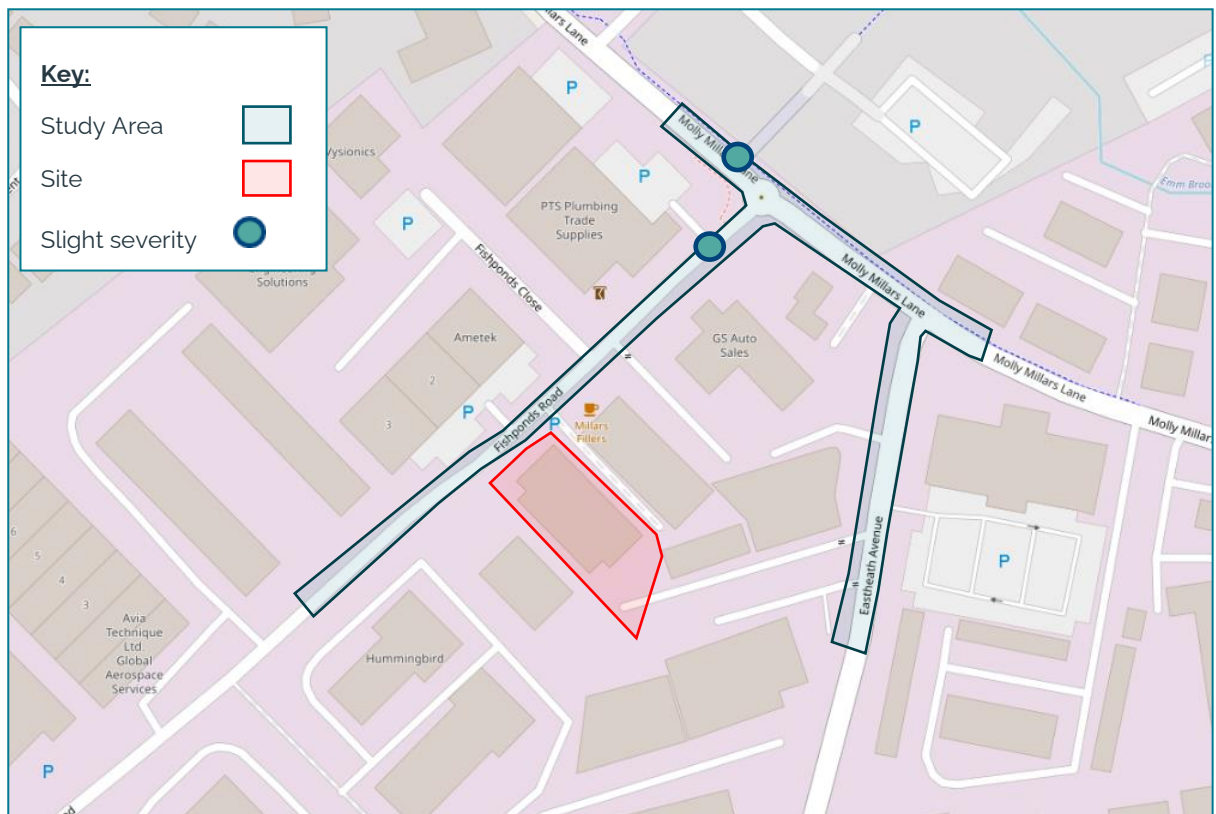


Figure 2.2: PIA Study Area

2.3.2 This review found that there has been a total of two collisions recorded within the study area over the most recent five-year period (2019-2023), both collision resulting in slight injuries being sustained.

2.3.3 Details of the incidents are included below:

- » Slight: the incident occurred on Fishponds Road and involved a car proceeding normally along the carriageway colliding with a pedal cycle proceeding normally along the carriageway.
- » Slight: the incident occurred on the roundabout with Fishponds Road and Molly Millars Lane. It involved a car turning right colliding with a pedal cycle proceeding normally along the carriageway.

2.3.4 The road safety record outputs are provided at Appendix A.

3. Site accessibility

3.1 Walking and cycling infrastructure

- 3.1.1 There are a number of publications which provide guidance for appropriate walking and cycling distances to facilities. These have been summarised as follows.
- 3.1.2 The Chartered Institution of Highways and Transportation (CIHT) guidelines 'Providing for Journeys on Foot' indicates that the desirable walking distance for commuting and school journeys is 500m, the acceptable walking distance is 1km and 2km is the preferred maximum. The CIHT guidelines indicate that the desirable walking distance for 'Elsewhere', including local amenities, is 400m, the acceptable walking distance is 800m and 1.2km is the preferred maximum
- 3.1.3 With regard to cycling, TA91/05 states (in paragraph 2.11) that 'Cycling is used for accessing a variety of different destinations, including educational facilities shops and places of work, up to a range of around 5 miles. Cycling is also undertaken as a leisure activity, often over much longer distances.' At paragraph 2.9, TA91/05 states that 5 miles (8km) is a distance 'that could easily be cycled by the majority of people'. Although now superseded, the document provides valuable guidance on acceptable cycle distances.
- 3.1.4 This is consistent with the statement in LTN1/20 Cycle Infrastructure Design (in paragraph 2.2.2) that 'Two out of every three personal trips are less than five miles in length – an achievable distance to cycle for most people'.
- 3.1.5 Manual for Streets (paragraph 4.4.1) states that 'walkable neighbourhoods' are typically characterised by having a range of facilities within 10 minutes (up to 800m) walking distance of residential areas which residents may access comfortably on foot, but that this is 'not an upper limit'.

3.2 Pedestrian connectivity and accessibility

- 3.2.1 On the roads surrounding the site footways are located on both sides of the carriageway, both within the industrial estate and within the nearby residential areas. Footways are of a high standard, generally measuring 2m wide.
- 3.2.2 Street lighting, tactile paving and dropped kerb crossing points are provided throughout the wider area. Other supporting pedestrian facilities such as signalised crossings are found on the busier roads in the vicinity of the site, such as the A321 and the B3349. Overall, these facilities ensure that the area is accessible and suitable for pedestrians.

3.3 Cycle connectivity and accessibility

- 3.3.1 There are some dedicated cycle facilities in the vicinity of the site, including a 2.2m-wide shared footway/cycleway along the eastbound carriageway of Molly Millars Lane. However, cycle lanes are not provided along the A321 and the B3349, requiring cyclists to mix with traffic along these routes.



Figure 3.1: Wokingham Borough Cycle Routes

- 3.3.2 Wokingham Borough Cycle Route 2 (CR2) runs along Oaklands Drive parallel to Fishponds Road and up along Molly Millars Lane to the west. The route provides a direct link from within 100m of the site to Wokingham Town Centre before connecting to CR3. CR2 and CR3 within the context of the site are shown at Figure 3.1.

3.4 Public transport connectivity and accessibility

Bus services

- 3.4.1 The site benefits from its proximity to local bus services, with these services provided within 400 metres or an 8-minute walk of the site. The closest stop, Oaklands Drive bus stop, is located along Molly Millars Lane approximately 300m metres north of the site whilst the Molly Millars Close stop is located 400m to the east. The stop is provided with a shelter, bench, timetable information, a bus cage and a raised kerb.
- 3.4.2 The 125-bus service operated by Thames Valley Buses is the only service to frequent these stops, offering a route from Crowthorne (Mon-Fri) and Sandhurst (Saturdays) to Wokingham Town Centre. The service runs three times a day Mon-Fri between 10:20 and 14:30 and twice on a Saturday (10:30 and 12:30).
- 3.4.3 Timetable information is provided at Appendix B.

Rail services

- 3.4.4 Wokingham train station is situated just 950m north-east of the development site and is accessible directly via the B3349 Barkham Road/CR2.
- 3.4.5 This station is served by the Great Western Railway and South Western Railway lines which offer frequent services to a range of local and regional locations including Reading, London, Redhill and Gatwick Airport.

