



ttp consulting
transport planning specialists

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**BARTON BUILDINGS,
ARUNDEL ROAD, HILLINGDON**

Transport Statement

May 2021

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1 INTRODUCTION

- 1.1 TTP Consulting has been appointed to provide highways and transport advice associated with the proposals to redevelop Barton Buildings within the Uxbridge Industrial Estate, UB8 2SN, in the London Borough of Hillingdon. The Site location is shown at **Figure 1.1**.

Figure 1.1 – Site Layout Plan



- 1.2 The Site currently comprises a single storey warehouse with a gross floor area of circa 1,437sqm with Class E (g), Class B2 and Class B8 uses permitted. The front of the warehouse is set back from Arundel Road with car parking provided in front of the building and accessed off Arundel Road.
- 1.3 Planning exists for the demolition of the existing warehouses and to provide a replacement albeit smaller 1,246sqm warehouse providing two units with parking for 13 vehicles and 8 bicycles as illustrated on the plans in **Appendix A**.
- 1.4 The proposals associated with this application are for 1,365sqm of floorspace and parking for 12 cars, with the same quantum of ground floor space as currently permitted with marginally more amenity space and provided as a single unit with a reconfiguration of the service yard and car parking as illustrated on the plans in **Appendix B** to suit an incoming tenant.

2 EXISTING SITUATION

Site and Surrounding Area

- 2.1 The Site is located within the Uxbridge Industrial Estate and comprises a single warehouse which has a gross floor area of circa 1,437sqm with Use Class E (g), B2 and B8 permitted.
- 2.2 Pedestrian and vehicle access is taken off Arundel Road which bounds the east of the Site. Access to a service yard capable of accommodating vehicles up to and including an 8m rigid vehicle is taken via a service road that runs along the northern boundary of the Site, with an alleyway running along the southern boundary of the Site.
- 2.3 Vehicle parking is provided along the Site frontage on Arundel Road where five marked parking spaces are marked. Further spaces are located to the rear of the Site which is also used for deliveries and servicing with access provided to the north of the Site. A substation is located within the service yard.
- 2.4 The surrounding area is characterised by industrial uses, with the River Colne located to the west of the Industrial Estate.

Local Highway Network

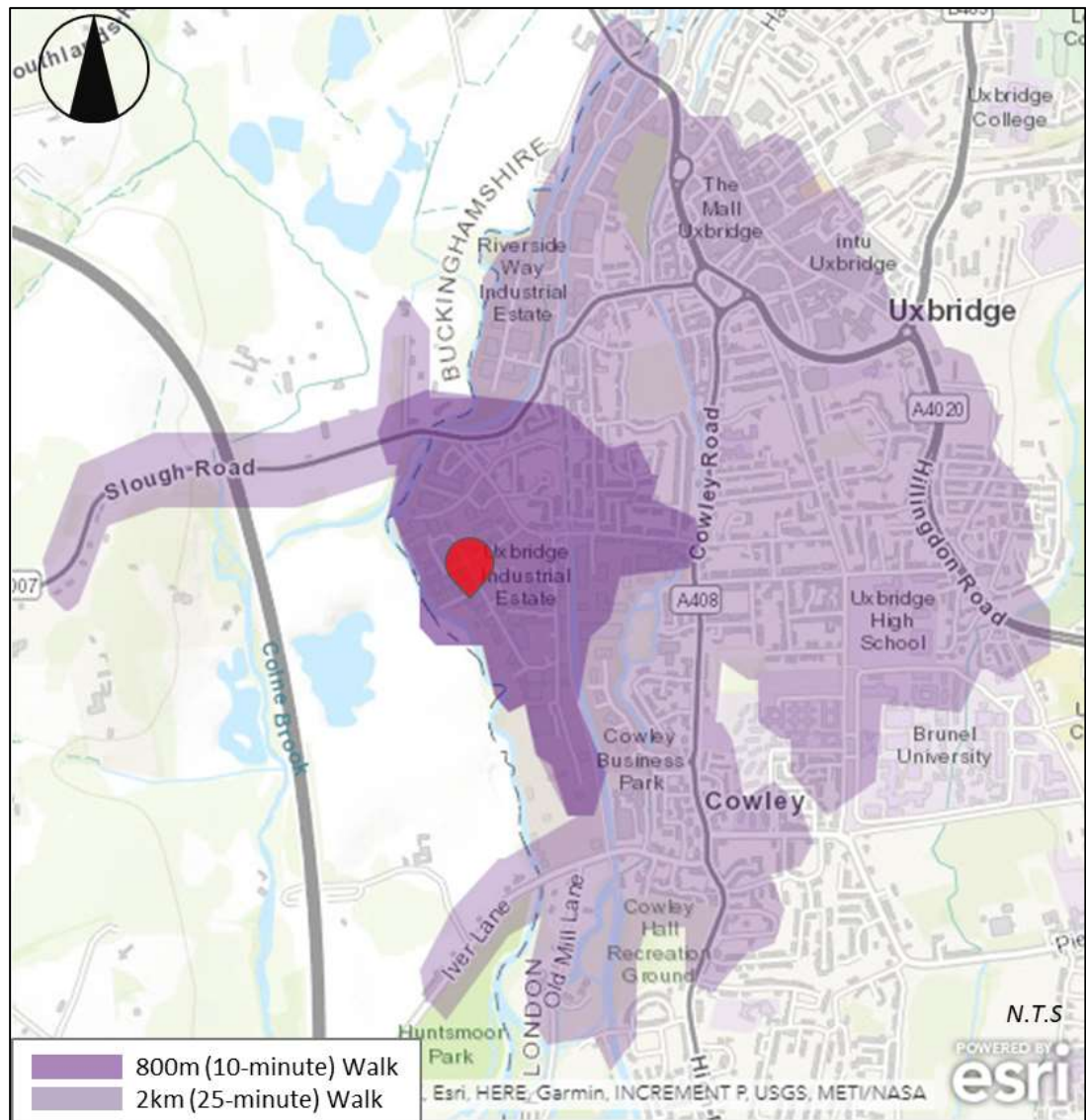
- 2.5 Arundel Road bounds the east of the Site and provides a route through the Industrial Estate from Ashley Road to Wallingford Road. It provides a single lane of traffic in either direction and has unrestricted parking along either side. Access to Chiltern Business Village bounds the northern boundary of the Site.
- 2.6 Cowley Mill Road which is located to the north of the Site facilitates access to the Industrial Estate is a single carriageway road with one lane in each direction. The junctions with accesses to the Industrial Estate operate under priority control, with a weight restriction of 17t to / from Cowley Road to the east over the canal with larger vehicles required to use the route to the north-west via St. Johns Road.

