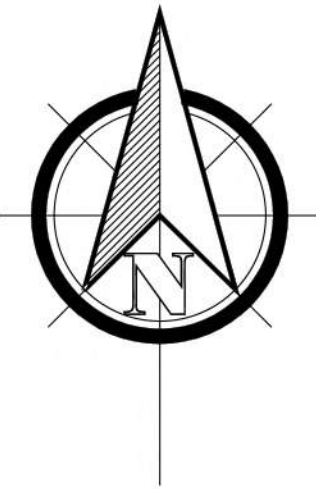


Appendices

Appendix A: Proposed Site Layout

GREENVALE, BAMFORD

general notes:
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KEY

- Application Boundary
- Denotes 1.8m high feathered edge timber fence (refer to detail FD-004)
- Denotes 1.8m high brick wall (detail tbc)
- Indicative planting
- Denotes timber gate
- Denotes shared drives
- Denotes raised tables
- Denotes affordable housing units
- Existing trees to be retained



D	19/03/2025	ELC	Blocks updated to issue 02. Minor amendments following production of planning pack.
C	04/03/2025	ELC	Overhead cable swing lines updated. Plots along swing line adjusted accordingly. Indicative footpath links. Su25 & pump station noted.
B	04/03/2025	ELC	Plot 2 changed to HSD. Plot 23 & 24 changed to STA & PEA respectively.
A	04/03/2025	ELC	Sub-station moved & access road adjusted to accommodate. Plot 41 swapped to HSD. Plot 8 swapped to PEA. Plots 9-12 revised. 23-25 noted.
Rev.	Date	By	Description

Client:

Wain
HOMES

mck associates limited
architecture | building surveying | urban design

burnaby villa ■ 48 watling street road ■ fulwood ■ preston ■ pr2 8bp
tel: 01772 774510 fax: 01772 774511 email mck@mckassociates.co.uk

Project:

GREENVALE

BAMFORD

ROCHDALE

Drawing Title:

COLOURED SITE LAYOUT

Drawn: ELC Checked: PGM Scale: 1:500 Date: 19/02/2025

Job No: 23-025 Drawing No: 401C Rev: D

0m 10m 20m 30m 40m 50m 60m 70m 80m

1 : 500

Drawn: Burnaby Villa: 23/01/2025 24/02/2025 Wain Homes: Greenvale, Bamford, Rochdale: 23/02/2025 24/02/2025 25/02/2025 26/02/2025 27/02/2025 28/02/2025 29/02/2025 01/03/2025 02/03/2025 03/03/2025 04/03/2025 05/03/2025 06/03/2025 07/03/2025 08/03/2025 09/03/2025 10/03/2025 11/03/2025 12/03/2025 13/03/2025 14/03/2025 15/03/2025 16/03/2025 17/03/2025 18/03/2025 19/03/2025 20/03/2025 21/03/2025 22/03/2025 23/03/2025 24/03/2025 25/03/2025 26/03/2025 27/03/2025 28/03/2025 29/03/2025 30/03/2025 31/03/2025 01/04/2025 02/04/2025 03/04/2025 04/04/2025 05/04/2025 06/04/2025 07/04/2025 08/04/2025 09/04/2025 10/04/2025 11/04/2025 12/04/2025 13/04/2025 14/04/2025 15/04/2025 16/04/2025 17/04/2025 18/04/2025 19/04/2025 20/04/2025 21/04/2025 22/04/2025 23/04/2025 24/04/2025 25/04/2025 26/04/2025 27/04/2025 28/04/2025 29/04/2025 30/04/2025 01/05/2025 02/05/2025 03/05/2025 04/05/2025 05/05/2025 06/05/2025 07/05/2025 08/05/2025 09/05/2025 10/05/2025 11/05/2025 12/05/2025 13/05/2025 14/05/2025 15/05/2025 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Appendix B: Transport Initial Scoping Package – 21.11.2024