3.5 Existing method of travel to work

2011 Census data

- 3.5.1 2011 Census Method of Travel to Work (QS701EW) data has been reviewed to determine the forecast modal share of extant trips to work made by staff in the area of the development proposals. The site lies within the boundary of Wokingham 016 (E02003454) Middle-Layer Super Output Area (MSOA).
- 3.5.2 2011 census data was used instead of 2021 census data as this was during COVID-19 and would not have provided a fair result.
- 3.5.3 Data from this MSAO has been used to inform the modal split and is shown at Table 3.1.

Table 3.1: Modal split of employees in Wokingham 016

Mode	Percentage (%)
Driving a car or van	81
Train	4
On foot	10
Passenger in a car or van	4
Bicycle	1
Bus, minibus or coach	0
Total	100

- 3.5.4 The review of the 2011 Census method of travel to work data for Wokingham 016 indicates that driving is the most popular method of travel to work at 81%, with on foot comprising the second most popular modal choice at 10%.

3.6 Accessibility summary

- 3.6.1 The site benefits from existing good quality connections with established walking, cycling and public transport routes through the surrounding commercial and residential areas.
- 3.6.2 A number of local residential areas, as well as Wokingham Town Centre, are within 1km walking and cycling distances. A review of the key local walking and cycling routes demonstrates that pedestrians benefit from a good standard of infrastructure provision which offers a realistic and attractive option for travel to and from the local and even wider regional areas.

- 3.6.3 There are bus services within the vicinity of the site which provide access to Wokingham Town Centre and other local destinations. Furthermore, Wokingham train station is situated just 950m north of the site, offering accessible travel to a range of regional destinations including London hub stations. This offers a realistic potential for multi-modal journeys to local and regional destinations.
- 3.6.4 The choice of travel options within the vicinity of the site offers a realistic potential for trips to and from the site to be made via non-car modes. The accessible location will, therefore, encourage and promote sustainable travel behaviour.
- 3.6.5 The census data shows that driving by car is the most popular method of travel to work. The measures the development seeks to implement are designed to affect a modal shift away from the use of single occupancy vehicles used by staff on the site.

4. Development proposals

4.1 Scheme overview

Existing site

4.1.1 The existing Sapphire Centre has recently been refurbished which included demolishing the existing Apacor building, and a new building being constructed on the site. The new development, which was consented planning permission in 2022, consists of a 2,285 sqm commercial/industrial unit.

4.1.2 A summary of the scheme is set out below:

- » Construction of new Apacor facility with the two existing units to be incorporated into new single unit;
- » Retained vehicular access from Fishponds Road;
- » Utilise the retained existing rear access via Eastheath Avenue;
- » Amended car park arrangement with access from Fishponds Road serving 19 spaces;
- » Servicing and delivery access off Fishponds Road; and,
- » Provision of 13 cycle parking spaces which will be located at the front and rear car park.

Existing access arrangements

4.1.3 As part of the recent redevelopment of the site, the existing site access was retained which currently serves Sapphire Centre. The access is gated and is c.5.5m in width giving access to the proposed surface car park arrangement.

4.1.4 To the rear of the development, the existing access via the Cedar House industrial units is being utilised which gives access to Eastheath Avenue.

4.2 Proposed development

4.2.1 This Transport Statement has been produced in support of the Phase 2 development to the site, which consists of an extension to the rear of the existing development. The plan is to 'link' the current site with the existing CODAN building so they can expand operations further. The circulation link area will be 170 sqm and the existing CODAN warehouse is 840 sqm, totalling 1,010 sqm.

4.2.2 The site layout is shown at Figure 4.1 and attached at Appendix C.

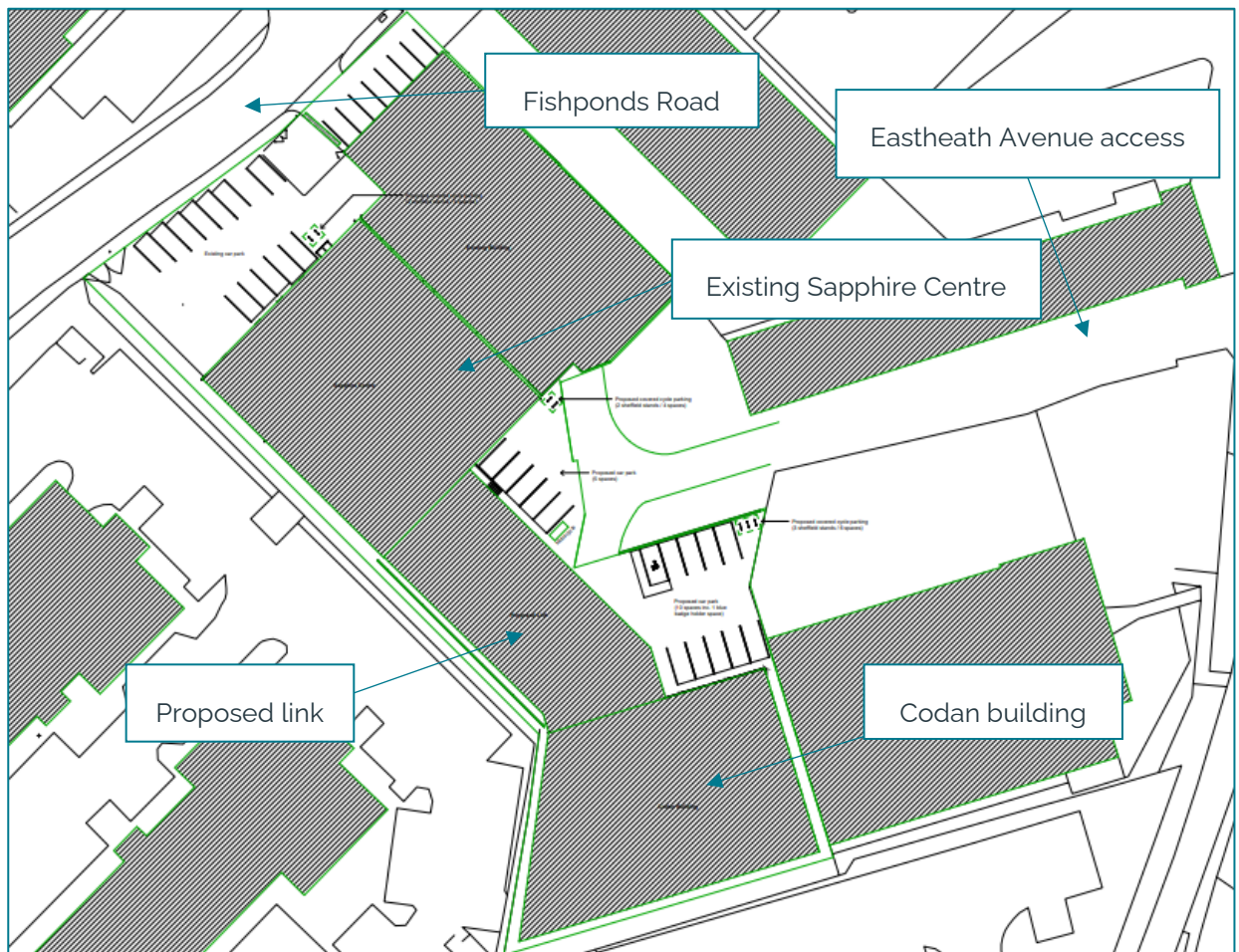


Figure 4.1: Site layout

4.2.3 Access to the proposed development will be gained through the existing commercial premises, off Fishponds Road, or via the lane to the rear off Eastheath Avenue. Both of which the client has right of access over.

4.3 Access arrangements

4.3.1 The development site is to retain the existing site access, which currently serves the Sapphire Centre. The access is gated and is c.5.5m in width giving access to the proposed surface car park arrangement.

4.3.2 To the rear of the proposed development the existing access via the Cedar House industrial units is to be utilised giving access to Eastheath Avenue.

4.3.3 Swept path analysis of a fire tender accessing the rear car park has been undertaken, and is attached at Appendix D.