Accessibility

Walking

- 2.7 Roughly half of all walking journeys in London are part of longer public transport journeys, for example walking to or from the bus stop or tube / train station, whilst a third of car journeys are less than 2km, i.e. within a 25-minute walk suggesting there are real opportunities for active modes to replace the car. **Figure 2.1** illustrates the extent of the 1km and 2km catchment zone surrounding the Site which includes Uxbridge town centre and Uxbridge Underground Station.

Figure 2.1 – Walking Isochrone Map

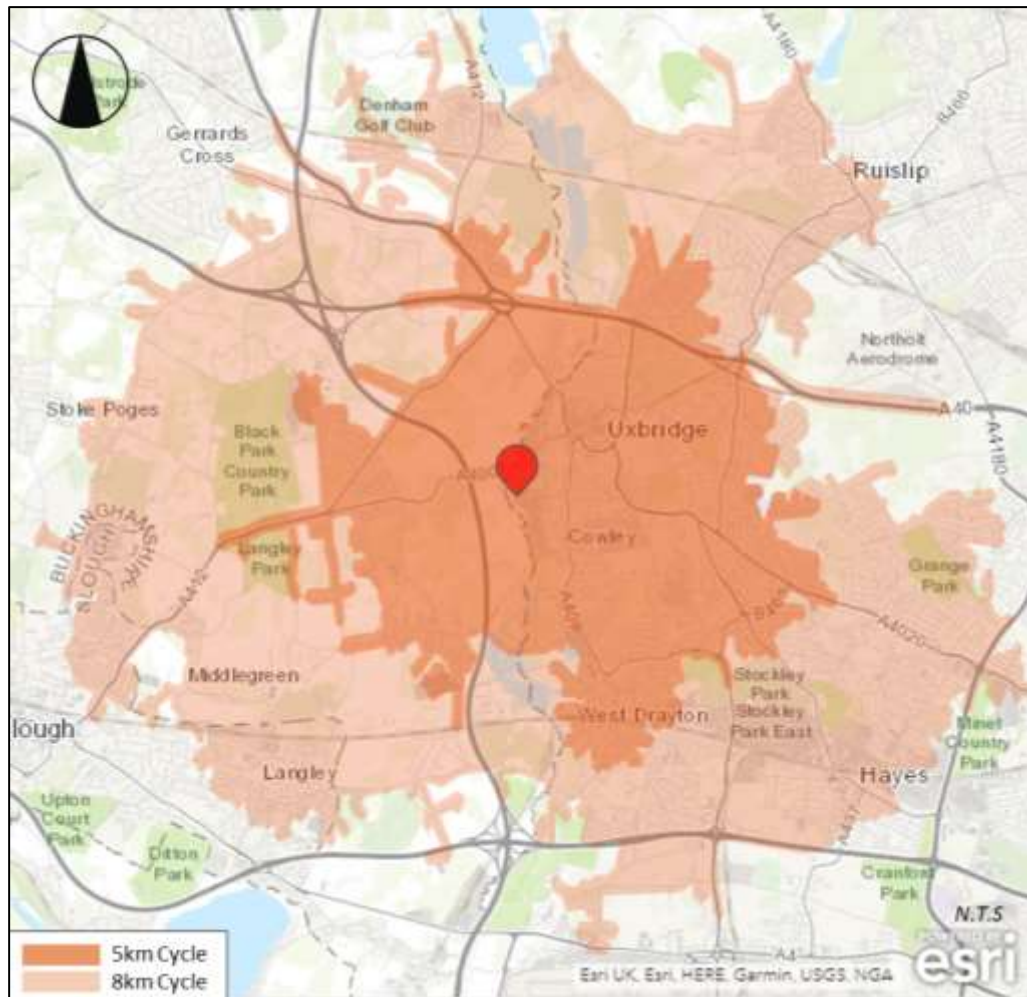


- 2.8 Footways are provided on both sides of Arundel Road and surrounding roads, albeit with long stretches of dropped kerbs facilitating vehicular access to units in common with industrial estates throughout the UK.

Cycling

- 2.9 It is generally accepted that cycling is a sustainable mode of travel for journeys up to 8km in length, although in London longer journeys are commonplace. **Figure 2.2** shows a 5km and 8km cycling catchment from the Site which includes nearby residential areas and local amenities, with Uxbridge town centre, Hillingdon, Cowley, Ickenham and Iver within 5km and Denham, Hayes and Ruislip within 8km.

Figure 2.2 – Cycling Isochrone Map



- 2.10 TfL's Journey Planner tool allows for cycle route planning dependent on the difficulty of the route. From the Site the following destinations can be reached within various journey times:
- West Drayton: 13 – 25 minutes;
 - Denham: 20 – 33 minutes;
 - Ickenham: 20 – 34 minutes;
 - Langley: 21 – 41 minutes and
 - Hayes: 24 – 47 minutes.

Public Transport Accessibility

By Bus

- 2.11 The closest bus stops are located on St John's Road in the vicinity of Cowley Mill Lane approximately 650m to the north of the Site. The stops are served by buses on Route 30 with the eastbound bus stop benefiting from seating and shelter.
- 2.12 Further bus stops are located along Cowley Road approximately 800m to the west of the Site. The stops are served by buses on Routes U5, 222 and 583. **Table 2.1** provides a summary of nearby bus routes and the relevant TfL Spider Map is attached in **Appendix B**.

Table 2.1: Summary of Bus Services			
Bus Stop	Route		Frequency (every 'x' minutes)
			Mon-Fri
St Johns Road	3	Uxbridge Station to Slough Bus Station	30
Cowley Road	222	Uxbridge Station to Hounslow Bus Station	8 – 12
	583	Uxbridge - Slough	120
	U5	York Road (Uxbridge Station) – Blyth Road (Hayes & Harlington Station)	10 – 13

By Underground / Rail

- 2.13 The closest station is Uxbridge Underground located 1.7km to the north-east of the Site. The station is the terminus for the Piccadilly and Metropolitan lines.
- The Piccadilly line provides a service to Cockfosters approximately every 10 minutes; and
 - The Metropolitan line provides a service to Aldgate approximately every 8 minutes.
- 2.14 West Drayton Station which is located approximately 4km to the south (13 – 25 minute cycle) is served by Great Western Rail with trains running between Reading and London Paddington. Once running, Crossrail will serve the station and provide a route through to Shenfield / Abbey Wood.

