



B R I G H T P L A N

SEAGULL LANE, EMSWORTH

COMMERCIAL DEVELOPMENT

Transport Statement

Prepared on Behalf of

M&M Hall Family Pension Trust

6442

May 2022



DOCUMENT CONTROL

Project: Seagull Lane, Emsworth
Commercial Development

Document: Transport Statement
Client: M&M Hall Family Pension Trust

Reference: 6442

Document Checking:

Author: EJD _____ **Date:** 19/05/2022 _____

Checked by: ALB _____ **Date:** 19/05/2022 _____

Approved by: ALB _____ **Date:** 19/05/2022 _____

Status:

Issue	Date	Status	Issued by
01	20/05/2022	Preliminary	EJD



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- 005** Max Legal Length Articulated Vehicle Swept Path Analysis
- 006** Unit 8 Vehicle Swept Path Analysis
- 007** Car Parking Vehicle Swept Path Analysis

APPENDICES

Appendix A TRICS Report

1 INTRODUCTION

- 1.1.1 This Transport Statement (TS) has been prepared by Bright Plan on behalf of the M&M Hall Family Pension Trust to support a planning application for a commercial development at Seagull Lane, Emsworth. The site is situated on the southern side of Seagull Lane, c.300m to the north of Emsworth town centre, as shown in **Figure 1.1**.

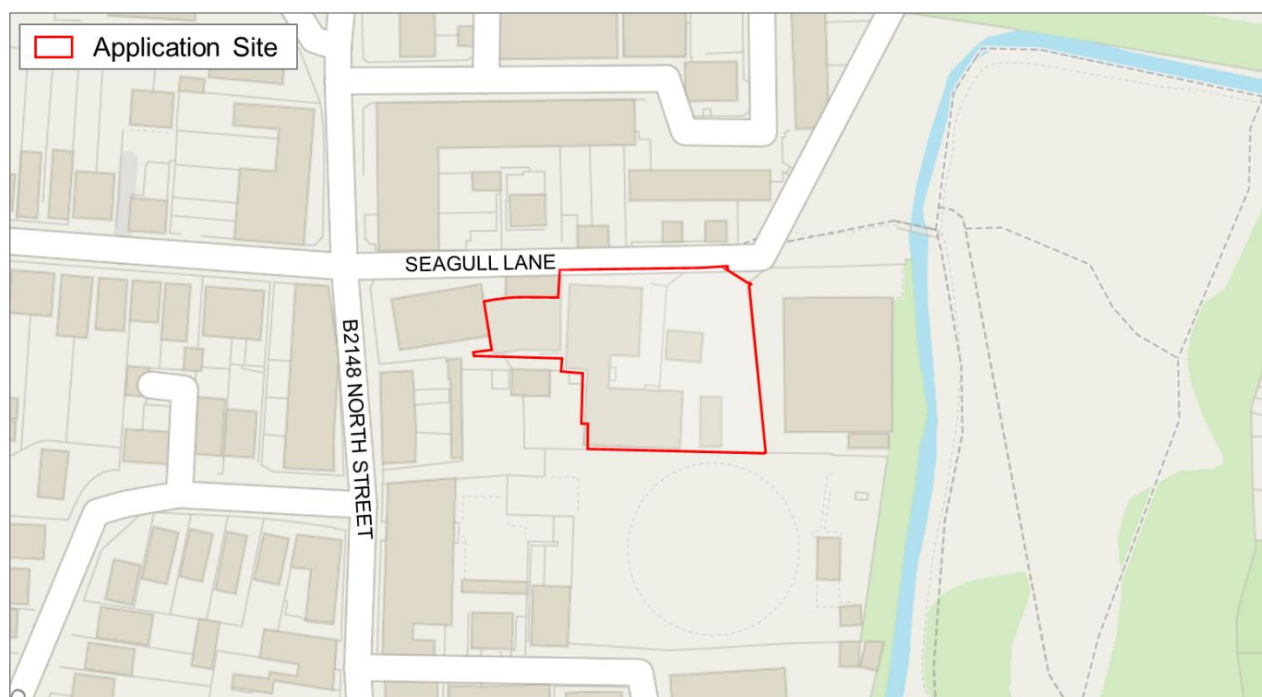


Figure 1.1: Site Location

- 1.1.2 The application site currently comprises of a series of industrial units, as well as a small office building, served from Seagull Lane. The proposed development would involve the demolition of the existing industrial units to be replaced by 8 new units with a comparable total floor area, as well as refurbishment of the existing office building – there is no change proposed to the office floor area.

1.2 Scope of Report

- 1.2.1 This TS outlines the key transport planning matters in accordance with national, regional and local guidance, reviewing the site's accessibility, relevant planning history, the proposed development layout, car and cycle parking requirements, access arrangements, servicing arrangements, and the proposed trip impact on the local road network.
- 1.2.2 The site has been assessed against the background of transport planning policy set out in the National Planning Policy Framework and Havant Borough Council's local transport policies. The site's highways design has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) and Manual for Streets (MfS) 1 and 2.



1.2.3 The remainder of this report comprises the following sections:

- i. **Section 2** sets out the transport conditions in the local area and highway network, and provides a review of highway safety.
- ii. **Section 3** provides an assessment of the proposed access and internal layout design, parking provision, and the site's servicing arrangements.
- iii. **Section 4** provides an assessment of the anticipated traffic impact resulting from the development supported by a trip generation assessment.
- iv. **Section 5** provides a summary of the TS conclusions.

2 BASELINE CONDITIONS

2.1 Site Location and Description

- 2.1.1 The application site is situated on the southern side of Seagull Lane, c.300m to the north of Emsworth town centre. The site is bordered by Seagull Lane to the north, an industrial unit to the east, the former gas holder site to the south, and garages/residential properties to the west.
- 2.1.2 The site currently accommodates 5 distinct units, including 4 industrial units and 1 office building (Units W1 and W4 are joined). The remainder of the site comprises hardstanding, providing an informal parking arrangement. The existing site arrangement is shown in **Figure 2.1**, and the existing floor areas are shown in **Figure 2.2**.



Figure 2.2: Existing Site

Unit	Land Use	Floor Area (sqm)
2a	Industrial	60.5
2	Industrial	340
W1 & 4	Industrial	327
W2 (inc. outbuilding)	Industrial	85.3
6	Office	135.6
Total		948.4

Figure 2.2: Existing Floor Areas



2.2 Vehicle Access

- 2.2.1 The existing site currently has 2 gated vehicle accesses, serving units W1/W4 and 6/W2, which adjoin a shared access point. In addition, the existing site includes an informal area of hardstanding flanking Seagull Lane's carriageway, providing direct access to Unit 2 from Seagull Lane. The site's existing access arrangements are shown in **Figure 2.3**.



Gated Accesses Serving Units W1/W4 and 6/W2



Hardstanding to the Front of Unit 2

Figure 2.3: Existing Access Arrangements



2.3 Local Road Network

- 2.3.1 The site adjoins Seagull Lane which is a no-through road serving the application site as well as a mixture of businesses, garages and residential properties. The road is 4.8m wide along the site frontage, but narrows to 4.0m to the west of the site. Parking on the road is restricted on either side of the carriageway for its entire length, enforced by double yellow lines.
- 2.3.2 The road has no formal turning head, however vehicles accessing properties on the road are able to turn using private accesses or drives. Seagull Lane's carriageway features are shown in **Figure 2.4**.



Seagull Lane Heading East



Seagull Lane Heading West

Figure 2.4: Seagull Lane

2.4 Wider Highway Network

- 2.4.1 The application site is situated c.300m to the north of the A259 which can be accessed via the B2148 North Street. The A259 runs east-west providing access to Havant, Southbourne, Nutbourne and Chichester. In addition, the A27 is situated to the north of the site, and can be accessed c.2km to the east of the site via the A259. The A27 forms part of the Strategic Road Network (SRN), providing access to Southampton, Portsmouth, Chichester and Worthing. The site's location in the context of the wider highway network is demonstrated in **Figure 2.5**.



Figure 2.5: Wider Highway Network

2.5 Accessibility Credentials

Pedestrian Accessibility

- 2.5.1 Seagull Lane is flanked by a c.1.5m wide footway on its southern side, which runs up to the boundary of the application site. At this point, pedestrians are required to walk in Seagull Lane's carriageway. This arrangement is longstanding, and there is no record of PIA incidents on the road. Given the road's short length and no-through status, vehicle speeds and traffic movements are low. The existing footway is shown in **Figure 2.6**.



Figure 2.6: Existing Footway on Seagull Lane

Cycle Accessibility

2.5.2 The National Cycle Route (NCR) no.2 runs along the A259 to the south of the application site. The route provides access to Havant, Hayling Island and Chichester. The route additionally connects with the NCR no.22 in Havant, which provides access north through Havant, as well as west to Portsmouth. The local cycle route network is shown in **Figure 2.7**.