4.4 Staff

4.4.1 The purpose of the proposed extension is to provide additional warehouse space and potential for increased manufacturing. This, however, will not result in an increase in staff numbers, and it is anticipated that the number of people currently employed onsite will remain the same.

4.4.2 Apacor Ltd have confirmed that a maximum of 50 staff could work on-site at any one time. These staff would mainly be located within in the Sapphire Centre building, with 2-3 staff in the warehouse.

- 4.4.3 Due to the nature of work onsite, it is anticipated that there will be no shift patterns or hybrid working. Based on a recent travel survey of the current staff that are employed onsite, it is likely that a total of 35 (70%) staff will travel to work via car, with the remaining 15 staff (30%) travelling by alternative modes.
- 4.4.4 This is an improvement on the 2011 travel to work census data set out in Chapter 3 above which states that 81% of people are likely to drive to work, with the remaining 19% travelling by sustainable modes such as walking, train, bike or lift share.

4.5 Car parking provision

Wokingham parking standard

- 4.5.1 The Wokingham Borough Council Managing Development Delivery (MDD) Local Plan (adopted 2014) sets out the car, cycle and motorcycles standards for provision within new developments. Table 4.1 sets out the parking standards for use class B2 (general industrial) development.

Table 4.1: Wokingham Borough Council Car, Cycle and Motorcycle Parking Standards

Use Class	Car Parking Allocation	Cycle Parking Allocation	PTW Parking
B2	Above 250 sqm = 1 space per additional 50 sqm	1 space per 200 sqm	1 space per 20 car parking spaces up to 100 car parking spaces.

- 4.5.2 Paragraph 0.3 of Appendix 2 within the MDD it states that *'the parking standards should be regarded only as a starting point in any discussions with Borough Council as it should be recognised that each development site will need to be assessed on its own merits'*, highlighting that there is a degree of flexibility pertaining to car parking provision for new developments.
- 4.5.3 Paragraph 0.2 of Appendix 2 within the Car Parking Standards states that *'it will be the responsibility of the developer to prove that parking provision has been adequately catered for on a proposed site'*, going on to state that *'the developer must prove that parking will not have a detrimental effect on traffic safety or on the character of an area due to an increase in parking on the public highway'*.

Car parking provision

- 4.5.4 As part of the development, it is proposed that a total of 15 spaces will be provided to the rear of the main building with access from Eastheath Avenue, together with the existing 19 spaces which are currently provided at the existing Sapphire Centre car park on Fishponds Road. This provides a combined total of 34 spaces on site.
- 4.5.5 All the servicing and delivery trips will continue to be carried out at the front car park, therefore, only staff will use the proposed rear car park.
- 4.5.6 As requested by the Local Highway Authority as part of the pre-app response, the car parking spaces to the rear of the site have been designed in accordance with Wokingham Borough Council car parking standards and measure 2.5m x 5m.
- 4.5.7 Apacor Ltd have confirmed that the staff numbers are unlikely to increase as part of the proposed extensions, with a maximum of 50 staff working on-site at any one time, this would mainly be in the Sapphire Centre building with 2-3 staff in the warehouse. Based on a recent staff travel survey, it is likely that a total of 35 staff would travel to work by car, with the rest by other means. The proposed provision of 34 spaces is therefore appropriate.

- 4.5.8 This approach confirms that operationally the level of car parking proposed is 'adequately catered for' within the development site and would not result in a 'an increase in parking on the public highway' in line with paragraph 0.2 of Appendix 2 of the WBC MDD.

Disabled parking provision

- 4.5.9 Guidance for the recommended quantity of disabled parking spaces is set out at Appendix 2 of the WBC MDD. For car parks that consist of 10-50 bays, two bays plus 3% of spaces are recommended as disabled parking spaces, with 2-4 bays designated as "Blue Badge" bays.
- 4.5.10 When applied to the development site proposal of 34 parking spaces, this constitutes a recommended provision of two disabled parking bays. As part of the development proposals one disabled bay will be provided at the front (Fishponds Road) and one at the rear (Eastheath Avenue) of Sapphire Centre.

Cycle parking provision

- 4.5.11 Based on the WBC standards, a total of seven cycle parking spaces are required to be considered policy compliant for the proposed development. The site currently provides a total of 14 cycle parking spaces in the form of seven Sheffield type stands, and this will remain for the proposed site. The size of the building is increasing, but the likely operations and number of staff are remaining the same, therefore, there is no need to provide any 'additional' parking, compared to the existing use.
- 4.5.12 The cycle parking spaces are located in the front and rear car park in the following locations:
- » Two stands at the north of the rear car park;
 - » Three stands adjacent to the disabled parking space in the rear car park; and,
 - » Two stands adjacent to existing Sapphire Centre building in the front car park.
- 4.5.13 The location of the existing cycle parking racks, which will remain as part of the development proposals, are shown in Figure 4.2 below.



Figure 4.2: Cycle parking

Powered two wheelers (motorcycles) provision

- 4.5.14 Based on the WBC standards, one motorcycle space is required for the new development. This will be provided within the rear car park adjacent to the CODAN warehouse.

4.6 Servicing and delivery arrangements

- 4.6.1 The proposed development would be serviced for deliveries and waste collection as per the existing arrangement from Fishponds Road.
- 4.6.2 Swept path analysis has been carried out to show that a range of vehicles that are likely to access the development can manoeuvre on-site and exit in a forward gear. This includes:
- » A 11.3m refuse vehicle;
 - » 10m Ridid vehicle;
 - » 8.6m fire tender;
 - » 7.5t panel van; and,
 - » A large car
- 4.6.3 These swept paths are presented in full in Appendix D. This also includes a swept path analysis for an 11.3m refuse vehicle and a typical delivery vehicle manoeuvring within the existing car park to the front of the building, to confirm that servicing can be achieved from Fishponds Road.

5. Traffic generation and impact assessment

5.1 Introduction

- 5.1.1 This section sets out the forecast trip generation of the proposed development site.. A comparison between the existing trip generation and the development proposal trip generation has been undertaken with reference to the TRICS database. The TRICS outputs are included as Appendix E.

5.2 Existing trip generation

- 5.2.1 The existing trip generation for the Sapphire Centre (2,285 sqm) is shown below in Table 5.1, based on its current industrial use:

Table 5.1: Existing vehicle trip generation

Peak Hour(s)/Daily:	Existing Trip Generation (2,285 sqm)		
	Arrivals	Departures	Two-way
AM Peak (0800-0900)	7	3	10
PM Peak (1700-1800)	1	4	5
12-hour (7am-7pm)	41	44	85

CODAN site trip generation

- 5.2.2 Table 5.2 shows the trip generation for the existing CODAN warehouse (838 sqm) located to the rear of the development site. This is based on its existing mixed office / industrial use.

Table 5.2: CODAN existing vehicle trip generation

Peak Hour(s)/Daily:	CODAN Existing Trip Generation (838 sqm)		
	Arrivals	Departures	Two-way
AM Peak (0800-0900)	3	1	4
PM Peak (1700-1800)	0	2	2
12-hour (7am-7pm)	15	16	31

Combined existing trip generation

- 5.2.3 The above values have been combined to give the total existing traffic attraction of the site:

Table 5.3: Combined existing vehicle trip generation

Peak Hour(s)/Daily:	Combined Existing Trip Generation		
	Arrivals	Departures	Two-way
AM Peak (0800-0900)	10	4	14
PM Peak (1700-1800)	1	6	7
12-hour (7am-7pm)	56	60	116

5.3 Proposed trip generation

- 5.3.1 As part of the development, the existing CODAN building will be converted to a Warehouse use, and likely to result in a reduction in vehicle trips. However, as a worst case, the values from Table 5.2 above for the existing CODAN floor area have been retained, and a trip generation of the new link has been undertaken to calculate the additional traffic that is likely to be generated by the development proposals.
- 5.3.2 The trip rates derived to establish the existing Sapphire Centre traffic generation have been applied to the proposed floorspace for the new link building (168 sqm). The likely trip generation for the proposed development is set out in Table 5.4 below.