Small Parcel of Development within JPA17 Bamford and Norden

Attachments to Scoping Email – 21.11.2024

Issued to Rochdale & TFGM

Contents

Attachment 1 - Site Location Plan

Attachment 2 - Draft Accessibility Plan

Attachment 3 - Site Access Preliminary Layout 784-B068938-00-XX-DR-O-001 P02

Attachment 4 – Speed Survey Raw Data

Attachment 5 – Visibility Calculations

Attachment 6 - Site Access Tracking 784-B068938-00-XX-TR-O-001 P01

Attachment 7 – Multi-Modal Trip Generation Table

Attachment 8 - TRICS Private Houses - Midlands & North England - exc Covid & Bungalows

Attachment 9 - Appendix D of PfE for JPA17

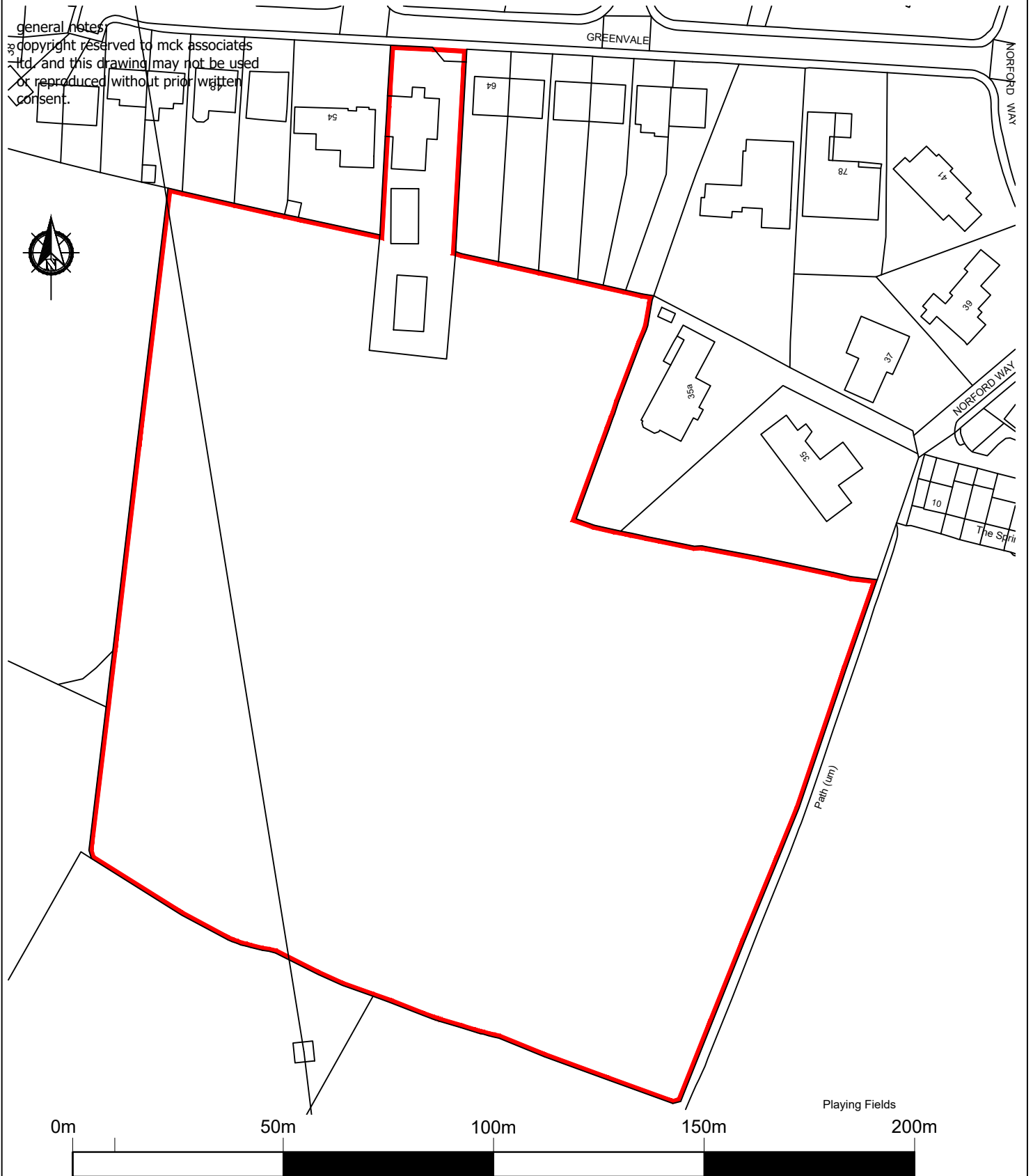
Attachment 10 - Schematic Figure showing Norden Rd - War Office Rd modifications to traffic circulation and local junction improvements