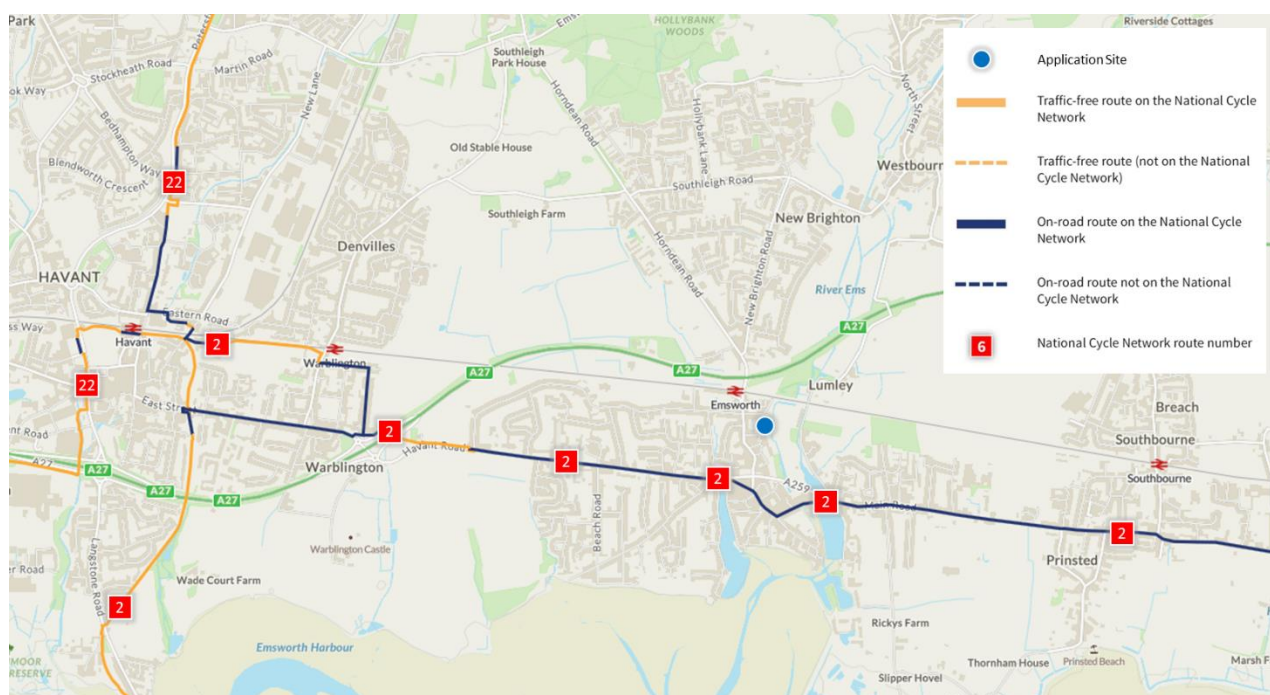


Figure 2.7: Cycle Route Network



Accessibility by Bus

- 2.5.3 The 'Victoria Road' bus stops are situated c.100m to the west of the site, and serve the no.27 service between Emsworth and Havant/Rowlands Castle. In addition, the 'Emsworth By-Pass' and 'Warblington Road' stops are situated on the A259 c.300m to the south of the site and serve the 700 Coastliner service which runs between Portsmouth/Havant and Chichester/Felpham. A summary of the services available from local stops is provided in **Figure 2.8**.

Service No.	Route Summary	Typical Frequency	Operating Hours
27	Emsworth – New Brighton – Warblington – Havant – Leigh Park – Rowlands Castle	1 every 2-3 hours	Mon-Fri: 09:00 – 17:35 Sat: 09:01 – 15:36
700	Portsmouth – Havant – Emsworth – Nutbourne – Bosham – Fishbourne – Chichester	1 every 30min	Mon-Fri: 06:12 – 20:33 Sat: 06:17 – 20:33 Sun: 07:26 – 20:20

Figure 2.8: Services Available from Local Bus Stops

Accessibility by Train

- 2.5.4 Emsworth railway station is situated c.180m to the northwest of the site. The station provides services to Portsmouth and Southsea, Littlehampton, Southampton Central, Horsham, Brighton, and London Victoria. A summary of services available from Emsworth railway station is provided in **Figure 2.9**.

Destination	Route Summary	Typical Journey Time	Typical Frequency
Portsmouth and Southsea	Emsworth – Havant – Fratton – Portsmouth & Southsea	16 – 22 min	4 every hour
Littlehampton	Emsworth – Chichester – Barnham – Littlehampton	35 min	2 every hour
Southampton Central	Emsworth – Havant – Fareham – Southampton Central	45 min	2 every hour
Horsham	Emsworth – Chichester – Horsham	48 min	3 every hour
Brighton	Emsworth – Chichester – Worthing – Lancing – Shoreham-by-Sea – Brighton	1 hr 3min	2 every hour
London Victoria	Emsworth – Chichester – Horsham – Crawley – Gatwick Airport – Clapham Junction – London Victoria	1 hr 47min	3 every hour

Figure 2.9: Services Available from Emsworth Railway Station

2.6 Collision Data

- 2.6.1 To determine highway safety on the local road network an assessment of Personal Injury Accidents (PIAs) has been undertaken for a five-year period from January 2017 to January 2022 using the CrashMap online data portal. The area considered includes Seagull Lane and the B2148 North Street in the vicinity of the site.

2.6.2 Collisions are classified as 'slight', 'serious' or 'fatal', depending on the severity of the injury sustained. Patterns displayed in the data can be assessed with regards to their proximity, frequency, severity and the cause of incident to identify underlying highways design issues. The distribution of the incidents relative to the site is displayed in **Figure 2.10**.

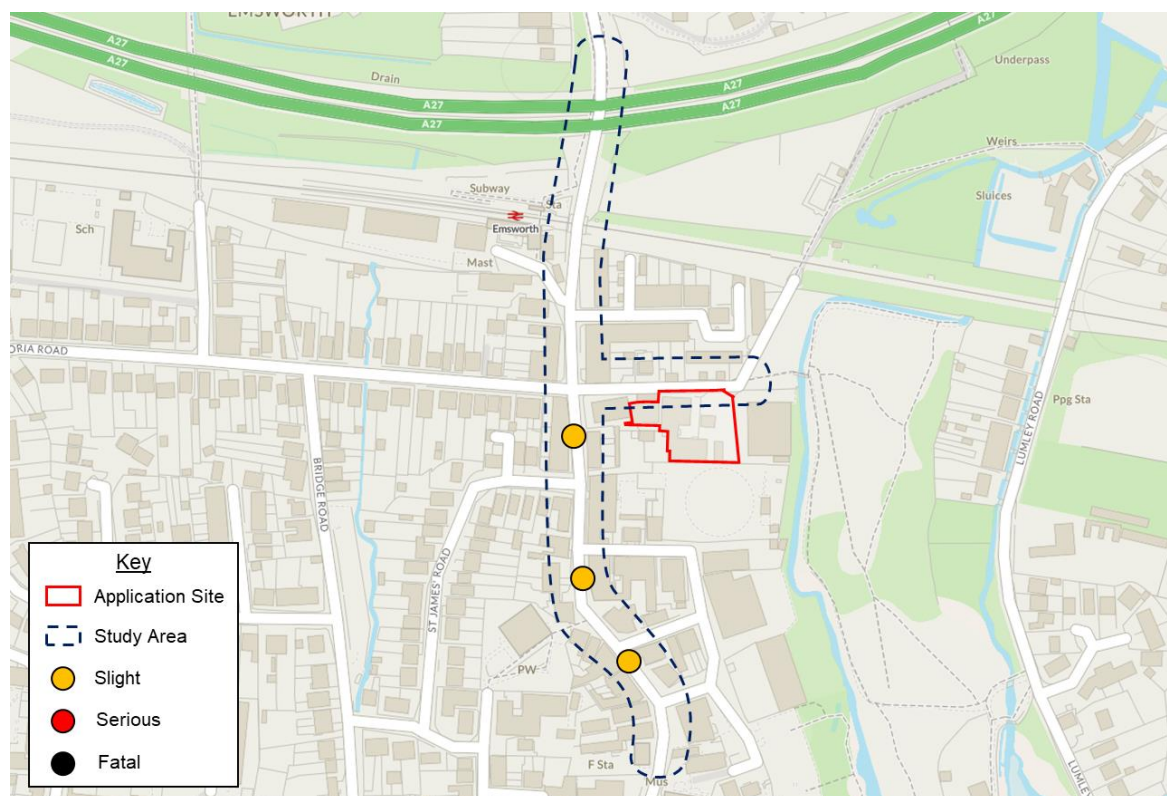


Figure 2.10: PIA Distribution

2.6.3 The study revealed 3 'slight' incidents on the B2148 North Street. The recorded PIA incidents do not reveal any pattern in terms of distribution, severity or cause that are of statistical significance. It is therefore concluded that there are no underlying highway safety issues on the local road network that could be exacerbated by the proposal.



3 PROPOSED DEVELOPMENT

3.1 Overview

3.1.1 The proposed development would involve the demolition of the existing industrial units, to be replaced by new units with a comparable floor area. The existing office building would be retained with no change to the floor area. The proposed site layout is shown on **Drawing 2022-6442-001**, and the proposed floor areas are shown in **Figure 3.1**.