Table 5.4: Vehicle trip generation: Proposed Link (168 sqm)

Peak Hour(s)/Daily:	Proposed Trip Generation (168 sqm)		
	Arrivals	Departures	Two-way
AM Peak (0800-0900)	1	0	1
PM Peak (1700-1800)	0	0	0
12-hour (7am-7pm)	3	3	6

- 5.3.3 The proposed development therefore represents a very minor increase in the site's traffic attraction and would have no material impact on the operation of the local highway network.
- 5.3.4 As a result, the development proposals would not exacerbate any existing capacity issues at local junctions or create any highway safety concerns. As such, the proposals will not have a severe impact on the operation of the local road network or an unacceptable impact on highway safety.

6. Summary and conclusions

6.1 Summary

- 6.1.1 Hydrock has prepared this Transport Statement (TS) on behalf of Apacor Ltd in support of a planning application for redevelopment of the existing Sapphire Centre on Fishponds Road, Wokingham.
- 6.1.2 This TS has been produced to provide the necessary information for the local authority to consider the merits of the development in terms of accessibility, highway safety and the impact of the development traffic on the local highway network.

6.2 Sustainability and accessibility

- 6.2.1 The site is within a highly sustainable location, close to Wokingham Town Centre which offers a wide range of public transport, education, retail and healthcare facilities within walking distance of the site.
- 6.2.2 A good provision of existing walking and cycling routes are available from the site and local bus services provide access to Wokingham Town Centre and other local destinations. Furthermore, Wokingham train station is close to the site and offers a range of services to local and national locations, including London hub stations. Therefore, there are ample opportunities for potential future employees of the site to be able to travel by sustainable modes of transport, which is consistent with the policies set out in paragraph 108 of the NPPF.

Pedestrians and cyclists

- 6.2.3 Access for pedestrians and cyclists has been considered and existing infrastructure is suitable to accommodate the proposed development, which is in line with the requirements of paragraph 108. of the NPPF.

Road safety

- 6.2.4 A review of Personal Injury Accident data covering the latest available five-year period has been undertaken which has confirmed that two accidents occurred on the local road network surrounding the site. On review these accidents do not represent an existing highway safety concern.

6.3 Development proposals

- 6.3.1 This TS has been produced in support of a Planning Application for a Phase 2 development, located to the rear of the existing Sapphire Centre. As part of this planning application, it is proposed to 'link' the current building with a proposed extension located to the rear.

Vehicular access

- 6.3.2 As part of the proposed extension access will remain as existing, through the existing commercial premises, off Fishponds Road, or via the lane to the rear off Eastheath Avenue. The client has rights of access over both of these.

Car parking provision

- 6.3.3 The car parking spaces to the rear of the site have been designed in accordance with Wokingham Borough Council car parking standards and measure 2.5m x 5m.
- 6.3.4 The development proposals include the provision of 34 car parking spaces. This is in line with the guidance set out by WBC within their MDD, which allows for flexibility in the level of parking if it will not have an adverse effect on parking in the surrounding road network. The 2011 travel to work

data confirms that operationally the level of car parking provision provided on-site would meet the demand of those likely to travel to the site by private car.

Cycle parking provision

- 6.3.5 A total of 14 cycle parking spaces provided onsite (with four provide at the front and 10 within the rear car park). This provision is in excess of the required parking standards and will remain as part of the proposed development.

Traffic generation

- 6.3.6 The development proposals represent a very minor increase in traffic when compared to the existing use on the site, and is not considered to result in a severe impact on the local highway network, as required at paragraph 115 of the NPPF if a scheme is to be refused on highway grounds.

Servicing arrangements

- 6.3.7 Swept path analysis has been undertaken and confirms that the development site can be adequately serviced by a fire tender at the rear car park.

6.4 Conclusion

- 6.4.1 In conclusion, in light of the assessment undertaken and presented within this report, it is considered that there are no significant highways or transportation matters that should preclude the Local Planning Authority from approving this planning application.

Appendix A Road safety records



Validated Data

Crash Date: Tuesday, August 10, 2021

Time of Crash: 12:15:00

Crash Reference: 2021430357947

Highest Injury Severity: Slight

Road Number: U

Casualties: 1

Highway Authority: Wokingham

Vehicles: 2

Local Authority: Wokingham

OS Grid Reference: 480382 167976

Weather Description: Fine without high winds

Road Surface Description: Dry

Speed Limit: 30

Light Conditions: Daylight: regardless of presence of streetlights

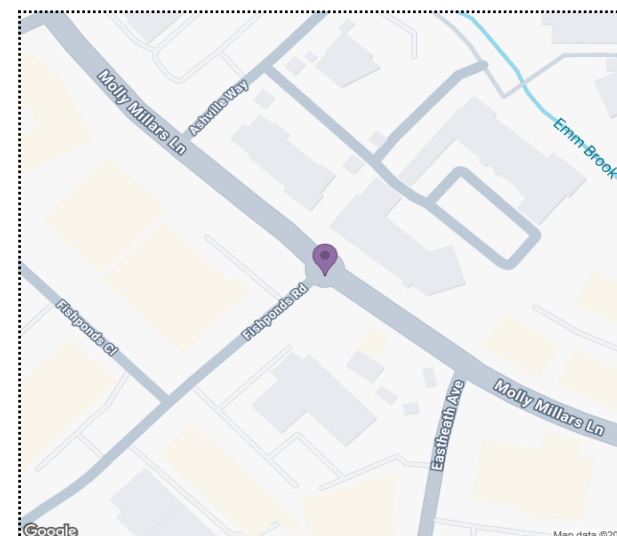
Carriageway Hazards: None

Junction Detail: Mini roundabout

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:

Tuesday, August 10, 2021

Time of Crash: 12:15:00

Crash Reference: 2021430357947

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	Pedal cycle	-1	Male	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Unknown	None	None
2	Car (excluding private hire cars 2005 onwards)	3	Male	Unknown	Vehicle is in the act of turning right	Nearside	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	56 - 65	Unknown or other	Unknown or other

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

Highest Injury Severity: Slight

Highway Authority: Wokingham

Local Authority: Wokingham

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: Mini roundabout

Junction Pedestrian Crossing: No physical crossing facility within 50 metres

Road Type: Single carriageway

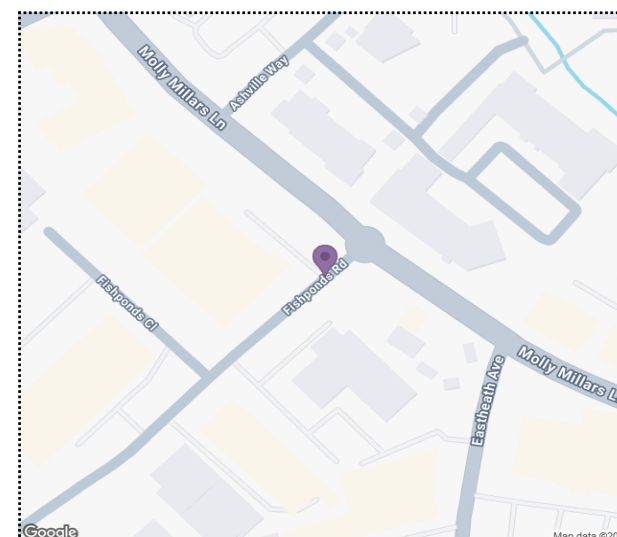
Junction Control: Give way or uncontrolled

Road Number: U

Casualties: 1

Vehicles: 2

OS Grid Reference: 480368 167965



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

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire cars 2005 onwards)	-1	Male	Unknown	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None
2	Pedal cycle	-1	Male	Unknown	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Unknown	None	None