3 PLANNING POLICY

National Planning Policy Framework

- 3.1 The National Planning Policy Framework was published on the 19th February 2019 setting out the Government's planning policies for England and how these are expected to be applied.
- 3.2 The document focuses on sustainable transport requiring Transport Assessments or Statements along with Travel Plans to be submitted alongside planning applications, with paragraph 109 advising that:

"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

London Plan

- 3.3 The document strives to promote a healthier and more active London with improving air quality and reducing car parking provision at the forefront of the plan. Chapter 10 focuses on transport.
- 3.4 Policy T1 seeks a strategic approach to transport and states at paragraph 10.1.1. that:
- "The integration of land use and transport, and the provision of a robust and resilient public transport network, are essential in realising and maximising growth and ensuring that different parts of the city are connected in a sustainable and efficient way. In order to help facilitate this, an integrated strategic approach to transport is needed, with an ambitious aim to reduce Londoners' dependency on cars in favour of increased walking, cycling and public transport use. Without this shift away from car use, which the policies in the Plan and the Mayor's Transport Strategy seek to deliver, London cannot continue to grow sustainably."*
- 3.5 The cycle parking standards as set out in Table 10.2 are summarised in **Table 3.1**.

Table 3.1 – Cycle Parking Minimum Standards		
Use Class	Long-stay	Short-stay
*B1 (Business Offices)	1 space per 150sqm (GEA)	First 5,000sqm : 1 space per 500sqm Thereafter : 1 space per 5,000sqm
*B1 (Light industry and research and development)	1 space per 250sqm	1 space per 1000sqm (GEA)
B2 – B8 (General industrial, storage or distribution)	1 space per 500sqm	1 space per 1000sqm (GEA)

*Now Class E uses

Hillingdon Local Plan

3.6 The London Borough of Hillingdon Local Plan was adopted in January 2020.

3.7 Policy DMT 1 'managing transport impacts' states that developments are required to:

"maximise safe, convenient and inclusive accessibility to, and from within developments for pedestrians, cyclists and public transport users;

provide equal access for all people, including inclusive access for disabled people;

adequately address delivery, servicing and drop-off requirements; and

have no significant adverse transport or associated air quality and noise impacts on the local and wider environment, particularly on the strategic road network."

3.8 Policy DMT 2 'highways impacts' states that developments must provide:

"safe and efficient vehicular access to the highway network is provided to the Council's standards;

safe, secure and convenient access and facilities for cyclists and pedestrian are satisfactorily accommodated in the design of highway and traffic management schemes;

impacts on local amenity and congestion are minimised by routing through traffic by the most direct means to the strategic road network, avoiding local distributor and access roads; and

there are suitable mitigation measures to address any traffic impacts in terms of capacity and functions of existing and committed roads, including along roads or through junctions which are at capacity".

3.9 Table 3.2 provides a summary of the parking standards as set out in the document.

Table 3.2 – Car and Bicycle Parking Maximum Standards		
Use Class	Car Parking	Bicycle Parking
*B1 (Business Offices)	1 space per 50 – 100 sqm of gross floorspace	1 space per 250 sqm
All other B class uses	2 spaces plus 1 space per 50 – 100 sqm of gross floorspace	• B1(b) (c) (business) – 1 per 250 sqm • B2 – B8 (General Industry storage and distribution) 1 per 500

*Now Class E uses

4 EFFECTS OF THE DEVELOPMENT

Proposal Overview

- 4.1 The development proposal seeks to demolish the existing warehouse and construct a 1,246sqm replacement building with associated access, parking and servicing arrangements. In particular:
- The layout would comprise a single warehouse split with a ground floor of 1,177sqm plus ancillary office space.
 - A service yard will be created along the northern side of the building able to accommodate vehicles up to and including a 7.5t box van (8m vehicle). The access on Arundel Road will be remodelled.
 - Parking is provided for 12 vehicles including 2 accessible spaces, with 4 spaces within the service yard and 8 accessed from Arundel Road.
 - Parking is provided for up to 8 bicycles in a secure compound along the Arundel Road frontage.
- 4.2 The proposed layout of the Site is shown at **Appendix A**.

Access Arrangements

- 4.3 Access to the existing service yard is taken via a crossover immediately adjacent to the northern boundary and effectively shared with the adjacent property. The proposals include modifying the access moving it circa 5m to the south of the boundary thereby creating a separation with the access to the north.
- 4.4 The swept path drawings show that a 7.5t box van is able to enter and exit the service yard in forward gear is shown in **Appendix C**.

Car Parking

- 4.5 The proposed layout includes parking for 12 cars with 8 spaces accessed directly off Arundel Road and 4 spaces within the service yard; two disabled spaces are provided along with four 'active' electric vehicle charging points and two 'passive' charging points for future use. This provides 33% 'active' and 10% 'passive' electric charging vehicle bays.
- 4.6 The provision of car parking spaces, disabled spaces and electric charging facilities (both active and passive) is in accordance with parking standards.
- 4.7 Parking for 2 motorcycles will be provided within the service yard.

Cycle Parking

- 4.8 Cycle parking will be provided in accordance with standards within secure and weather protected shelters, located in the vicinity of the entrance into the Site. The proposals show provision of 8 cycle parking spaces, distributed across four stands.

Deliveries and Refuse Collection

- 4.9 The proposed service yard will be able to accommodate vehicles up to and including a 7.5t box van in common with the existing service yard, with vehicles able to enter and exit the yard in forward gear as illustrated on the plans in Appendix D.
- 4.10 Refuse bins are proposed within the service yard as illustrated on the plans in Appendix B.

Trip Generation

- 4.11 The proposals do not include any change of use with the resultant overall gross floor area circa 51sqm less than existing. As such, the proposals would not result in any impact of the local or wider highway network.
- 4.12 For information, Table 4.1 below provides a breakdown of the potential number of vehicular trips associated with the proposed development of 1,386sqm GFA based on trip rates from the TRICS database considering surveys in the Employment: Industrial Units category selecting all Sites within Greater London. Copies of the TRICS data are provided at **Appendix E**. The exercise revealed two comparable Sites, both located within the London Borough of Hillingdon with PTALs ranging from 0 and 1b which are included in the results.