Unit	Land Use	Floor Area (sqm)
1	B1 (c)	100
2		100
3		100
4		100
5		100
6		120
7		120
8		100
Office	B1 (a)	135.6
Total		975.6

Figure 3.1: Proposed Floor Areas

3.2 Vehicle Access

- 3.2.1 Vehicle access to the site would be formalised, with separate ingress and egress point for the main body of the site, as well as an additional access serving Unit 8. The arrangement represents an improvement over the existing arrangement with units being served from within the site rather than directly onto Seagull Lane.
- 3.2.2 The ingress point to the main body of the site would be positioned in the approximate location of the existing access to unit 2. The ingress has been designed to accommodate vehicles approaching from the west, with a 6.1m width, and a 9.0m wide inside corner radius. The egress point has been designed for vehicle egressing to the west, with a 6.4m width, and a 10.3m wide inside corner radius. The proposed ingress and egress points are shown on **Drawing 2022-6442-001**.
- 3.2.3 In addition, a separate access would be provided for Unit 8, running adjacent to the existing garages on Seagull Lane. The access would be 3.3m wide at its narrowest point, and would serve cars only. The proposed access to Unit 8 is shown on **Drawing 2022-6442-001**.



Visibility

- 3.2.4 Whilst Seagull Lane is subject to a 30mph speed limit, the road's narrow width and no-through status means that vehicle speeds are significantly lower than this limit. As such, visibility splays from the primary egress point measuring 2.0m x 25.0m (appropriate for a 20mph design speed), and 2.0m to the end of road/adjacent access, have been shown on **Drawing 2022-6442-001**.

Vehicle Swept Path Analysis

- 3.2.5 A vehicle swept path analysis has been undertaken demonstrating the following manoeuvres:
- i. A refuse vehicle negotiating the primary access and egress points in **Drawing 2022-6442-002**.
 - ii. A fire tender (the largest emergency service vehicle) negotiating the primary access and egress points in **Drawing 2022-6442-003**.
 - iii. A large rigid delivery vehicle negotiating the primary access and egress points in **Drawing 2022-6442-004**.
 - iv. A maximum legal length articulated vehicle negotiating the primary access and egress points in **Drawing 2022-6442-005**.
 - v. A private car negotiating the access to Unit 8 in **Drawing 2022-6442-006**.

3.3 Pedestrian Access

- 3.3.1 Pedestrian access to the site would be served from Seagull Lane as per the existing arrangement.

3.4 Internal Layout

- 3.4.1 The site's primary ingress point would continue into the main body of site, providing a one-way internal road serving units 1-7 and the existing office. The road would have a minimum width of 6.1m and would provide access to car parking spaces and service bays for each of the units.

3.5 Emergency Access

- 3.5.1 Fire tenders (the largest emergency vehicle) would be comfortably able to negotiate the proposed ingress, egress, and internal road. In accordance with MfS guidance, the following design compliances are met:
- i. Fire tenders will be able to access within 45.0m of the building.
 - ii. Fire tenders could achieve an appropriate level of access without requiring reversing distances greater than 20.0m.
 - iii. A minimum width in excess of 3.7m is maintained throughout the site.



3.5.2 A vehicle swept path analysis has been undertaken demonstrating fire tenders negotiating the site in **Drawing 2022-6442-003**.

3.6 Servicing Arrangement

3.6.1 Refuse collection would be undertaken from a bin store located at the site frontage. Large refuse vehicles would be comfortably able to access the site and negotiate the internal one-way road.

3.6.2 The main body of the site would additionally accommodate access by large delivery vehicles, up to the size of a maximum legal length articulated vehicle (although it is not anticipated there would be any significant demand for these vehicles). A vehicle swept path analysis has been undertaken demonstrating manoeuvres by these vehicles in **Drawings 2022-6442-004** and **2022-6442-005**.

3.7 Parking

Car Parking

3.7.1 Car parking requirements for the site have been based on Havant Borough Council's minimum car parking standards as set out in the council's 'Parking Supplementary Planning Document' (July 2016 (Partially updated September 2019)). A summary of the standards and the proposed provision is set out in **Figure 3.2**.

Unit	Floor Area (sqm)	Land Use	HBC Minimum Car Parking Standard	Required	Proposed
1	100	B1 (c) Light Industrial	1 space per 45 sqm	3	3
2	100			3	3
3	100			3	3
4	100			3	3
5	100			3	3
6	120			3	4
7	120			3	4
8	100			3	4
Office	135.6	B1 (a) Office	1 space per 30 sqm	5	6
Visitor	-	-	-	-	1
Disabled	-	-	5% of total allocation	2	2
Total	975.6	-	-	31	36

Figure 3.2: Car Parking Provision

3.7.2 Car parking spaces would be allocated to specific units, and as such, unallocated disabled bays have been provided to allow flexible use by all units.



3.7.3 Whilst HBC's standards do not set out visitor parking requirement for the proposed site uses, given the lack of available parking on the local road network, the provision of this space is considered appropriate.

3.7.4 All parking spaces would use minimum dimensions of 2.4m x 4.8m with minimum reversing distances of 6.0m in accordance with HBC guidance. A vehicle swept path analysis has been undertaken demonstrating car parking manoeuvres in **Drawings 2022-6442-006** and **2022-6442-007**.

Cycle Parking

3.7.5 Cycle parking requirements for the site have been based on Havant Borough Council's minimum cycle parking standards as set out in the council's 'Parking Supplementary Planning Document' (July 2016 (Partially updated September 2019)). A summary of the standards and the proposed provision is set out in **Figure 3.2**.

Unit	Floor Area (sqm)	Land Use	HBC Minimum Cycle Parking Standard		Required Cycle Parking		Proposed
			Long Stay	Short Stay	Long Stay	Short Stay	
1	100	B1(c) Light Industrial	1 space per 250 sqm	1 space per 500 sqm	4	2	12
2	100						
3	100						
4	100						
5	100						
6	120						
7	120						
8	100						
Office	135.6	B1(a) Office	1 space per 150 sqm		1		
Total	975.6	-	-	-	5	2	

Figure 3.2: Car Parking Provision

3.7.6 Cycle parking would be provided within a secure cycle store situated at the southwest corner of the site.



4 VEHICLE TRIP GENERATION AND TRAFFIC IMPACT

4.1.1 To assess the traffic impact of the proposals, the TRICS database (version 7.9.1) has been used to anticipate the likely traffic volumes generated by the existing site and the proposed development. The internal aspects of the office building are to remain unchanged, and there is to be no change to the building's floor area. As such, vehicle trips generated by this element would not be expected to change, and, office trips have therefore been excluded from this trip assessment.

4.2 Existing Site

4.2.1 The existing site includes 4 separate industrial units with a combined floor area of 812.8 sqm. To establish the number of the trips generated by the existing industrial units, the parameters identified in **Figure 4.1** have been used to filter the TRICS database.

TRICS (version 7.9.1)	
Filtering Parameter:	Criteria Selected:
i. Land Use	Employment – Industrial Unit
ii. Regions	England (excluding Greater London)
iii. Gross Floor Area	150 to 3000 sqm
iv. Date Range	01/01/12 to 01/02/2020
v. Count Type	Manual
vi. Selected Days	Weekdays
vii. Selected Locations	1. Suburban Area – 2 surveys 2. Edge of Town – 6 surveys

Figure 4.1: TRICS Filtering Parameters – Industrial Units

4.2.2 The TRICS reports are attached at **Appendix A**, whilst a summary of the peak hour and daily trip rates, along with the subsequent vehicle movements associated with the existing industrial units is provided in **Figure 4.2**.

TRICS Trip Rate per 100sqm			
Time Period	Arrivals	Departures	Two-way Total
AM Peak Hour	0.775	0.143	0.918
PM Peak Hour	0.051	0.561	0.612
Daily Traffic	3.686	3.516	7.202
TRICS Trip Generation (812.8 sqm)			
AM Peak Hour	6	1	7
PM Peak Hour	0	5	5
Daily Traffic	30	29	59

Figure 4.2: Existing Trip Generation – Industrial Units



4.2.3 The TRICS assessment suggests that the existing industrial units would generate 59 daily two-way vehicle movements, including 7 during the AM peak hour and 5 during the PM peak hour.

4.3 Proposed Development

4.3.1 To establish the number of the trips generated by the proposed units, the trip rate previously derived in **Figure 4.2** for the existing units has been applied to the new floor areas. The peak hour and daily trip rates, along with the subsequent vehicle movements associated with the proposed units is provided in **Figure 4.3**.

TRICS Trip Rate per 100sqm			
Time Period	Arrivals	Departures	Two-way Total
AM Peak Hour	0.775	0.143	0.918
PM Peak Hour	0.051	0.561	0.612
Daily Traffic	3.686	3.516	7.202
TRICS Trip Generation (840 sqm)			
AM Peak Hour	7	1	8
PM Peak Hour	0	5	5
Daily Traffic	31	30	60

Figure 4.3: Proposed Trip Generation – Industrial Units

4.3.2 The TRICS assessment suggests that the proposed units would generate 60 daily two-way vehicle movements, including 8 during the AM peak hour and 5 during the PM peak hour.

4.4 Net Trip Generation

4.4.1 The trip generations associated with the existing site and the proposed development have been compared in **Figure 4.4** to establish the net trip impact associated with the development.

Net Trip Generation			
Time Period	Arrivals	Departures	Two-way Total
AM Peak Hour	1	0	1
PM Peak Hour	0	0	0
Daily Traffic	1	1	1

*discrepancies due to rounding

Figure 4.4: Net Trip Generation

4.4.2 As shown in **Figure 4.4**, the development would result in 1 additional vehicle trip, which would occur during the AM peak hour.