Attachment 1 - Site Location Plan

general notes
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 consent.

GREENVALE

NORFORD WAY



0m 50m 100m 150m 200m

Playing Fields

Path (un)

1 : 1250

PLANNING

Client:

Project:
 GREENVALE, BAMFORD, ROCHDALE

Drawing Title:
 SITE LOCATION PLAN

Drawn:
 W.L

Checked:

Scale:
 1:1250 @A4

Date:
 JULY 2023



associates limited

architecture ■ building surveying ■ urban design

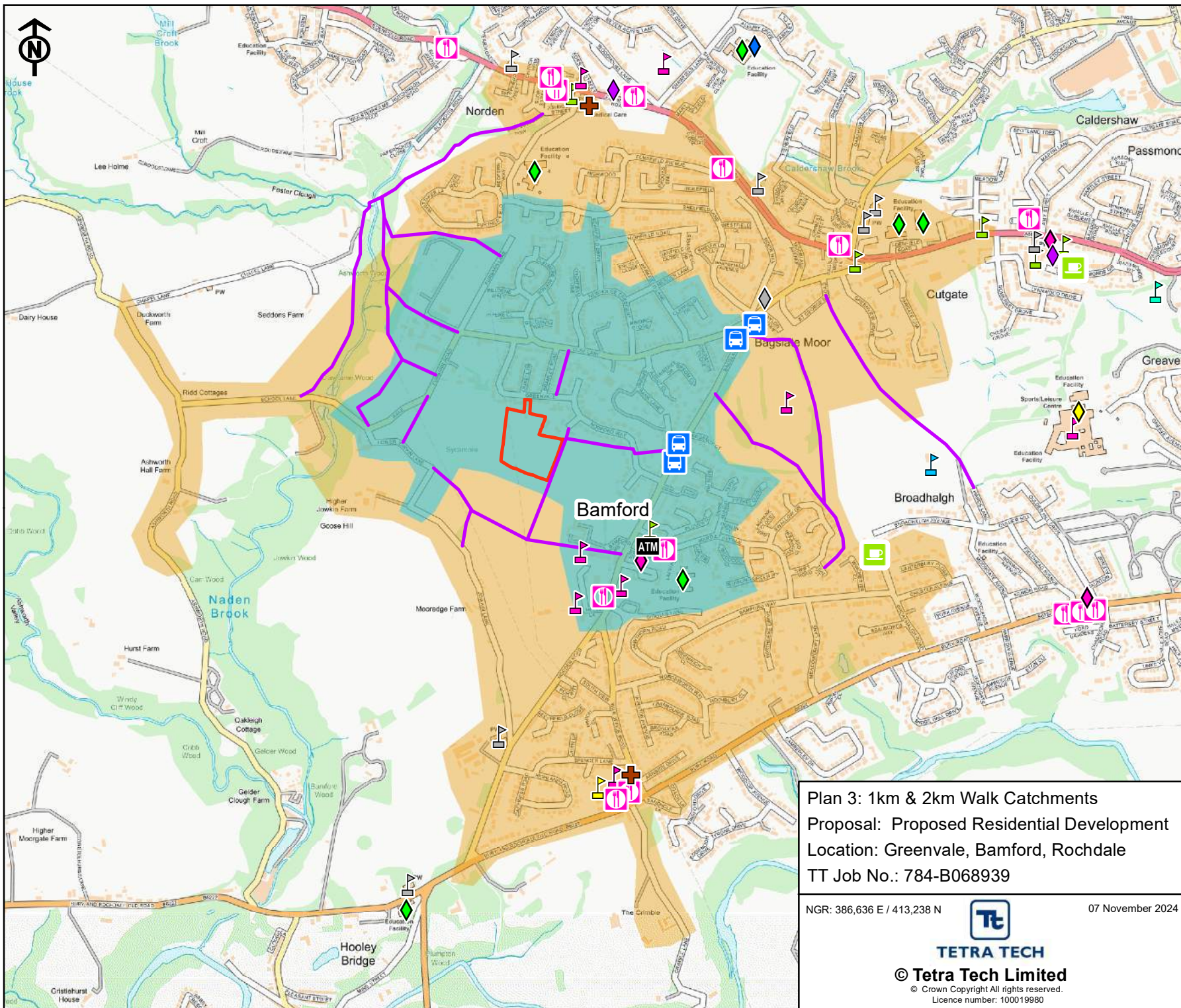
burnaby villa ■ 48 watling street road ■ fulwood ■ preston ■ pr2 8bp
 tel: 01772 774510 fax: 01772 774511 email mck@mckassociates.co.uk