Table 4.1: TRICs Trip Rates & Resultant Flows (Proposed Scenario)					
Time		Trip Rates		Flows	
		Arrive	Depart	Arrive	Depart
AM Peak	0700 – 0800	0.661	0.561	9	8
	0800 – 0900	0.441	0.300	6	4
	0900 – 1000	0.461	0.441	6	6
	0700 – 1000	1.563	1.302	21	18
PM Peak	1600 – 1700	0.321	0.401	4	6
	1700 – 1800	0.240	0.401	3	6
	1800 – 1900	0.120	0.260	2	4
	1600 - 1900	0.681	1.062	9	16

5 SUMMARY AND CONCLUSION

Summary

- 5.1 TTP Consulting has been appointed to provide highways and transport advice associated with the proposals for the Barton Buildings within the Uxbridge Industrial Estate.
- The Site currently contains approximately 1,437sqm of Class B1, B2, B8 warehousing with associated parking and servicing.
 - Consent exists to demolish the existing building and construct a modern replacement building with a gross floor area of circa 1,246sqm with parking for up to 13 cars. No change of use is proposed.
 - The proposals associated with this application are largely the same as for the permitted scheme with the same overall ground floor area, albeit with additional amenity space at mezzanine level and one less parking space.
 - Parking will be provided for 12 cars including 2 accessible spaces and 4 with electric charging facilities as permitted, with the layout reconfigured to provide 8 spaces accessed from Arundel Road and 4 spaces within the yard.
 - Access will be taken from Arundel Road with the existing crossover modified.
 - The provision of 8 cycle parking spaces is in accordance with policy.
 - The potential trip attraction of the proposed warehouse has been estimated based on trip rate information from the TRICS database. The proposed floorspace is less than existing and as such there would not be any impact on the surrounding highway network.

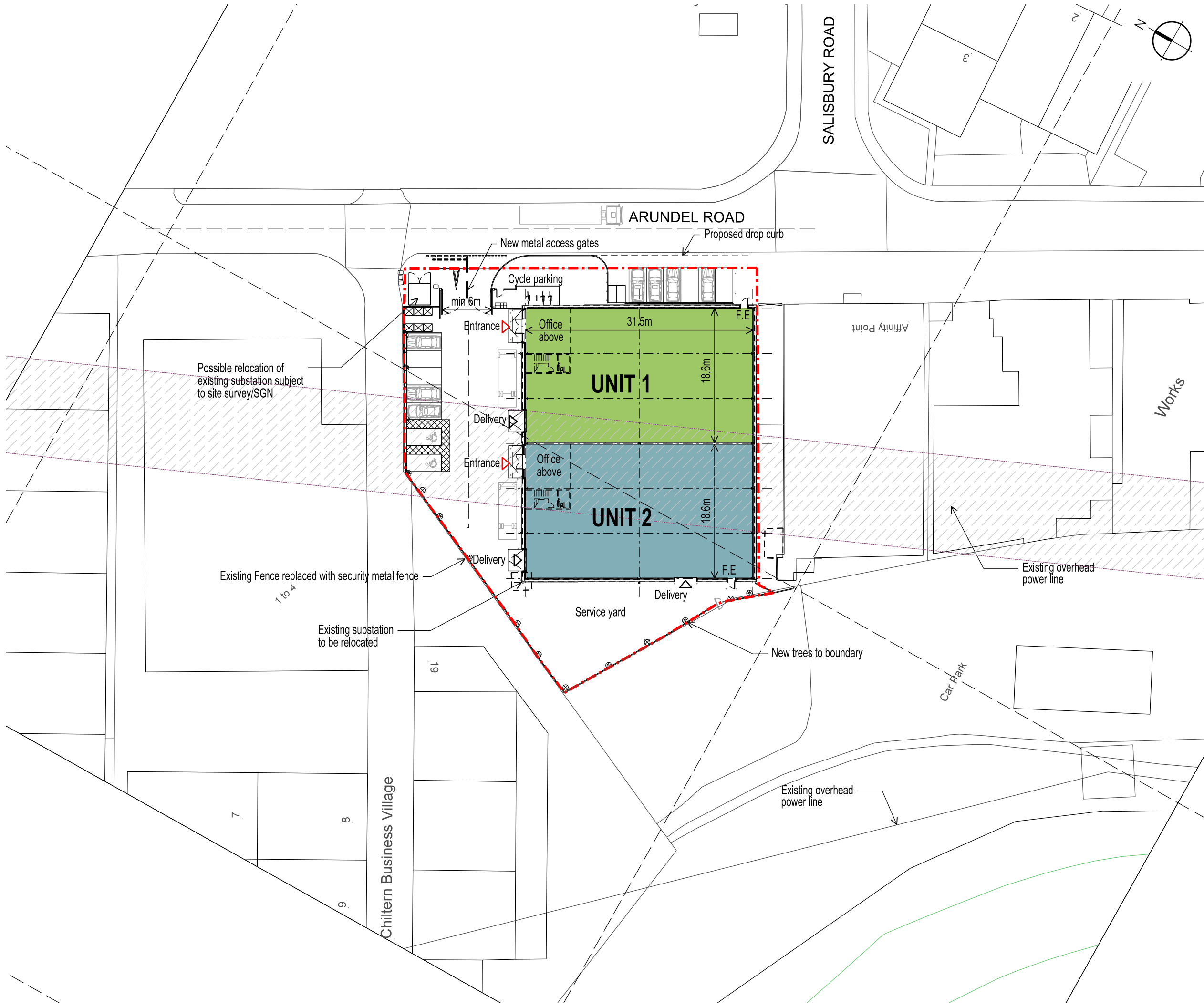
Conclusion

- 5.2 The proposals associated with this planning application are considered acceptable in traffic and transport terms.

Appendix A

(Permitted Layout)

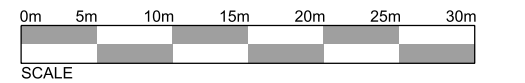
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SITE SPECIFIC HAZARDS

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PROPOSED GROSS INTERNAL AREA

584 sqm / 6,286 sqft
incl. 10% office space

584 sqm / 6,286 sqft
incl. 10% office space

TOTAL 1,168 sqm / 12,572 sqft

Site Boundary

13no. car parking spaces.
Including 2no. disabled bays and 4no. Active /
2no. Future EV charging bays
2no. motorcycling bays

D	26.02.20	NEW TREES ADDED TO BOUNDARY	ME
C	12.02.20	EXISTING PEDESTRIAN GATED ACCESS ADDED TO REAR CAR PARK	CF
B	21.01.20	GENERAL AMENDS FOLLOWING SURVEY	ME
A	29.05.19	GENERAL AMENDMENTS	ME
REV.	DATE	NOTES	INIT.