5 SUMMARY AND CONCLUSIONS

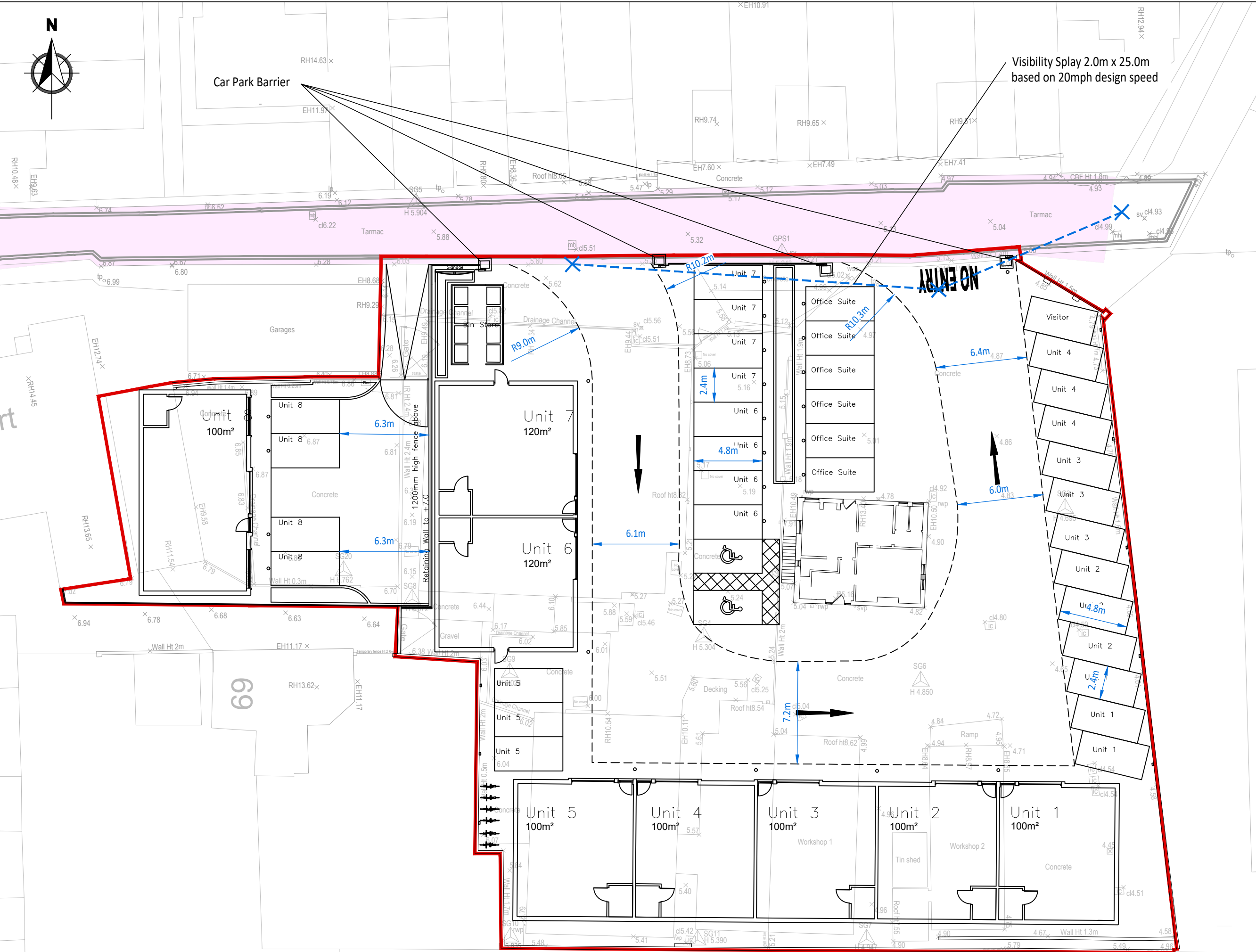
5.1.1 This Transport Statement has been prepared by Bright Plan on behalf of M&M Hall Family Pension Trust to support a planning application for a commercial development at Seagull Lane, Emsworth. The findings from this report are as follows:

- i. The application site is conveniently located within walking distance of local bus stops and Emsworth railway station.
- ii. The PIA record does not reveal any pattern that in terms of distribution, severity or cause that would be exacerbated by the proposed development.
- iii. Vehicle movements to/from the main body of the site would be served from separate ingress/egress points adjoining Seagull Lane. The ingress/egress geometries can accommodate vehicles up to the size of maximum legal length articulated vehicle.
- iv. A separate access point would be provided for Unit 8 which would serve the parking spaces associated with this unit.
- v. A vehicle swept path analysis has been undertaken demonstrating that the proposed ingress/egress point and internal geometries can accommodate access by large emergency, service, and delivery vehicles.
- vi. The site would provide car and cycle parking in accordance with HBC's minimum car and cycle parking standards.
- vii. The development is expected to result in 1 additional daily two-way vehicle trip, which is expected to occur during the AM peak hour.



DRAWINGS

- 001** Site Overview
 - 002** Refuse Collection Vehicle Swept Path Analysis
 - 003** Emergency Access Vehicle Swept Path Analysis
 - 004** Rigid Delivery Vehicle Swept Path Analysis
 - 005** Max Legal Length Articulated Vehicle Swept Path Analysis
 - 006** Unit 8 Vehicle Swept Path Analysis
 - 007** Car Parking Vehicle Swept Path Analysis
-



NOTES

A3

1. This drawing is to be read in conjunction with all other Bright Plan drawings, and with all relevant Architect's and Engineer's drawings and specification. Any discrepancies found are to be reported immediately to the Engineer.
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4. Any information given regarding existing underground services is given in good faith after consultation with the relevant authority, however accuracy is not certain.

-Legend-

- Application Boundary
- Public Highway
- Existing Road Markings
- Visibility Splay

Original Issue	19/05/2022
Rev.	Amendments
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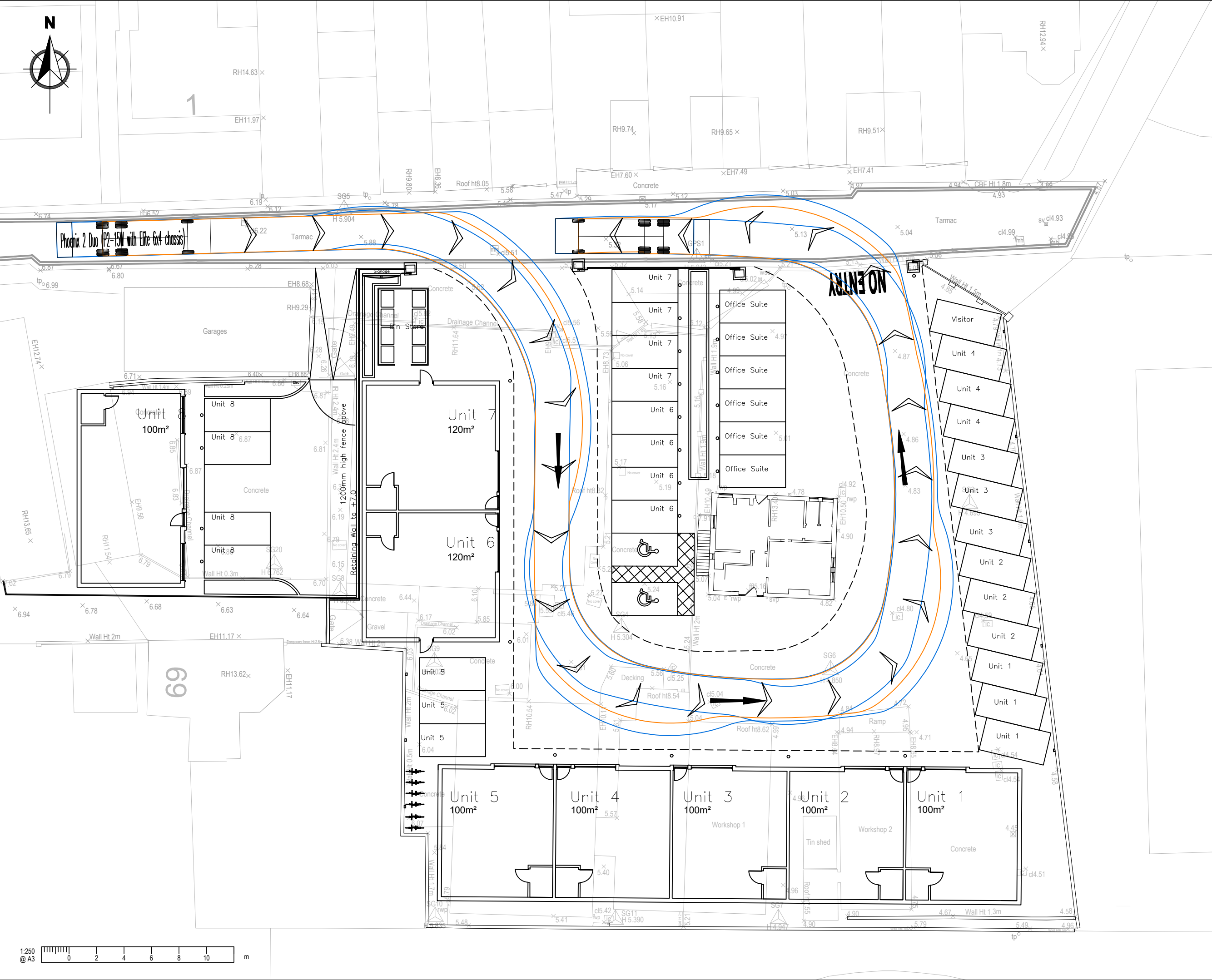
Drawing Status	Draft
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Client	M&M Hall Family Pension Trust
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Project	Seagull Lane, Emsworth
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Drawing Title	Site Overview
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Drawing No.	2022-6442-001					Rev.	-