Job No:
 23-025

Drawing No:
 SL01

Rev:

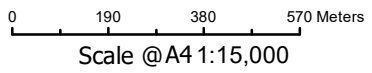
Attachment 2 - Draft Accessibility Plan



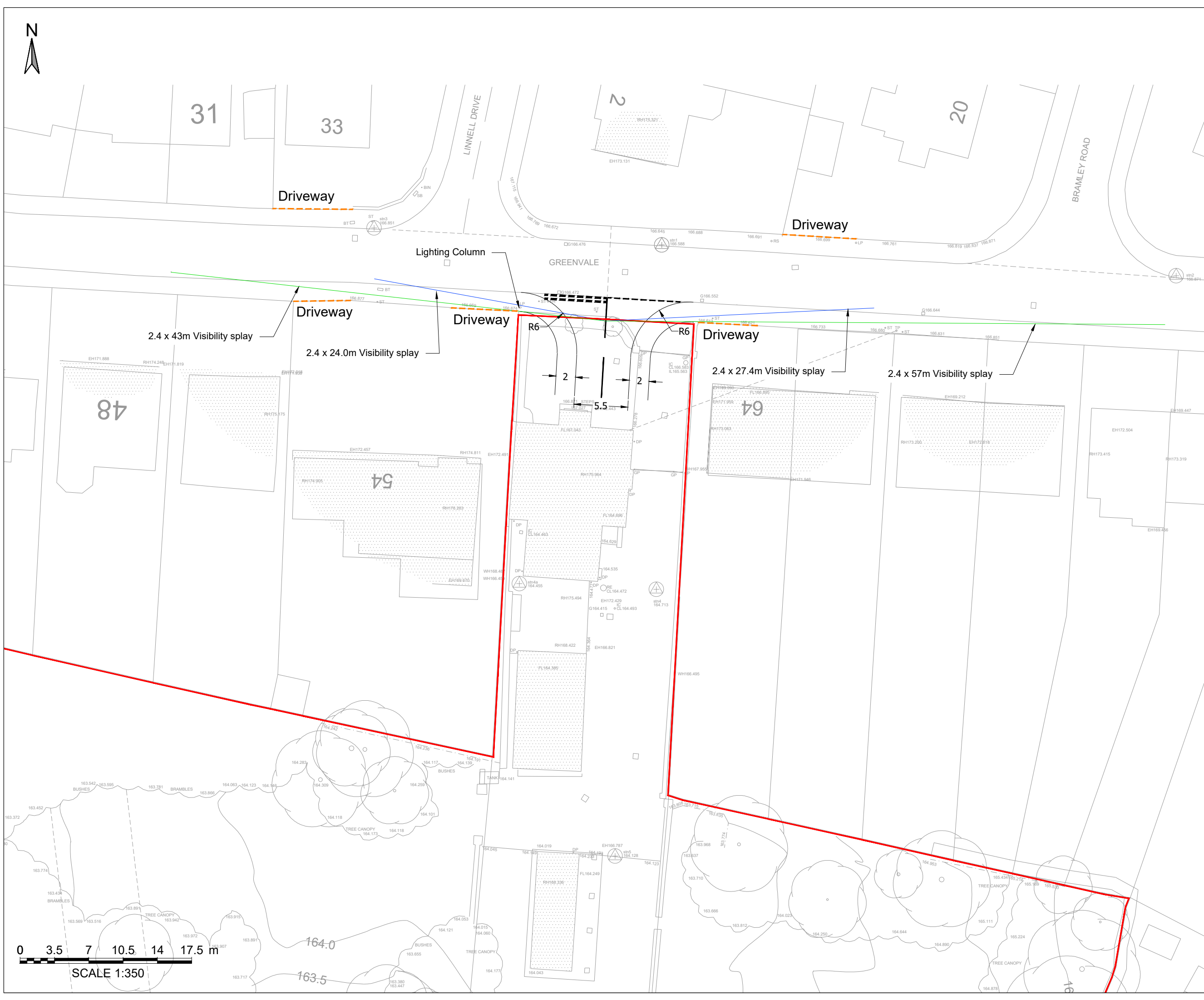
Legend

- Approx Site Boundary
- PRow
- + Post Office
- Bus Stop
- Restaurants
- ATM
- Cafe
- Library
- Nursery
- Pharmacy
- Dentist
- Secondary School
- Primary School
- Place of Worship
- Parks
- Leisure Facilities
- Convenience Store
- Rugby Club
- Butchers
- 1km Walk Catchment
- 2km Walk Catchment

Plan 3: 1km & 2km Walk Catchments
Proposal: Proposed Residential Development
Location: Greenvale, Bamford, Rochdale
TT Job No.: 784-B068939



Attachment 3 - Site Access Preliminary Layout
784-B068938-00-XX-DR-O-001 P02



- Red line site boundary provided by client
- Visibility Splays based on recorded speeds
- Achievable visibility splay
- Driveway entrances

P02	UPDATED VISIBILITY SPLAYS	20.11.2024	JH	MT	MT
P01	PRELIMINARY FIRST ISSUE	07.08.2024	AB	MT	MT
Rev	Description	Date	Drm / Chk / App		

Client



Proposed Residential Development:
Land off Greenvale

Sheet Title

Proposed Site Access: Visibility Splay
Assessment

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B068938	- TTE	- 00	- XX	- DR	- O	- 001	P02