CLIENT / PROJECT
CYRIL LEONARD
UXBRIDGE INDUSTRIAL ESTATE
BARTON BUILDINGS, UB8 2SN
DRAWING TITLE
PROPOSED SITE PLAN

STATUS				
PLANNING ISSUE				
DATE	DRAWN	SCALE @ A3		
15.05.19	JT	1:500		
PROJECT NUMBER	UNIT / BLOCK	CI / SFB CODE	TYPE & NUMBER	REVISION LETTER
10773	P	101	D	
Site Location Plans	L	GA Plans	P	Elevations
Sections	S	Details	D	Prefix: Colour

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Appendix B

(Proposed Layout Plans)

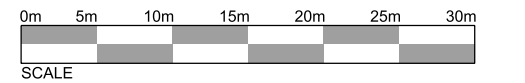
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PROPOSED GROSS INTERNAL AREA

	1,176.4 sqm / 12,663 sqft
	Amenity core, mezzanine and staircases 209 sqm / 2,250 sqft

TOTAL 1,364.7 sqm / 14,690 sqft

Site Boundary

12 no. car parking spaces.
Including 2no. disabled bays and 4no. Active /
2no. Future EV charging bays
2no. motorcycling bays

REV.	DATE	NOTES	INIT.
H	28.04.21	Drawing updated following Agent comments	DS
G	23.04.21	ALTERATIONS FOR SINGLE UNIT SCHEME	DS
F	29.01.21	CLADDING BUILD-UP UPDATED	WCS
E	23.03.20	NEW LANDSCAPING & BAT/BIRD BOXES	ME
D	26.02.20	NEW TREES ADDED TO BOUNDARY	ME
C	12.02.20	EXISTING PEDESTRIAN GATED ACCESS ADDED TO REAR CAR PARK	CF
B	21.01.20	GENERAL AMENDS FOLLOWING SURVEY	ME
A	29.05.19	GENERAL AMENDMENTS	ME

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UXBRIDGE INDUSTRIAL ESTATE
BARTON BUILDINGS, UB8 2SN
DRAWING TITLE
PROPOSED SITE PLAN

STATUS
FOR APPROVAL

DATE	DRAWN	SCALE @ A3
15.05.19	JT	1:500

PROJECT NUMBER	UNIT / BLOCK	CI / SFB CODE	TYPE & NUMBER	REVISION LETTER
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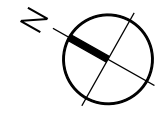
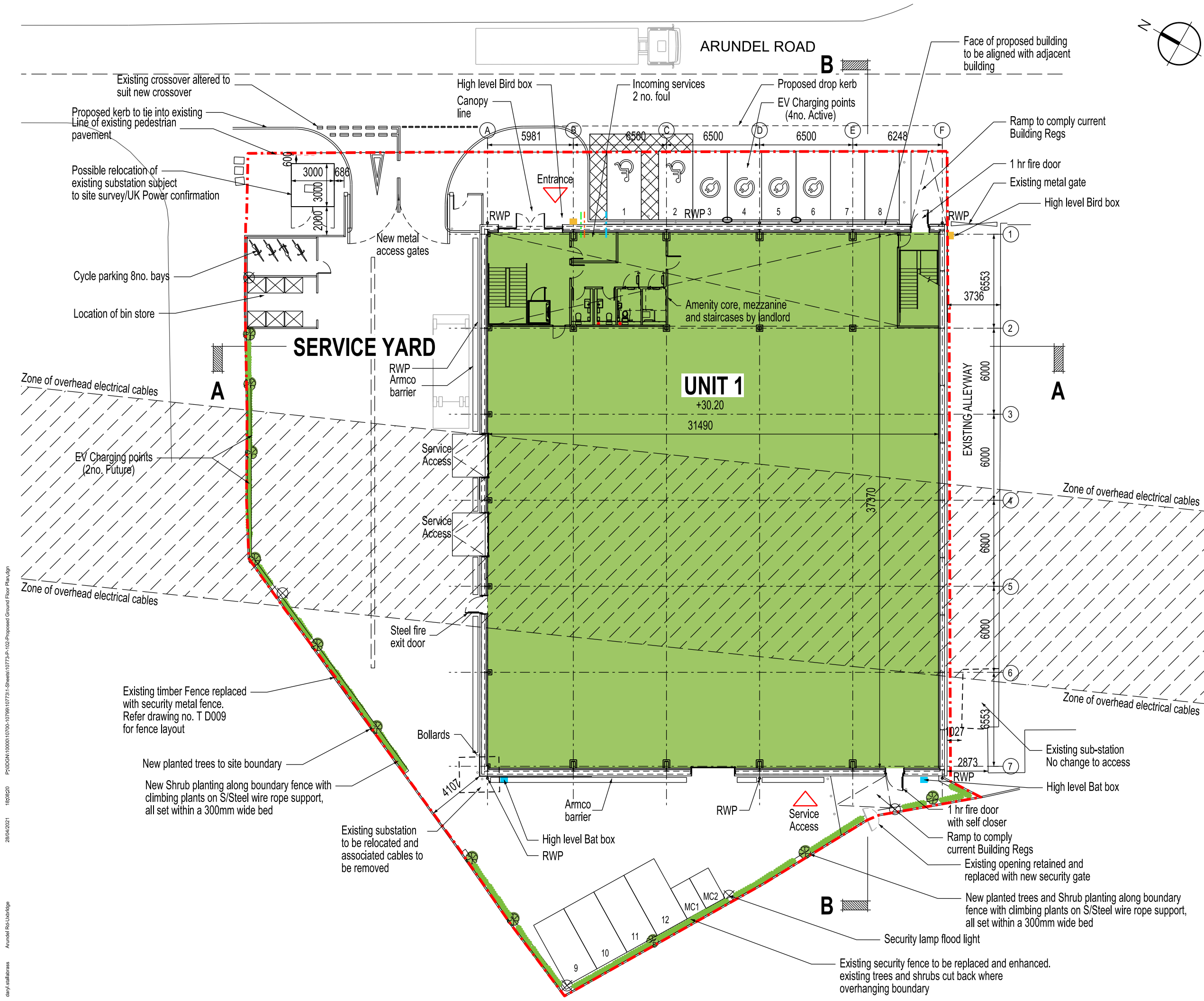
Site Location Plans	L	GA Plans	P	Elevations	E
Sections	S	Details	D	Prefix: Colour	C

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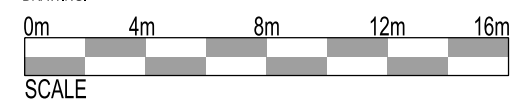
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PROPOSED GROSS INTERNAL AREA

- 1,176.4 sqm / 12,663 sqft
- Amenity core, mezzanine and staircases 209 sqm / 2,250 sqft

TOTAL 1,364.7 sqm / 14,690 sqft
EXISTING (1,437 sqm / 15,467 sqft)

- Site Boundary
- Security lamp flood light
- 12no. car parking spaces. Including 2no. disabled bays and 4no. Active / 2no. Future EV charging bays 2no. motorcycling bays

J	28.04.21	Drawing updated following Agent comments	DS
H	23.04.21	SINGLE UNIT SCHEME UPDATE	DS
G	08.04.21	Units combined; entrances/access/exits altered; sub station, cycle store and bin store relocated, parking altered, etc.	DS
F	08.03.21	GRID DIMENSIONS AMENDED	DS
E	29.01.21	Drawing altered to suit new cladding build-up	WCS
D	12.01.21	ADDITIONAL DIMS TO ADJACENT PROPERTY	DM
C	07.08.20	TENDER ISSUE	DM
B	30.07.20	Services added	JT
A	23.07.20	Additional setting out	JT
REV.	DATE	NOTES	INIT.