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A3

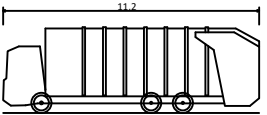
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-Legend-

Existing Road Markings

-Swept Path-

Wheel Track
Over Swing



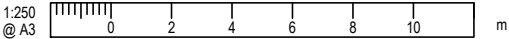
Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)
Overall Length 11.200m
Overall Width 2.530m
Overall Body Height 3.751m
Min Body Ground Clearance 0.304m
Track Width 2.500m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 9.500m

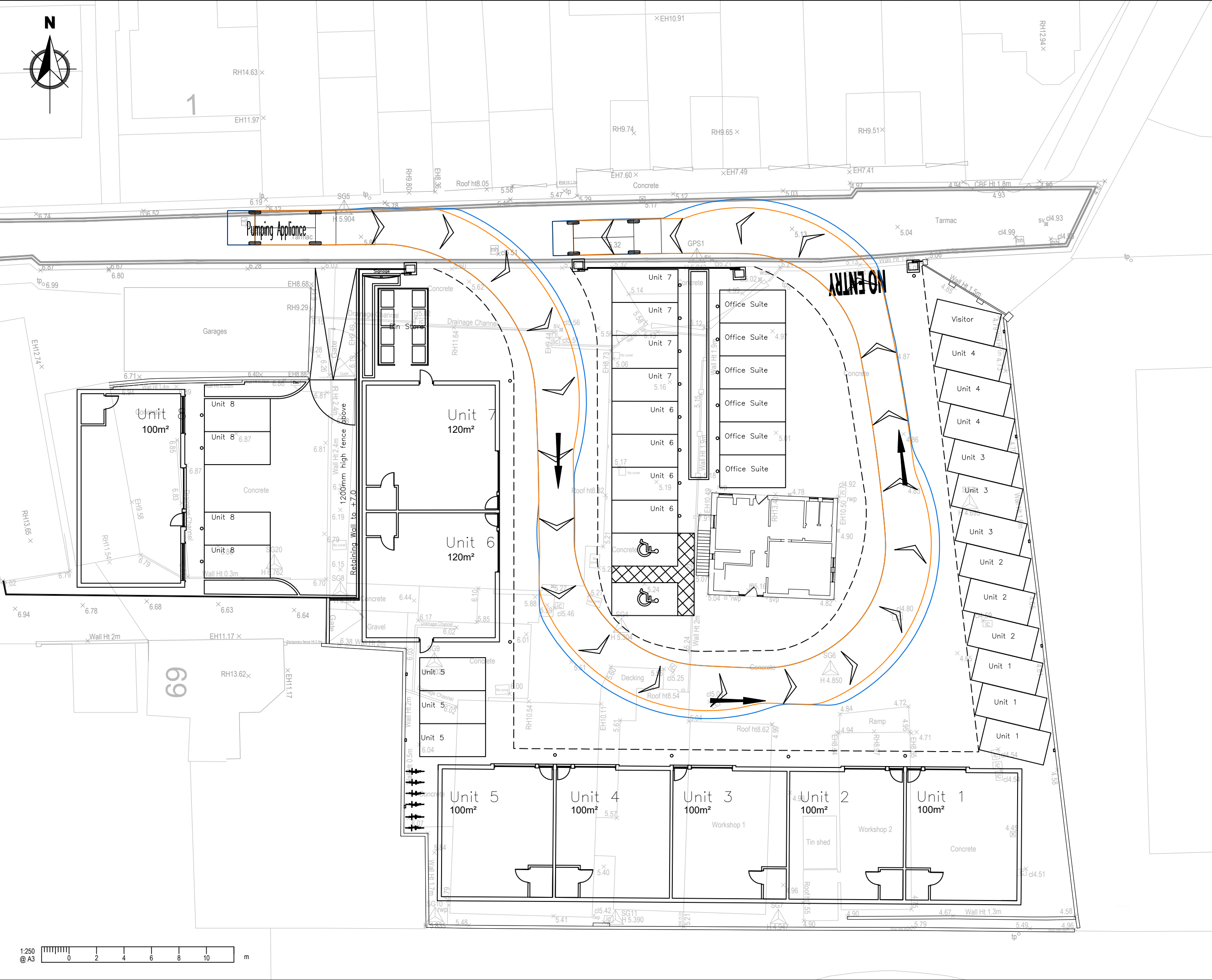
-	Original Issue	19/05/2022
Rev.	Amendments	Date



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Drawing Status		Final	
Client			
M&M Hall Family Pension Trust			
Project		Seagull Lane, Emsworth	
Drawing Title			
Emergency Access Vehicle Swept Path Analysis			
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1:250	May 22	SMO	EJD
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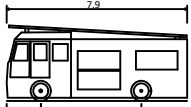
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-Legend-

Existing Road Markings

-Swept Path-

Wheel Track
Over Swing



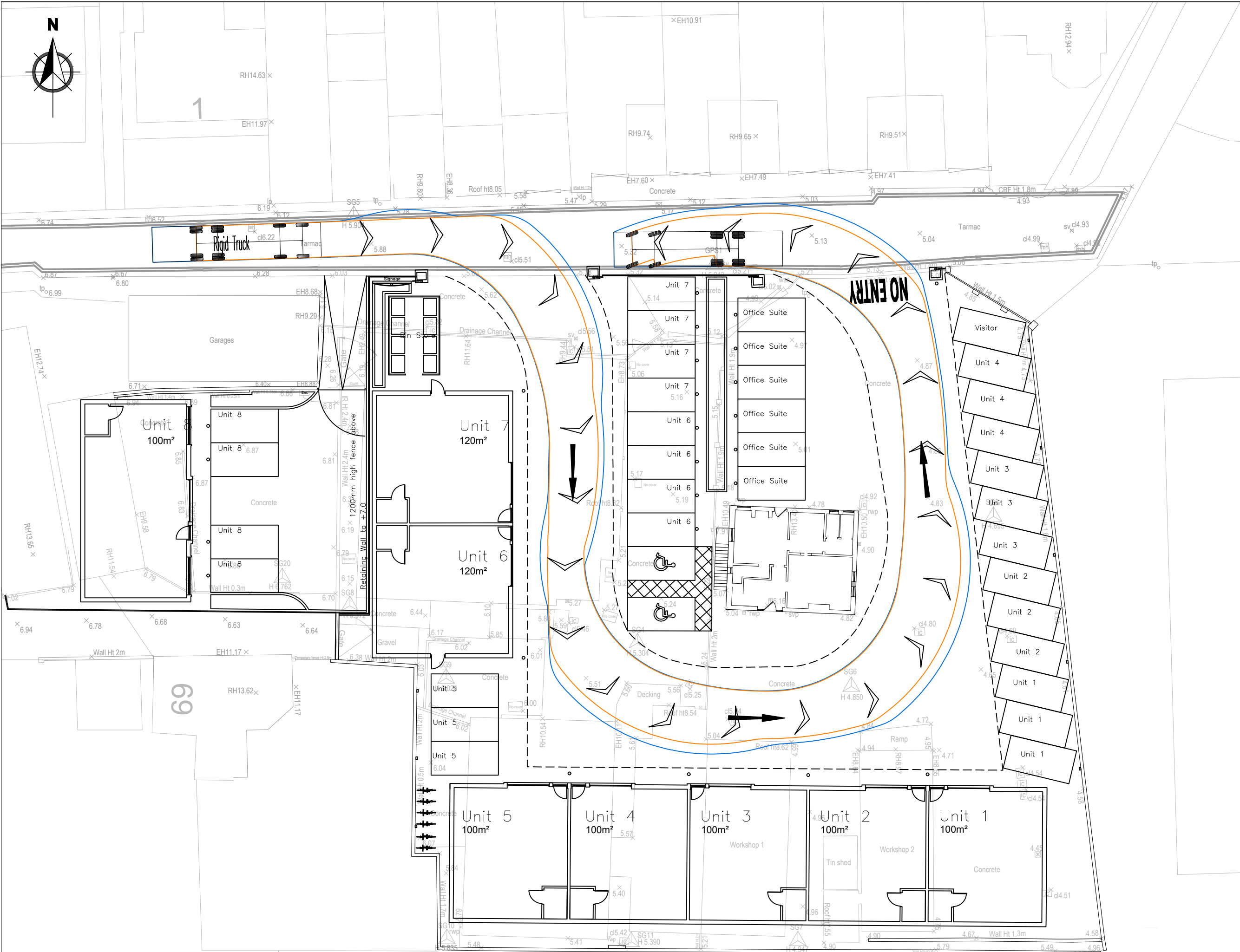
Pumping Appliance
Overall Length 7.900m
Overall Width 2.500m
Overall Body Height 3.300m
Min Body Ground Clearance 0.140m
Track Width 2.500m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 7.750m