Casualties

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

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

Appendix B

Bus timetables

COURTNEY BUSES

Wokingham to Crowthorne	125
Wokingham to Pinewood Crossroads via Crowthorne	125A
Wokingham to Crowthorne via Pinewood Crossroads	125B

Monday to Friday

Ref.No.: 2009

Service No	125B	125B	125	125	125	125A	125A
Wokingham, Broad Street			0950	1155	1400		
Wokingham Station Interchange	0719	0832				1714	1809
Wokingham, Tesco			0958	1203	1408		
California Crossroads	0728	0843	1006	1211	1416	1726	1821
High Street						1739	
Pinewood Crossroads	0736	0853					
Crowthorne, The Prince			1020	1225	1430		
Pinewood Crossroads						1744	

Crowthorne to Wokingham	125
Pinewood Crossroads to Wokingham via Crowthorne	125A
Crowthorne to Wokingham via Pinewood Crossroads	125B

Service No	125A	125A	125	125	125	125B	125B
Pinewood Crossroads		0740					
Crowthorne, The Prince		0746	1020	1225	1430		
Pinewood Crossroads						1645	1745
California Crossroads	0708	0758	1030	1235	1440	1652	1752
Wokingham, Tesco			1035	1240	1445		
Wokingham Station Interchange	0717	0817	1040	1245	1450	1700	1800
Wokingham, Broad Street			1043	1248	1453		

COURTNEY BUSES

Wokingham to The Meadows
via Crowthorne

125

Saturday

Ref.No.: 2009

Service No	125	125
Wokingham, Broad Street	0950	1150
California Crossroads	1001	1200
High Street	1011	1209
The Meadows	1026	1224

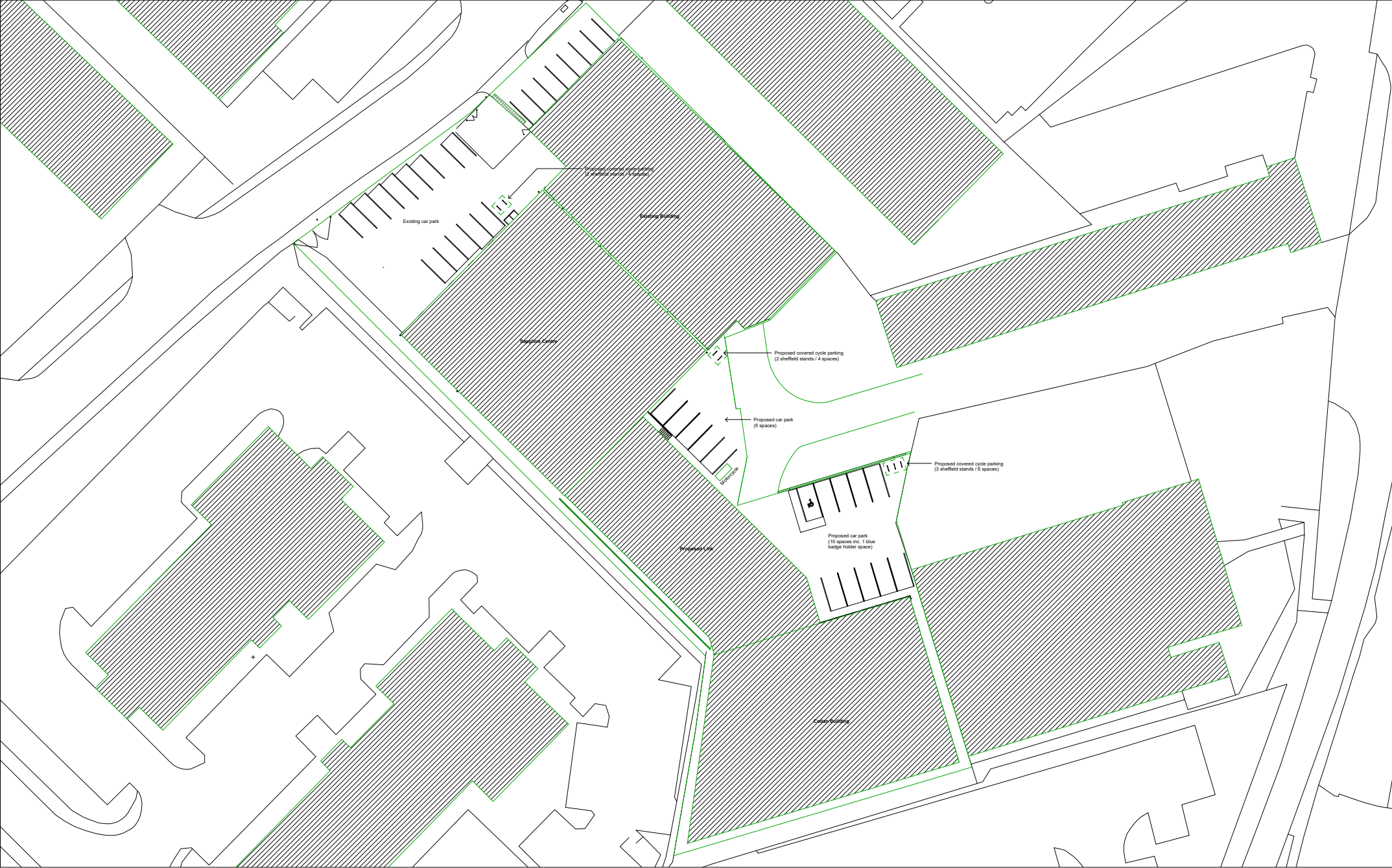
The Meadows to Wokingham
via Crowthorne

125

Service No	125	125
The Meadows	1030	1230
The New Inn	1036	1236
Crowthorne, The Prince	1044	1244
Finchampstead, California Crossroads	1056	1256
Wokingham, Broad Street	1108	1308

Appendix C

Site layout



Disclaimer
This drawing and details contained therein are copyright and are not to be reproduced without obtaining permission. All dimensions and levels relating to actual site conditions are to be checked on site prior to any works being commenced or executed. Contributions are not to scale from this drawing and should refer any queries in respect of dimensions to the designers.

Notes
These drawings indicate in general the project in terms of Architectural Design Intent to a RIBA Stage 3 level. They are for Tender purposes only and not for Construction. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the contract documents or full structural, mechanical and electrical systems. As indicated or described, the contractor shall furnish all items required for the full and proper execution and completion of the work.

The Architectural drawings should always be read in conjunction with all other relevant structure and services drawings and any other applicable contract documents. Any discrepancy between these drawings and documents should be reported for clarification and verification. The Architectural drawing is subject to Design Development at RIBA Stage 4 & 5.

Rev	Notes	Date	Dwn	Iss	Key / Location
00	Issue for Planning	05.02.25	ST	ST	

16 Old Town, London SW4 6JY
info@codanbuild.co.uk

Client
Apacor Ltd
Fishponds Lane
Wokingham
RG41 2QL

Project Codan Building			
Drawing Title Proposed Site Plan			
Scale 1 : 250	@ A1	Drawn By ST	Issued By ST
FOR PLANNING			
Project No. 24014	Drawing No. A_PL_PR_010	Revision 00	

Appendix D

Swept path analysis

P:\18000-18999\18740 - Sapphire Centre, Wokingham\01_WIP\W2_Model_2d\TP\18740-HYD-XX-XX-M2-TP-0002.dwg, 05/02/2025 14:45:17, DWG to PDF.pc3



KEY PLAN

Large Car

Overall Length 4.988m
Overall Width 1.769m
Overall Body Height 1.503m
Min Body Ground Clearance 0.287m
Track Width 1.700m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 6.200m

NOTES

NOTES (CONTINUED)

REVISIONS (CONTINUED)