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BARTON BUILDINGS, UB8 2SN
DRAWING TITLE
PROPOSED GROUND FLOOR PLAN

STATUS
FOR APPROVAL

DATE		DRAWN		SCALE @ A3	
06.07.2020		JT		1:250	
PROJECT NUMBER		UNIT / BLOCK	CI / SFB CODE	TYPE & NUMBER	REVISION LETTER
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J					
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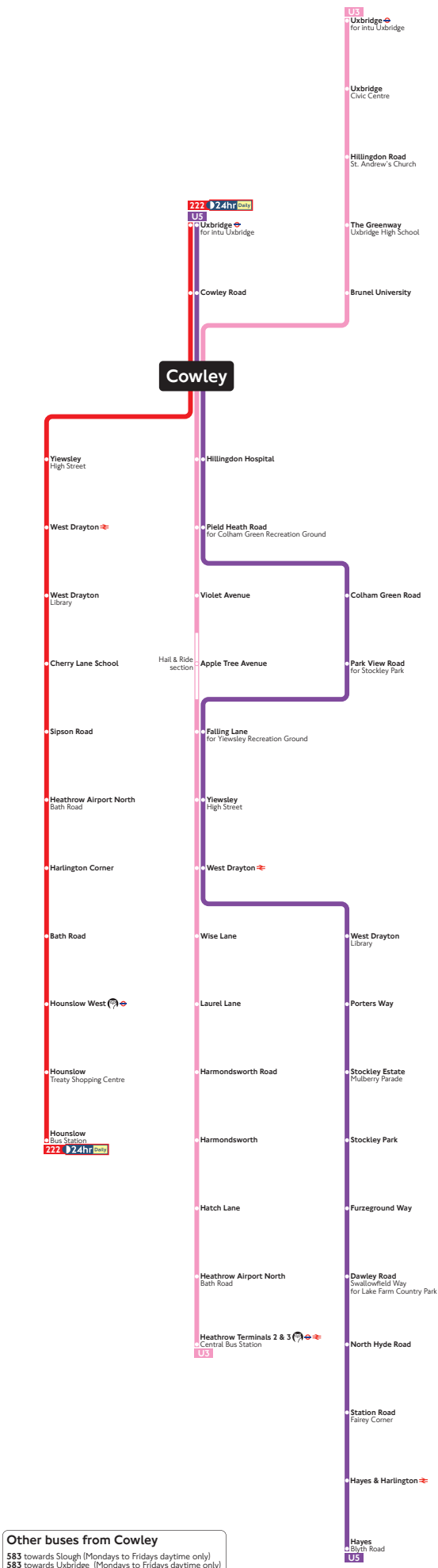
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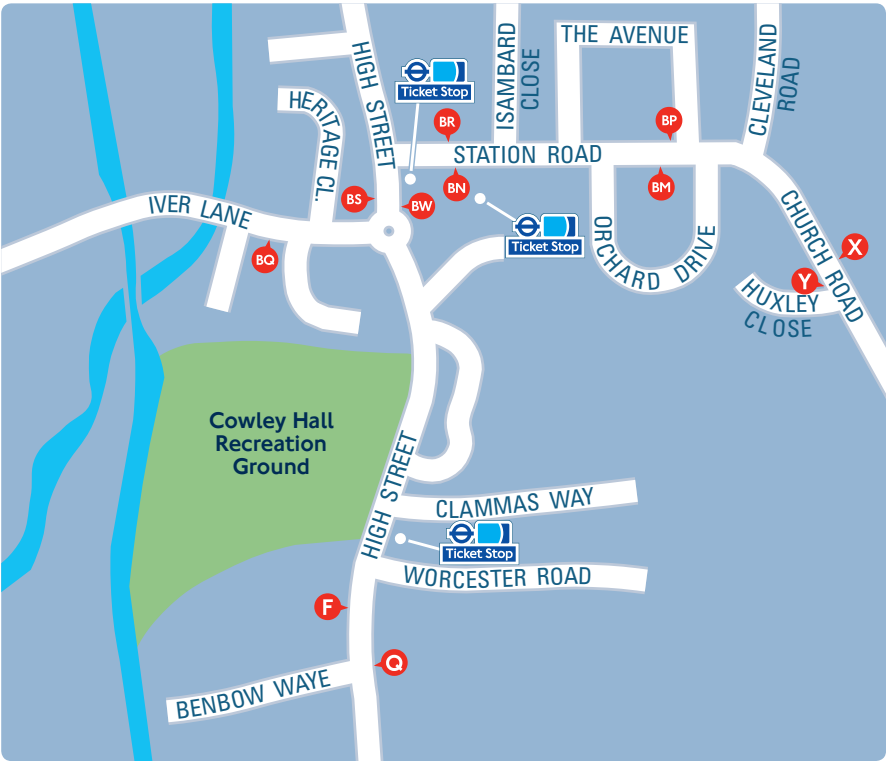
Appendix C

(TfL Bus Map)

Buses from Cowley



Other buses from Cowley
583 towards Slough (Mondays to Fridays daytime only)
583 towards Uxbridge (Mondays to Fridays daytime only)



Destination finder

Destination	Bus routes	Bus stops
A		
Apple Tree Avenue	U3	X
B		
Bath Road	222	BW Q
Brunel University	U3	Y
C		
Cherry Lane School	222	BW Q
Colham Green Road	U5	BN BP Y
Cowley Road	222	BS F
	U5	BN BP Y
D		
Dawley Road Swallowfield Way for Lake Farm Country Park	U5	BN BP Y
F		
Falling Lane for Yiewsley Recreation Ground	U3	X
	U5	BN BP Y
Furzeground Way	U5	BN BP Y
H		
Harlington Corner	222	BW Q
Harmondsworth	U3	X
Harmondsworth Road	U3	X
Hatch Lane	U3	X
Hayes Blyth Road	U5	BN BP Y
Hayes & Harlington	U5	BN BP Y
Heathrow Airport North	222	BW Q
Bath Road	U3	X
Heathrow Terminals 2 & 3 Central Bus Station	U3	X
Hillingdon Hospital	U3	X
	U5	BN BP Y
Hillingdon Road St. Andrew's Church	U3	Y
Hounslow Bus Station	222	BW Q
Hounslow Treaty Shopping Centre	222	BW Q
Hounslow West	222	BW Q