-	Original Issue	17/05/2022
Rev.	Amendments	Date

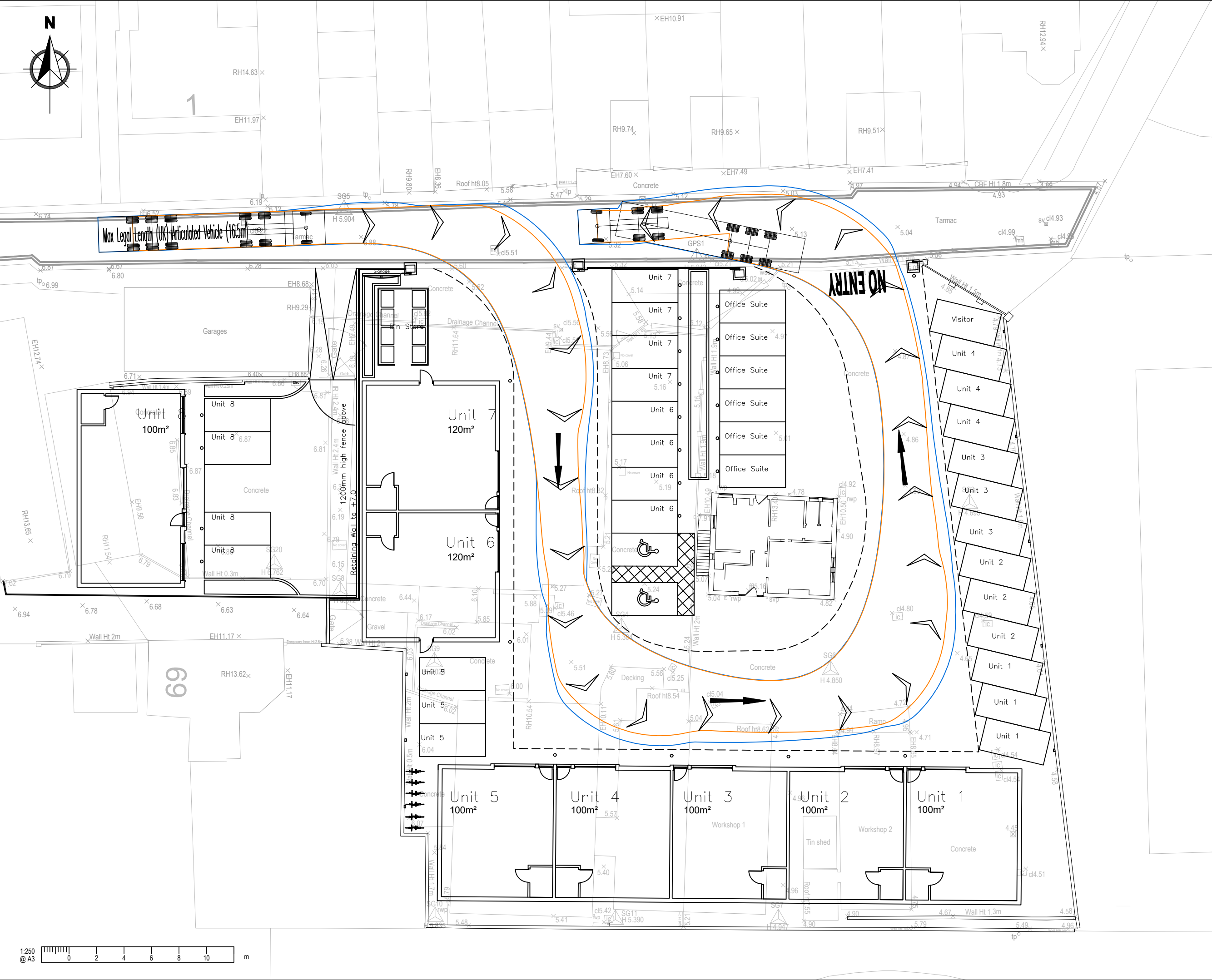


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Drawing Status		Final	
Client			
M&M Hall Family Pension Trust			
Project		Seagull Lane, Emsworth	
Drawing Title			
Refuse Collection Vehicle Swept Path Analysis			
Scale	Date	Drawn By	Checked By
1:250	May 22	SMO	EJD
Drawing No.			Rev.
2022-6442-003			-



NOTES																																	
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-Legend- Existing Road Markings Swept Path- Wheel Track Over Swing																																	
Rigid Truck Overall Length 12.000m Overall Width 2.500m Overall Body Height 3.928m Min Body Ground Clearance 0.412m Track Width 2.471m Lock to lock time 6.00s Kerb to Kerb Turning Radius 11.900m																																	
<table border="1"><thead><tr><th>-</th><th>Original Issue</th><th>17/05/2022</th></tr><tr><th>Rev.</th><th>Amendments</th><th>Date</th></tr></thead><tbody><tr><td colspan="3"> B R I G H T P L A N Transport Planning and Civil Engineering Consultants 2 West Barn, Norton Lane, Chichester, West Sussex PO20 3AF Tel: 01243 210418 Email: enquiries@bpcivils.co.uk www.bpcivils.co.uk </td></tr></tbody></table>				-	Original Issue	17/05/2022	Rev.	Amendments	Date	B R I G H T P L A N Transport Planning and Civil Engineering Consultants 2 West Barn, Norton Lane, Chichester, West Sussex PO20 3AF Tel: 01243 210418 Email: enquiries@bpcivils.co.uk www.bpcivils.co.uk																							
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1:250	May 22	SMO	EJD																														
Drawing No.			Rev.																														
2022-6442-004			-																														



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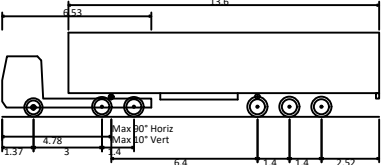
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-Legend-