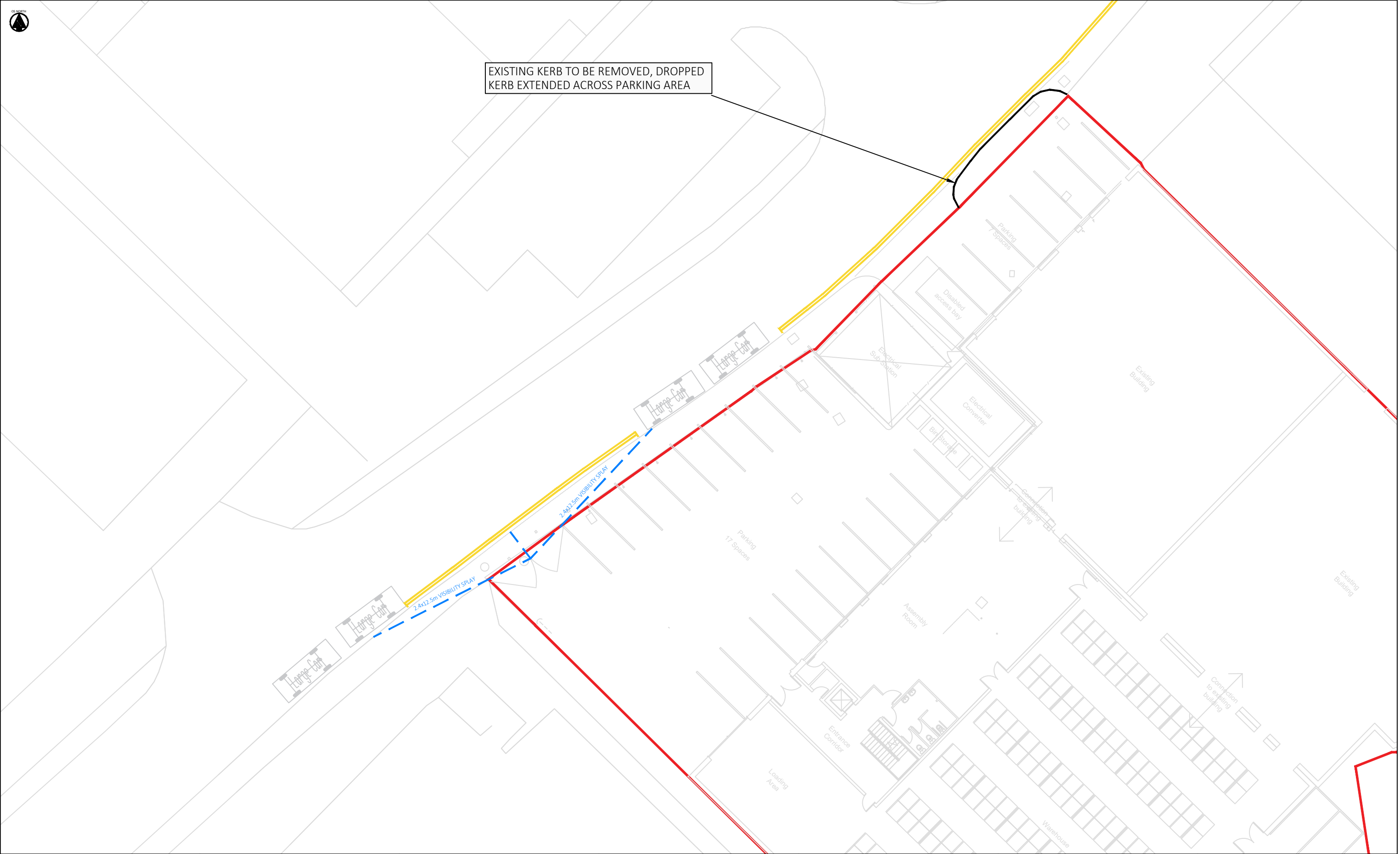
REVISIONS						
PO2 05/02/2025 Second Issue.						
				AR	LC	LC
PO1 20/06/2024 First Issue.						
				AR	LC	LC
Rev	Date	Description	By	Ckd	App	

MERCHANTS' HOUSE NORTH
WAPPING ROAD
BRISTOL
BS1 4RW
t: (0117) 9459 225
e: bristol@hydrock.com

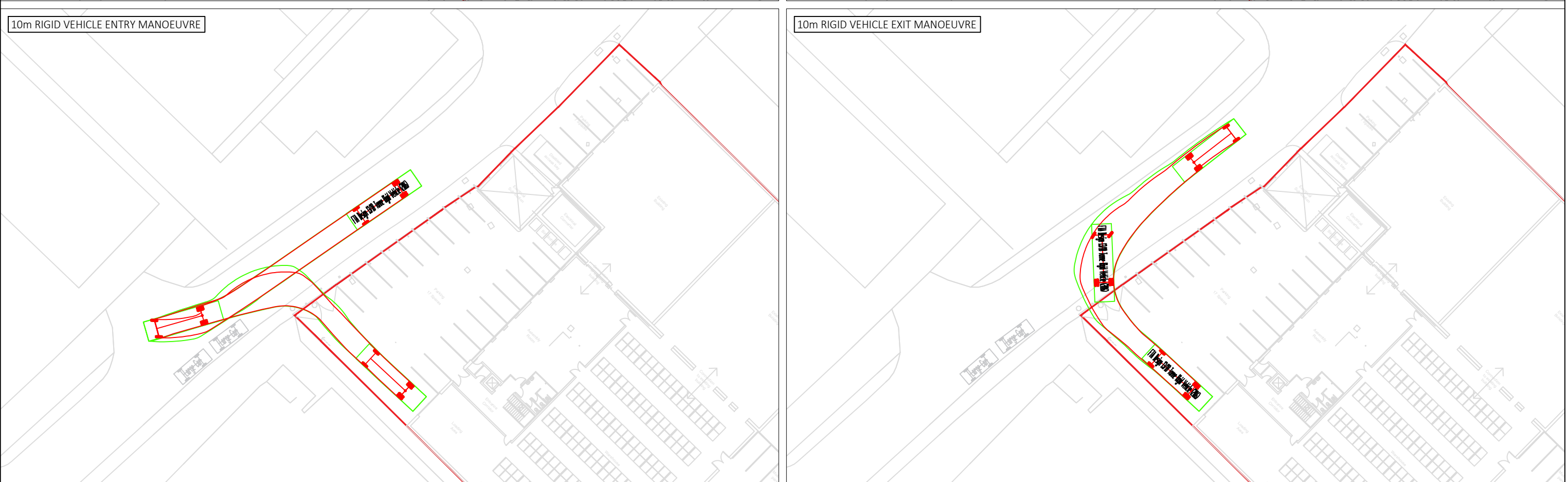
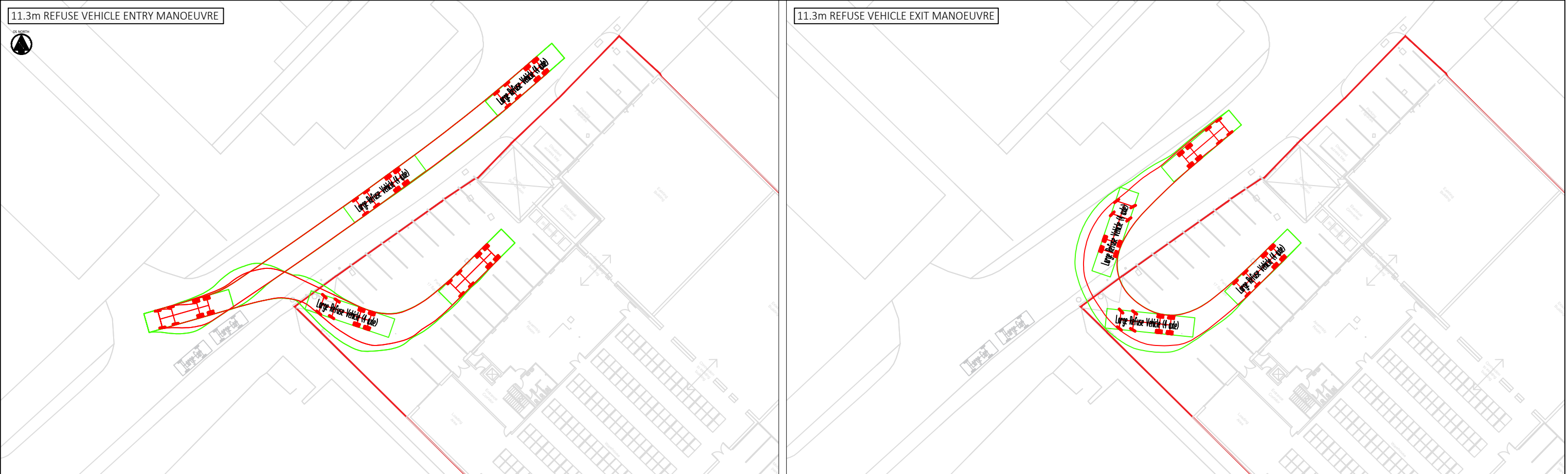
CLIENT
APACOR