Destination	Bus routes	Bus stops
L		
Laurel Lane	U3	X
N		
North Hyde Road	U5	BN BP Y
P		
Park View Road for Stockley Park	U5	BN BP Y
Pield Heath Road for Colham Green Recreation Ground	U3	X
	U5	BN BP Y
Porters Way	U5	BN BP Y
S		
Sipson Road	222	BW Q
Station Road Fairey Corner	U5	BN BP Y
Stockley Estate Mulberry Parade	U5	BN BP Y
Stockley Park	U5	BN BP Y
T		
The Greenway Uxbridge High School	U3	Y
U		
Uxbridge for Intu Uxbridge	222	BS F
	U3	Y
	U5	BN BP Y
Uxbridge Civic Centre	U3	Y
V		
Violet Avenue	U3	X
W		
West Drayton	222	BW Q
	U3	X
	U5	BN BP Y
West Drayton Library	222	BW Q
	U5	BN BP Y
Wise Lane	U3	X
Y		
Yiewsley High Street	222	BW Q
	U3	X
	U5	BN BP Y

Ways to pay

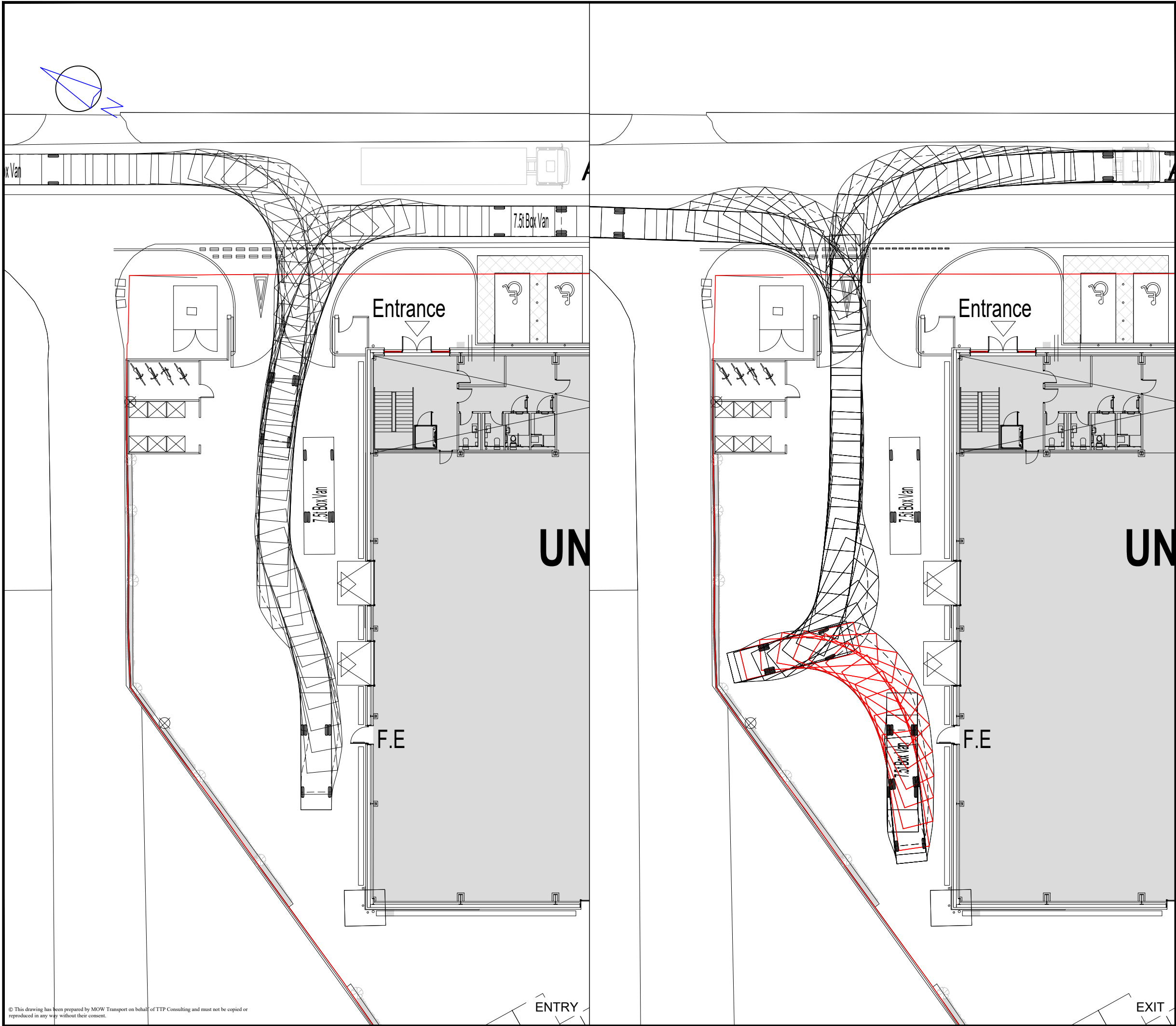
	Use your contactless debit or credit card. It's the same fare as Oyster and there is no need to top up.
	Top up your Oyster pay as you go credit or buy Travelcards and bus & tram passes at around 4,000 shops across London.
	Sign up for an online account to top up online and see your travel history and spending.

Key

	Connections with London Underground
	Connections with National Rail
	Tube station with 24-hour service Friday and Saturday nights

Appendix D

(Swept Path Analysis)



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Rev	Details	Drawn	Checked	Date
1				

7.5t Box Van

Overall Length 8.01m
Overall Width 2.10m
Overall Body Height 3.556m
Min Body Ground Clearance 0.351m
Track Width 2.064m
Lock to Lock Time 4.00 sec
Kerb to Kerb Turning Radius 7.400m

Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.