Existing Road Markings

-Swept Path-

Wheel Track
Over Swing



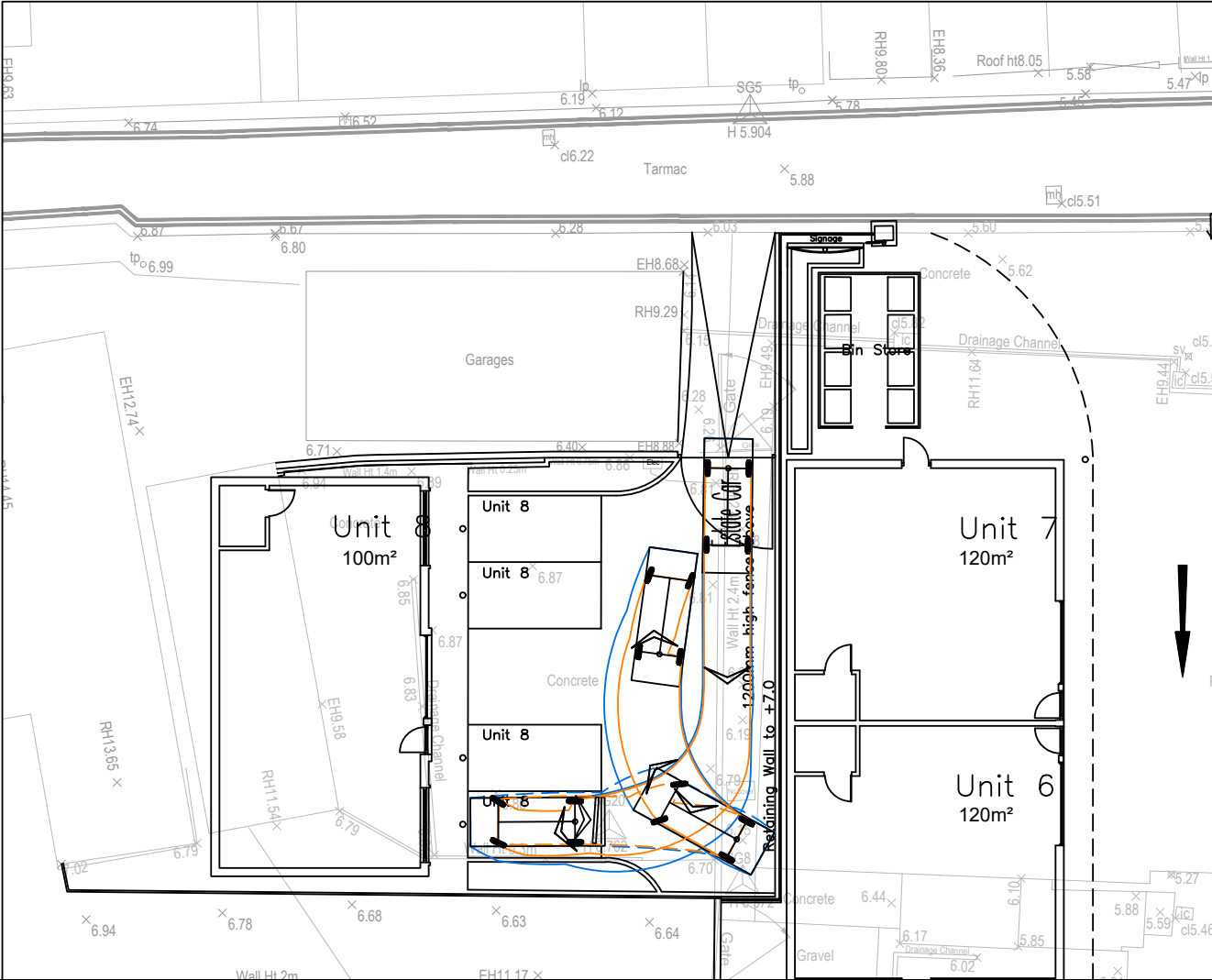
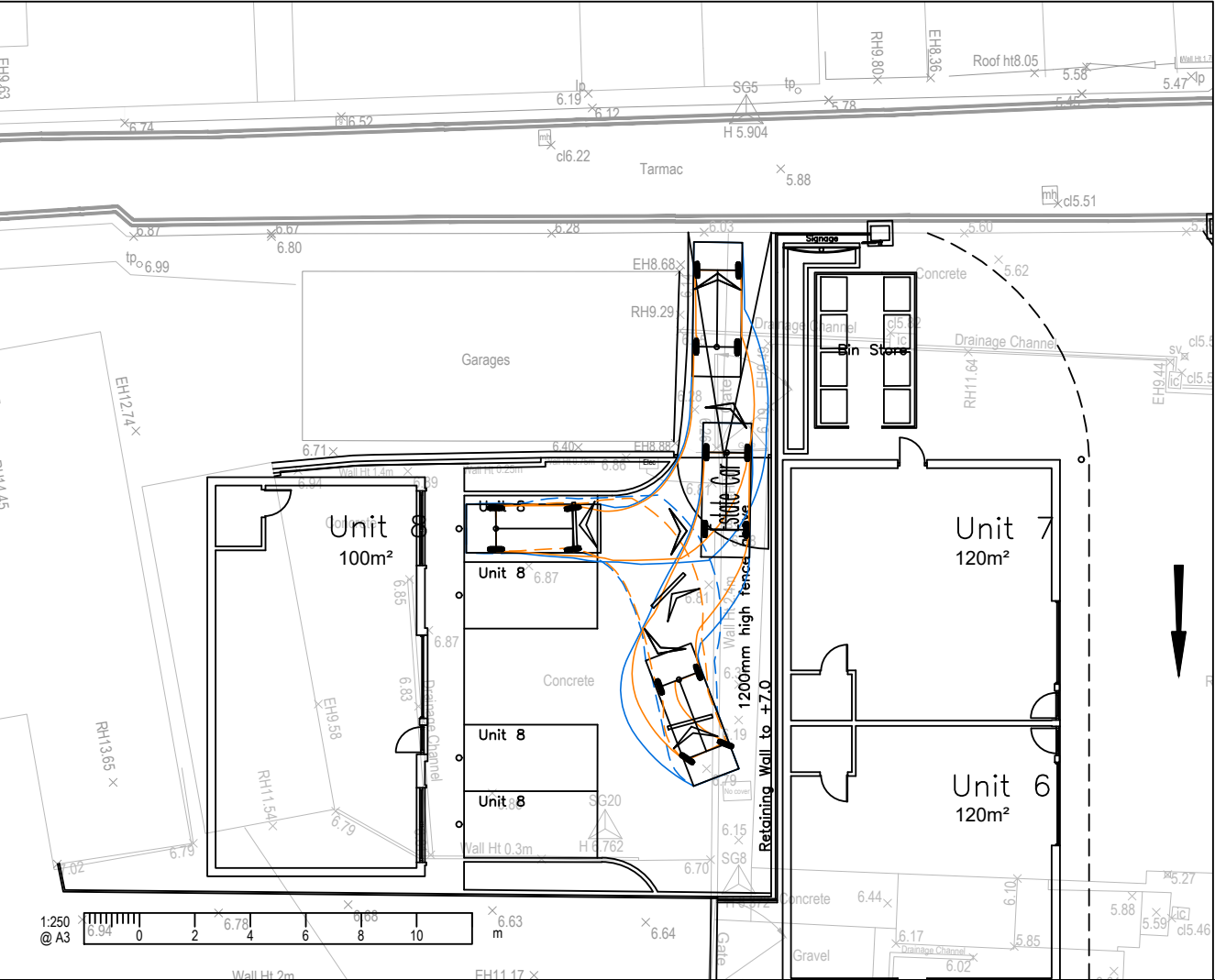
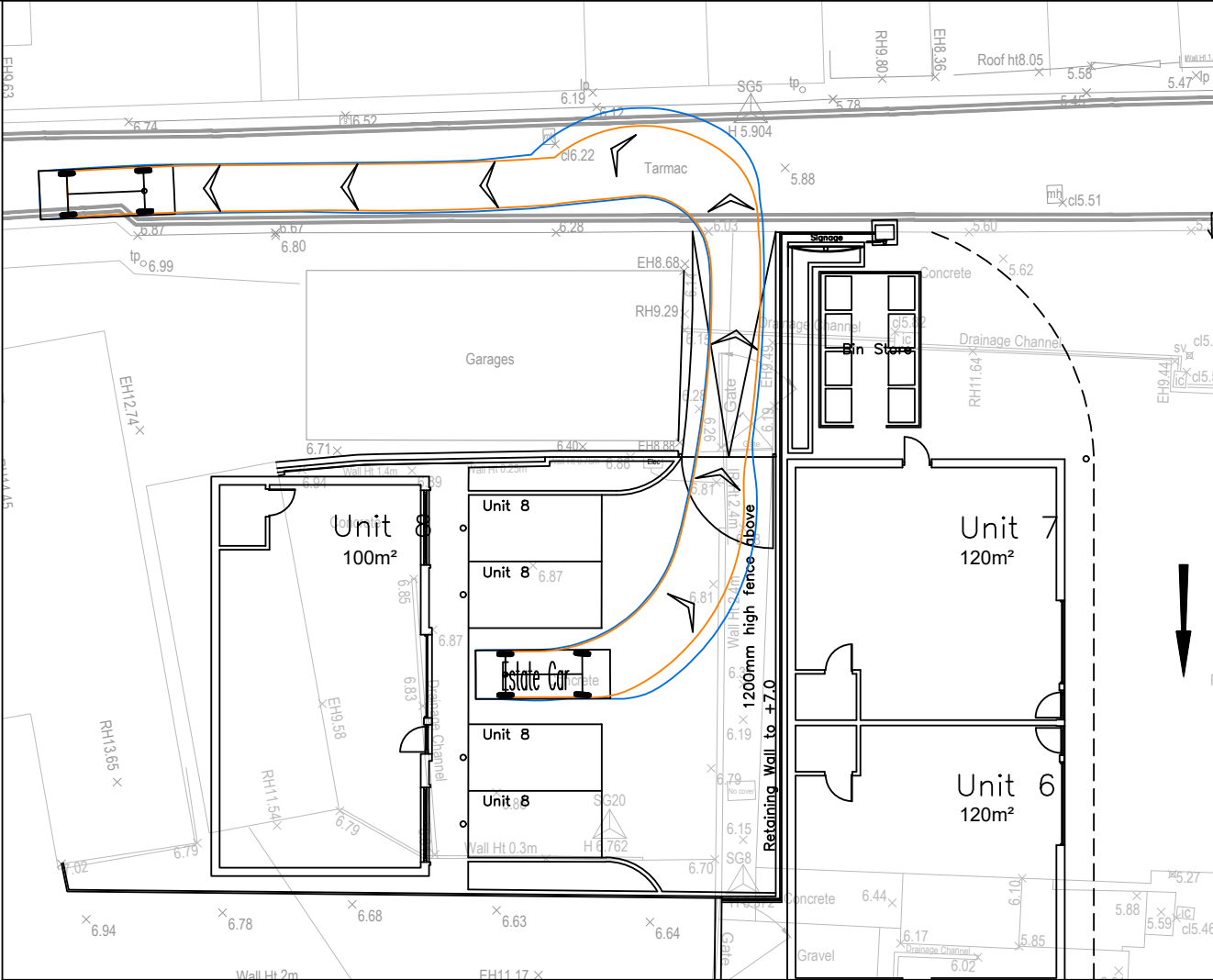
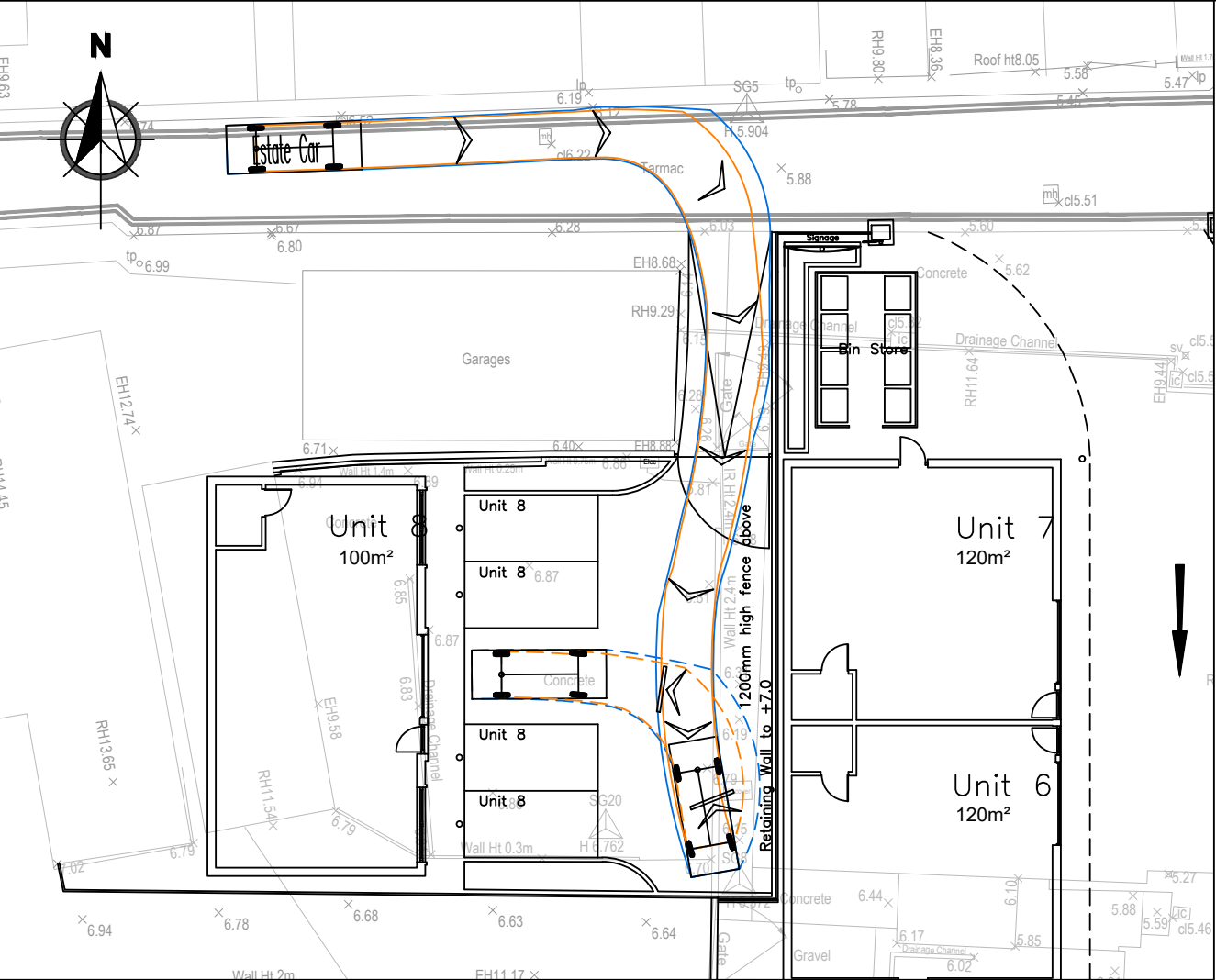
Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.500m
Overall Width 2.550m
Overall Body Height 3.681m
Min Body Ground Clearance 0.411m
Max Track Width 2.500m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.530m