PROJECT
SAPPHIRE CENTRE

TITLE SWEEP PATH ANALYSIS LARGE CAR		
HYDROCK PROJECT NO. 18740		SCALE @ A1 1:250
STATUS DESCRIPTION INFORMATION		STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 18740-HYD-XX-XX-DR-TP-0103		REVISION P02

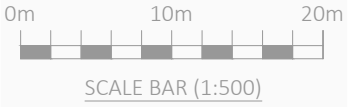


NOTES		NOTES (CONTINUED)	REVISIONS (CONTINUED)	REVISIONS P01 08/06/2021 First Issue. RO LK LK Rev Date Description By Ckd App	Hydrock MERCHANTS' HOUSE NORTH WAPPING ROAD BRISTOL BS1 4RW t: (0117) 9459 225 e: bristol@hydrock.com CLIENT - PROJECT SAPPHIRE CENTRE, WOKINGHAM		SITE ACCESS VISIBILITY SPLAYS	
					HYDROCK PROJECT NO. 18740		SCALE @ A3 1:250	
					STATUS DESCRIPTION INFORMATION		STATUS S2	
					DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 18740-HYD-XX-XX-DR-TP-0001		REVISION P01	



VEHICLE MODELS USED FOR SWEEP PATH ANALYSIS		NOTES (CONTINUED)	REVISIONS (CONTINUED)	REVISIONS	Hydrock MERCHANTS' HOUSE NORTH WAPPING ROAD BRISTOL BS1 4RW t: (0117) 9459 225 e: bristol@hydrock.com CLIENT - PROJECT SAPPHIRE CENTRE, WOKINGHAM	SWEEP PATH ANALYSIS OF SERVICING VEHICLES	
Large Refuse Vehicle (4 axle) Overall Length 11.347m Overall Width 2.500m Overall Body Height 3.750m Min Body Ground Clearance 0.300m Track Width 2.500m Lock to lock time 5.00s Wall to Wall Turning Radius 11.330m FTA Design 13/18 Tonne Rigid Vehicle (2016) Overall Length 10.000m Overall Width 2.500m Overall Body Height 3.645m Min Body Ground Clearance 0.300m Track Width 2.470m Lock to lock time 3.10s Kerb to Kerb Turning Radius 11.000m				P01 08/06/2021 First Issue. RO LK LK Rev Date Description By Ckd App		HYDROCK PROJECT NO. 18740 SCALE @ A3 1:500 STATUS DESCRIPTION INFORMATION DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 18740-HYD-XX-XX-DR-TP-0002 STATUS S2 REVISION P01	

P:\18000-18999\18740 - Sapphire Centre, Wokingham\01_WIP\M2_Model_2d\TP\18740-HYD-XX-XX-M2-TP-0002.dwg, 05/02/2025 14:28:19, DWG to PDF.pc3



KEY PLAN

DB32 Fire Appliance

Overall Length 8.680m
Overall Width 2.32m
Overall Body Height 3.91m
Min Body Ground Clearance 0.337m
Max Track Width 1.21m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 7.910m

NOTES

NOTES (CONTINUED)

REVISIONS (CONTINUED)

REVISIONS					
PO2	05/02/2025	Second Issue.	AR	LC	LC
PO1	20/06/2024	First Issue.	AR	LC	LC
Rev	Date	Description	By	Ckd	App

Hydrock

CLIENT
APACOR

PROJECT
SAPPHIRE CENTRE

TITLE SWEEP PATH ANALYSIS		
FIRE TENDER		
HYDROCK PROJECT NO. 18740		SCALE @ A1 1:500
STATUS DESCRIPTION INFORMATION		STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 18740-HYD-XX-XX-DR-TP-0101		REVISION P02

P:\18000-18999\18740 - Sapphire Centre, Wokingham\01_WIP\M2_Model_2d\TP\18740-HYD-XX-XX-M2-TP-0002.dwg, 05/02/2025 14:47:01, DWG to PDF.pc3



KEY PLAN

7.5t Panel Van

Overall Length 7.20m
Overall Width 2.50m
Overall Body Height 2.544m
Min Body Ground Clearance 0.516m
Track Width 1.82m
Lock to lock time 4.00s
Kerb to kerb Turning Radius 7.40m

NOTES

NOTES (CONTINUED)

REVISIONS (CONTINUED)

REVISIONS						
PO2	05/02/2025	Second Issue.	AR	LC	LC	
PO1	20/06/2024	First Issue.	AR	LC	LC	
Rev	Date	Description	By	Ckd	App	

Hydrock

CLIENT
APACOR

PROJECT
SAPPHIRE CENTRE

MERCHANTS' HOUSE NORTH
WAPPING ROAD
BRISTOL
BS1 4RW
t: (0117) 9459 225
e: bristol@hydrock.com

TITLE		
SWEPT PATH ANALYSIS		
7.5T PANEL VAN		
HYDROCK PROJECT NO. 18740		SCALE @ A1 1:500
STATUS DESCRIPTION INFORMATION		STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 18740-HYD-XX-XX-DR-TP-0102		REVISION P02

Appendix E

TRICS Outputs

Calculation Reference: AUDIT-540501-210408-0414

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : C - INDUSTRIAL UNIT
 TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	BD BEDFORDSHIRE	1 days
	RE READING	1 days
03	SOUTH WEST	
	DV DEVON	1 days
04	EAST ANGLIA	
	NF NORFOLK	2 days
05	EAST MIDLANDS	
	NR NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS	
	HE HEREFORDSHIRE	1 days
	WM WEST MIDLANDS	1 days
08	NORTH WEST	
	CH CHESHIRE	1 days
	LC LANCASHIRE	1 days

Primary Filtering selection:

Parameter: Gross floor area
 Actual Range: 260 to 8100 (units: sqm)
 Range Selected by User: 150 to 80000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 22/10/20

Selected survey days:

Tuesday	2 days
Wednesday	1 days
Thursday	7 days

Selected survey types:

Manual count	10 days
Directional ATC Count	0 days

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	7

Selected Location Sub Categories:

Industrial Zone	9
Commercial Zone	1

Secondary Filtering selection:

Use Class:

Not Known	10 days
-----------	---------

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
10,001 to 15,000	4 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days
25,001 to 50,000	2 days

Secondary Filtering selection (Cont.):

Population within 5 miles:

50,001 to 75,000	2 days
125,001 to 250,000	8 days

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	5 days

Travel Plan:

No	10 days
----	---------

PTAL Rating:

No PTAL Present	10 days
-----------------	---------

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
-----------------------	-----	--