Client
-

Project
Barton Buildings

Drawing Title
Swept Path Analysis Using a 7.5t Box Van

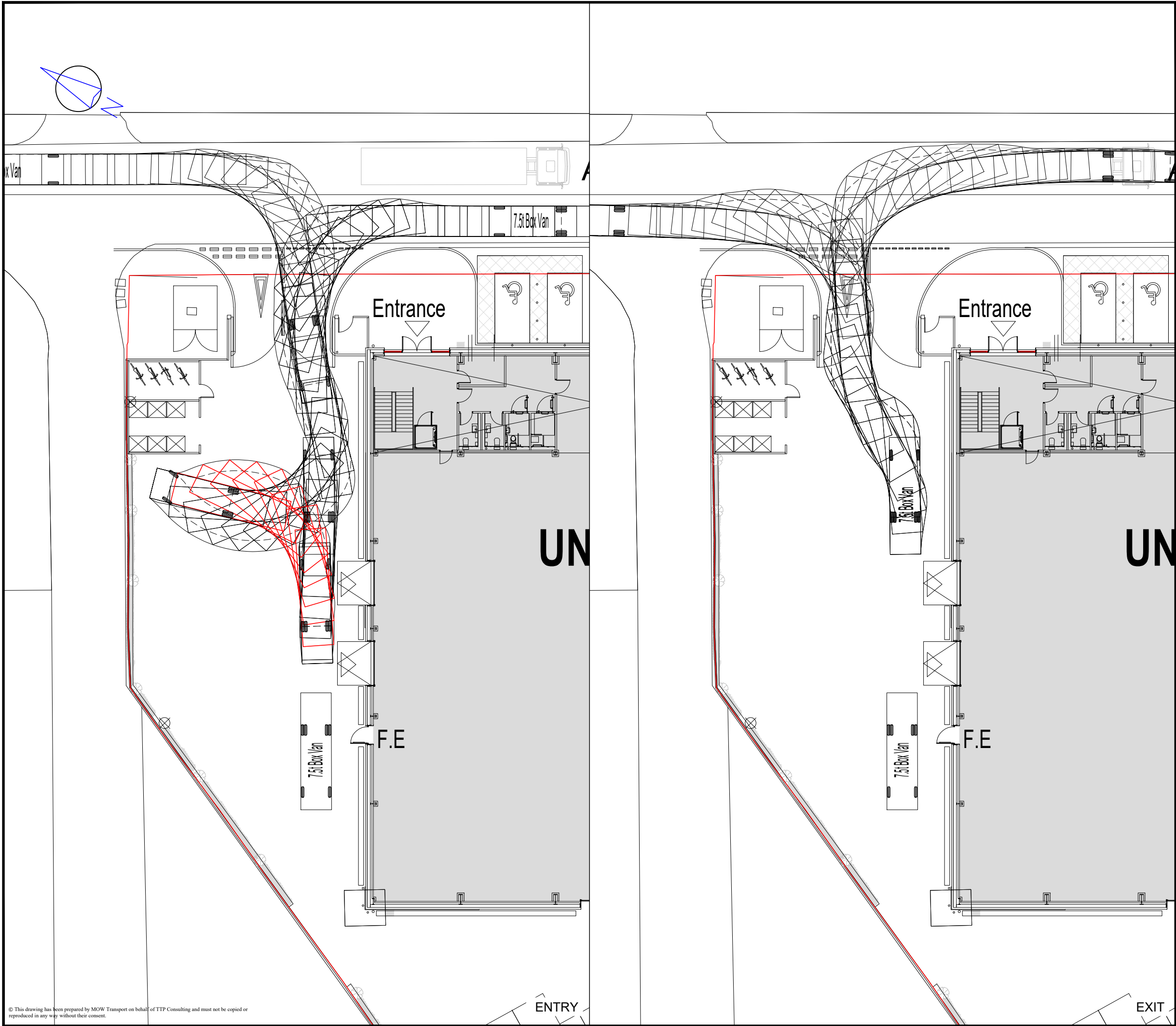
Scale
1:250 at A3

Drawn	MW	12.05.21
Checked	AM	12.05.21

ttp consulting
transport planning specialists

111 - 113 Great Portland Street
London
W1W 6QQ
Tel. No. 0207 1000 753

Drawing Number 2020-3765-AT-105(1)	Rev .
--	-----------------



Rev	Details	Drawn	Checked	Date
1				

7.5t Box Van

Overall Length 8.01m
Overall Width 2.10m
Overall Body Height 3.556m
Min Body Ground Clearance 0.351m
Track Width 2.064m
Lock to Lock Time 4.00 sec
Kerb to Kerb Turning Radius 7.400m

Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.

Client: -

Project: Barton Buildings

Drawing Title: Swept Path Analysis Using a 7.5t Box Van

Scale: 1:250 at A3

Drawn	MW	12.05.21
Checked	AM	12.05.21

ttp consulting
transport planning specialists

111 - 113 Great Portland Street
London
W1W 6QQ
Tel. No. 0207 1000 753

Drawing Number	Rev
2020-3765-AT-105(2)	.

Appendix E

(TRICS Report)

Calculation Reference: AUDIT-752101-200227-0202

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01 GREATER LONDON
 HD HILLINGDON 2 days

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

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 1080 to 3912 (units: sqm)
 Range Selected by User: 620 to 5000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 05/12/12

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Wednesday 1 days
 Friday 1 days

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

Selected survey types:

Manual count 2 days
 Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre) 2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone 2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

B1 2 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

10,001 to 15,000	1 days
15,001 to 20,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

125,001 to 250,000	2 days
--------------------	--------

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

1.1 to 1.5	2 days
------------	--------

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	2 days
----	--------

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	1 days
1b Very poor	1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	HD-02-C-01	TARMAC PRODUCTION	HILLINGDON
	PUMP LANE		
	HAYES		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	3912 sqm	
	Survey date: FRIDAY	11/05/12	Survey Type: MANUAL
2	HD-02-C-02	WINDOW PRODUCTION	HILLINGDON
	BETAM ROAD		
	HAYES		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	1080 sqm	
	Survey date: WEDNESDAY	05/12/12	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
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									
06:00 - 07:00									
07:00 - 08:00	2	2496	0.661	2	2496	0.561	2	2496	1.222
08:00 - 09:00	2	2496	0.441	2	2496	0.300	2	2496	0.741
09:00 - 10:00	2	2496	0.461	2	2496	0.441	2	2496	0.902
10:00 - 11:00	2	2496	0.541	2	2496	0.481	2	2496	1.022
11:00 - 12:00	2	2496	0.561	2	2496	0.581	2	2496	1.142
12:00 - 13:00	2	2496	0.481	2	2496	0.721	2	2496	1.202
13:00 - 14:00	2	2496	0.300	2	2496	0.421	2	2496	0.721
14:00 - 15:00	2	2496	0.461	2	2496	0.501	2	2496	0.962
15:00 - 16:00	2	2496	0.401	2	2496	0.461	2	2496	0.862
16:00 - 17:00	2	2496	0.321	2	2496	0.401	2	2496	0.722
17:00 - 18:00	2	2496	0.240	2	2496	0.401	2	2496	0.641
18:00 - 19:00	2	2496	0.120	2	2496	0.260	2	2496	0.380
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.989			5.530			10.519

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected:	1080 - 3912 (units: sqm)
Survey date range:	01/01/11 - 05/12/12
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.