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Drawing Status		Final	
Client			
M&M Hall Family Pension Trust			
Project		Seagull Lane, Emsworth	
Drawing Title			
Max Legal Length Articulated Vehicle Swept Path Analysis			
Scale	Date	Drawn By	Checked By
1:250	May 22	SMO	-
Drawing No.			Rev.
2022-6442-005			-



NOTES

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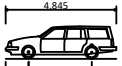
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-Legend-

Existing Road Markings

-Swept Path-

Wheel Track
Over Swing



Estate Car
Overall Length 4.845m
Overall Width 1.750m
Overall Body Height 1.424m
Min Body Ground Clearance 0.189m
Max Track Width 1.655m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 4.950m

-	Original Issue	17/05/2022
Rev.	Amendments	Date

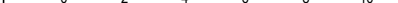


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Drawing Status		Final	
Client			
M&M Hall Family Pension Trust			
Project			
Seagull Lane, Emsworth			
Drawing Title			
Unit 8 Vehicle Swept Path Analysis			
Scale	Date	Drawn By	Checked By
1:250	May 22	SMO	EJD
Drawing No.			Rev.
2022-6442-006			-



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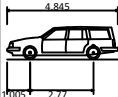
0 2 4 6 8 10 m

A3

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Existing Road Markings

Wheel Track Over Swing



Estate Car	
Overall Length	4.845m
Overall Width	1.750m
Overall Body Height	1.424m
Min Body Ground Clearance	0.189m
Max Track Width	1.655m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	4.950m

-	Original Issue	18/05/2022
Rev.	Amendments	Date



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Drawing Status		Draft	
Client			
M&M Hall Family Pension Trust			
Project			
Seagull Lane, Emsworth			
Drawing Title			
Car Parking Vehicle Swept Path Analysis			
Scale	Date	Drawn By	Checked By
1:250	May 22	SMO	EJD
Drawing No.			Rev.
2022-6442-007			-



APPENDICES



Appendix A

TRICS Report

Calculation Reference: AUDIT-305901-220517-0551

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
	RE READING	1 days
04	EAST ANGLIA	
	NF NORFOLK	2 days
	SF SUFFOLK	1 days
08	NORTH WEST	
	LC LANCASHIRE	2 days
09	NORTH	
	CB CUMBRIA	1 days

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

Primary 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: 150 to 3000 (units: sqm)
 Range Selected by User: 150 to 3000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 01/02/2020

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:

Tuesday	2 days
Thursday	5 days
Friday	1 days

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

Selected survey types:

Manual count	8 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
Edge of Town	6

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	8
-----------------	---

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.

Bright Plan 2 West Barn Chichester

Licence No: 305901

Secondary Filtering selection:

Use Class:

Not Known

8 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®.

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
5,001 to 10,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	3 days
25,001 to 50,000	2 days

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

Population within 5 miles:

5,001 to 25,000	1 days
75,001 to 100,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	5 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	5 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

8 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

8 days

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

LIST OF SITES relevant to selection parameters

1	CB-02-C-01	DOMINO'S PIZZA	CUMBRIA
	COWPER ROAD		
	PENRITH		
	GILWILLY IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	2950 sqm	
	Survey date: TUESDAY	10/06/14	Survey Type: MANUAL
2	HC-02-C-01	ENGINEERING COMPANY	HAMPSHIRE
	JAYS CLOSE		
	BASINGSTOKE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3000 sqm	
	Survey date: THURSDAY	16/06/16	Survey Type: MANUAL
3	LC-02-C-03	TIMBER SUPPLIES	LANCASHIRE
	GOLDEN HILL LANE		
	LEYLAND		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	150 sqm	
	Survey date: TUESDAY	06/11/18	Survey Type: MANUAL
4	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
5	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
6	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
7	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
8	SF-02-C-01	JOINERY	SUFFOLK
	ANSON ROAD		
	IPSWICH		
	MARTLESHAM HEATH		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	1100 sqm	
	Survey date: FRIDAY	12/07/13	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.

MANUALLY DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
HE-02-C-02	22/10/13	Trip rate too low

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Licence No: 305901

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	2950	0.000	1	2950	0.000	1	2950	0.000
05:30 - 06:00	1	2950	0.102	1	2950	0.000	1	2950	0.102
06:00 - 06:30	1	2950	0.034	1	2950	0.000	1	2950	0.034
06:30 - 07:00	1	2950	0.102	1	2950	0.034	1	2950	0.136
07:00 - 07:30	8	1226	0.153	8	1226	0.041	8	1226	0.194
07:30 - 08:00	8	1226	0.388	8	1226	0.071	8	1226	0.459
08:00 - 08:30	8	1226	0.316	8	1226	0.051	8	1226	0.367
08:30 - 09:00	8	1226	0.459	8	1226	0.092	8	1226	0.551
09:00 - 09:30	8	1226	0.255	8	1226	0.092	8	1226	0.347
09:30 - 10:00	8	1226	0.112	8	1226	0.082	8	1226	0.194
10:00 - 10:30	8	1226	0.143	8	1226	0.133	8	1226	0.276
10:30 - 11:00	8	1226	0.112	8	1226	0.122	8	1226	0.234
11:00 - 11:30	8	1226	0.133	8	1226	0.102	8	1226	0.235
11:30 - 12:00	8	1226	0.061	8	1226	0.071	8	1226	0.132
12:00 - 12:30	8	1226	0.102	8	1226	0.082	8	1226	0.184
12:30 - 13:00	8	1226	0.092	8	1226	0.143	8	1226	0.235
13:00 - 13:30	8	1226	0.204	8	1226	0.235	8	1226	0.439
13:30 - 14:00	8	1226	0.133	8	1226	0.153	8	1226	0.286
14:00 - 14:30	8	1226	0.071	8	1226	0.102	8	1226	0.173
14:30 - 15:00	8	1226	0.092	8	1226	0.143	8	1226	0.235
15:00 - 15:30	8	1226	0.102	8	1226	0.061	8	1226	0.163
15:30 - 16:00	8	1226	0.010	8	1226	0.071	8	1226	0.081
16:00 - 16:30	8	1226	0.051	8	1226	0.112	8	1226	0.163
16:30 - 17:00	8	1226	0.031	8	1226	0.316	8	1226	0.347
17:00 - 17:30	8	1226	0.031	8	1226	0.275	8	1226	0.306
17:30 - 18:00	8	1226	0.020	8	1226	0.286	8	1226	0.306
18:00 - 18:30	8	1226	0.041	8	1226	0.184	8	1226	0.225
18:30 - 19:00	8	1226	0.031	8	1226	0.122	8	1226	0.153
19:00 - 19:30	1	2950	0.169	1	2950	0.102	1	2950	0.271
19:30 - 20:00	1	2950	0.034	1	2950	0.102	1	2950	0.136
20:00 - 20:30	1	2950	0.034	1	2950	0.034	1	2950	0.068
20:30 - 21:00	1	2950	0.068	1	2950	0.102	1	2950	0.170
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			3.686			3.516			7.202

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:	150 - 3000 (units: sqm)
Survey date range:	01/01/12 - 01/02/20
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
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.