LIST OF SITES relevant to selection parameters

1	BD-02-C-01	PUMPS, MOTORS & FANS	BEDFORDSHIRE
	POSTLEY ROAD		
	BEDFORD		
	KEMPSTON		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	1045 sqm	
	Survey date: THURSDAY	15/10/20	Survey Type: MANUAL
2	CH-02-C-02	INDUSTRIAL MATERIALS	CHESHIRE
	JUPITER DRIVE		
	CHESTER		
	CHESTER W. EMP. PARK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	8100 sqm	
	Survey date: WEDNESDAY	19/11/14	Survey Type: MANUAL
3	DV-02-C-02	ENERGY RECOVERY FACILITY	DEVON
	GRACE ROAD SOUTH		
	EXETER		
	MARSH BARTON TRAD. EST.		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	3513 sqm	
	Survey date: THURSDAY	06/07/17	Survey Type: MANUAL
4	HE-02-C-02	THERMAL PROCESSING	HEREFORDSHIRE
	COLLEGE ROAD		
	HEREFORD		
	BURCOTT		
	Edge of Town		
	Commercial Zone		
	Total Gross floor area:	1880 sqm	
	Survey date: TUESDAY	22/10/13	Survey Type: MANUAL
5	LC-02-C-04	POWDER COATINGS	LANCASHIRE
	CHORLEY ROAD		
	BLACKPOOL		
	LITTLE CARLETON		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	1010 sqm	
	Survey date: THURSDAY	20/06/19	Survey Type: MANUAL
6	NF-02-C-03	SHEET METAL CONTRACTOR	NORFOLK
	ELVIN WAY		
	NORWICH		
	HELLESDON		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	260 sqm	
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL
7	NF-02-C-04	EXHIBITION DESIGN & MANUF.	NORFOLK
	FLETCHER WAY		
	NORWICH		
	UPPER HELLESDON		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	690 sqm	
	Survey date: THURSDAY	14/11/19	Survey Type: MANUAL
8	NR-02-C-02	RENEWABLE ENGINEERING	NORTHAMPTONSHIRE
	TREVITHICK ROAD		
	CORBY		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	702 sqm	
	Survey date: THURSDAY	22/10/20	Survey Type: MANUAL
9	RE-02-C-01	SHEET METAL FABRICATION	READING
	COMMERCIAL ROAD		
	READING		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	645 sqm	
	Survey date: THURSDAY	22/11/12	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

10

WM-02-C-03

INDUSTRIAL GLASS

WEST MIDLANDS

DOWNING STREET

SMETHWICK

Edge of Town

Industrial Zone

Total Gross floor area: 5070 sqm

Survey date: TUESDAY 06/11/12

Survey Type: MANUAL

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CB-02-C-01	not comparable
DV-02-C-01	site not comparable - too large
HC-02-C-01	site not comparable - too large
LC-02-C-03	not comparable

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	874	0.000	2	874	0.000	2	874	0.000
06:00 - 07:00	2	874	0.057	2	874	0.172	2	874	0.229
07:00 - 08:00	10	2292	0.209	10	2292	0.048	10	2292	0.257
08:00 - 09:00	10	2292	0.323	10	2292	0.135	10	2292	0.458
09:00 - 10:00	10	2292	0.271	10	2292	0.166	10	2292	0.437
10:00 - 11:00	10	2292	0.148	10	2292	0.127	10	2292	0.275
11:00 - 12:00	10	2292	0.118	10	2292	0.140	10	2292	0.258
12:00 - 13:00	10	2292	0.192	10	2292	0.218	10	2292	0.410
13:00 - 14:00	10	2292	0.188	10	2292	0.175	10	2292	0.363
14:00 - 15:00	10	2292	0.109	10	2292	0.100	10	2292	0.209
15:00 - 16:00	10	2292	0.122	10	2292	0.148	10	2292	0.270
16:00 - 17:00	10	2292	0.065	10	2292	0.288	10	2292	0.353
17:00 - 18:00	10	2292	0.039	10	2292	0.196	10	2292	0.235
18:00 - 19:00	10	2292	0.031	10	2292	0.183	10	2292	0.214
19:00 - 20:00	2	874	0.057	2	874	0.114	2	874	0.171
20:00 - 21:00	2	874	0.000	2	874	0.000	2	874	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.929			2.210			4.139

Parameter summary

Trip rate parameter range selected: 260 - 8100 (units: sqm)
 Survey date range: 01/01/10 - 22/10/20
 Number of weekdays (Monday-Friday): 10
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 4

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	874	0.000	2	874	0.000	2	874	0.000
06:00 - 07:00	2	874	0.000	2	874	0.000	2	874	0.000
07:00 - 08:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
08:00 - 09:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
09:00 - 10:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
10:00 - 11:00	10	2292	0.004	10	2292	0.004	10	2292	0.008
11:00 - 12:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
12:00 - 13:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
13:00 - 14:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
14:00 - 15:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
15:00 - 16:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
16:00 - 17:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
17:00 - 18:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
18:00 - 19:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
19:00 - 20:00	2	874	0.000	2	874	0.000	2	874	0.000
20:00 - 21:00	2	874	0.000	2	874	0.000	2	874	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.004			0.004			0.008

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	874	0.000	2	874	0.000	2	874	0.000
06:00 - 07:00	2	874	0.000	2	874	0.000	2	874	0.000
07:00 - 08:00	10	2292	0.031	10	2292	0.022	10	2292	0.053
08:00 - 09:00	10	2292	0.061	10	2292	0.052	10	2292	0.113
09:00 - 10:00	10	2292	0.079	10	2292	0.070	10	2292	0.149
10:00 - 11:00	10	2292	0.022	10	2292	0.031	10	2292	0.053
11:00 - 12:00	10	2292	0.048	10	2292	0.061	10	2292	0.109
12:00 - 13:00	10	2292	0.087	10	2292	0.100	10	2292	0.187
13:00 - 14:00	10	2292	0.079	10	2292	0.057	10	2292	0.136
14:00 - 15:00	10	2292	0.031	10	2292	0.017	10	2292	0.048
15:00 - 16:00	10	2292	0.031	10	2292	0.048	10	2292	0.079
16:00 - 17:00	10	2292	0.013	10	2292	0.035	10	2292	0.048
17:00 - 18:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
18:00 - 19:00	10	2292	0.004	10	2292	0.000	10	2292	0.004
19:00 - 20:00	2	874	0.000	2	874	0.000	2	874	0.000
20:00 - 21:00	2	874	0.000	2	874	0.000	2	874	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.486			0.493			0.979

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
 PSVS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	874	0.000	2	874	0.000	2	874	0.000
06:00 - 07:00	2	874	0.000	2	874	0.000	2	874	0.000
07:00 - 08:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
08:00 - 09:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
09:00 - 10:00	10	2292	0.004	10	2292	0.004	10	2292	0.008
10:00 - 11:00	10	2292	0.004	10	2292	0.000	10	2292	0.004
11:00 - 12:00	10	2292	0.000	10	2292	0.004	10	2292	0.004
12:00 - 13:00	10	2292	0.004	10	2292	0.004	10	2292	0.008
13:00 - 14:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
14:00 - 15:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
15:00 - 16:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
16:00 - 17:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
17:00 - 18:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
18:00 - 19:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
19:00 - 20:00	2	874	0.000	2	874	0.000	2	874	0.000
20:00 - 21:00	2	874	0.000	2	874	0.000	2	874	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.012			0.012			0.024

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	874	0.000	2	874	0.000	2	874	0.000
06:00 - 07:00	2	874	0.000	2	874	0.000	2	874	0.000
07:00 - 08:00	10	2292	0.004	10	2292	0.000	10	2292	0.004
08:00 - 09:00	10	2292	0.009	10	2292	0.000	10	2292	0.009
09:00 - 10:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
10:00 - 11:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
11:00 - 12:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
12:00 - 13:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
13:00 - 14:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
14:00 - 15:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
15:00 - 16:00	10	2292	0.000	10	2292	0.000	10	2292	0.000
16:00 - 17:00	10	2292	0.000	10	2292	0.022	10	2292	0.022
17:00 - 18:00	10	2292	0.000	10	2292	0.022	10	2292	0.022
18:00 - 19:00	10	2292	0.000	10	2292	0.013	10	2292	0.013
19:00 - 20:00	2	874	0.000	2	874	0.000	2	874	0.000
20:00 - 21:00	2	874	0.000	2	874	0.000	2	874	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.013			0.057			0.070