TE_MT_v1

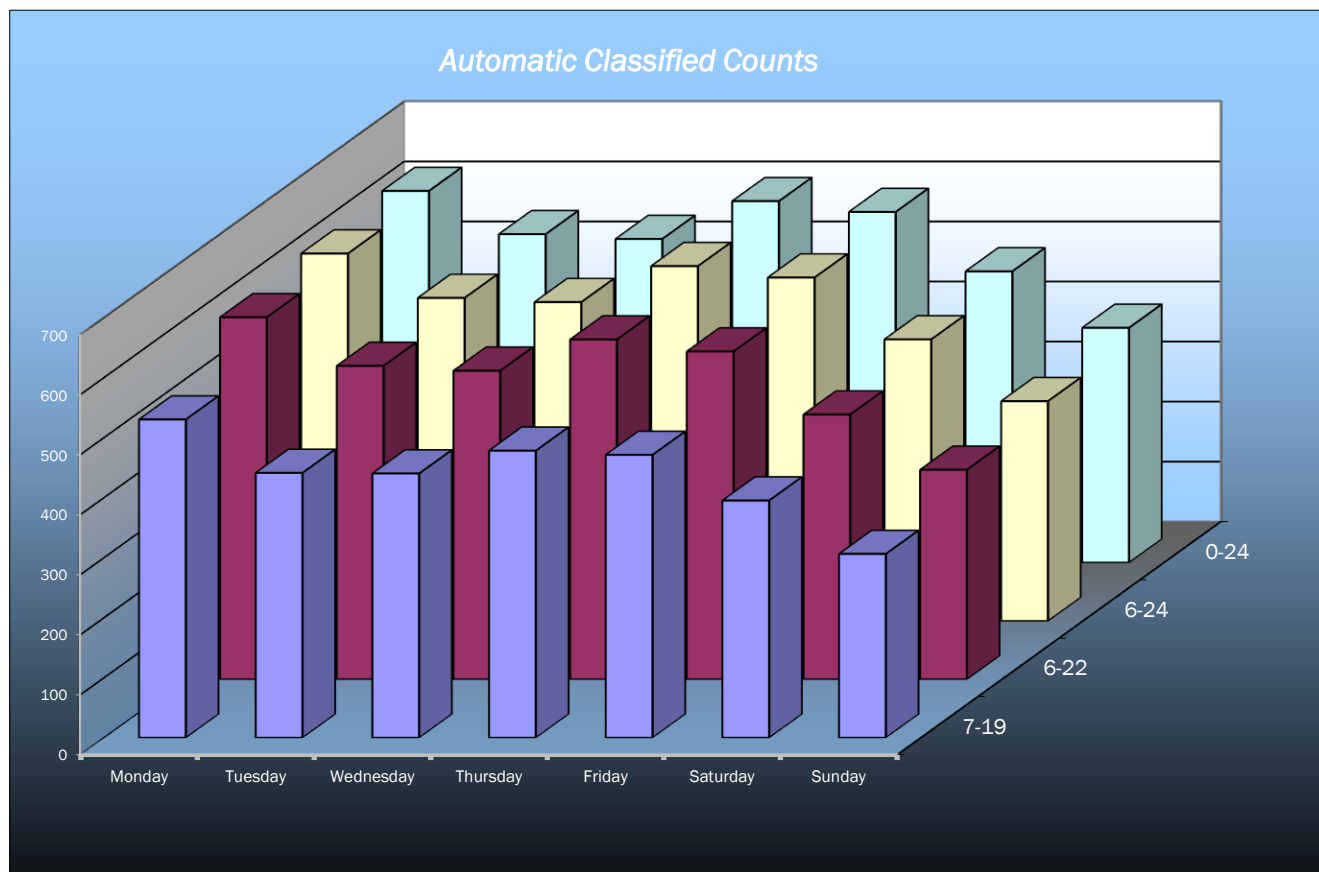
Attachment 4 – Speed Survey Raw Data

Automatic Classified Counts, Rochdale

LOCATION: GREENVALE (EASTERN SITE)

Direction : WESTBOUND

VEHICLE FLOWS									
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24	WEEKDAY AVERAGE	WEEK AVERAGE
1	3	3	3	1	6	6	6	3	4
2	0	1	0	1	2	5	9	1	3
3	0	1	2	3	1	1	2	1	1
4	1	1	0	1	1	2	5	1	2
5	1	1	0	0	1	1	2	1	1
6	2	2	3	5	1	1	1	3	2
7	2	7	7	5	5	1	1	5	4
8	15	17	15	16	26	6	5	18	14
9	32	33	24	32	31	8	7	30	24
10	21	19	22	28	22	17	8	22	20
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12	31	31	30	28	30	45	46	30	34
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14	34	30	40	34	44	41	41	36	38
15	35	30	39	39	44	49	28	37	38
16	137	49	52	55	63	44	36	71	62
17	60	65	45	57	59	37	31	57	51
18	68	56	62	72	50	36	22	62	52
19	35	45	51	46	40	29	26	43	39
20	34	31	19	35	27	16	13	29	25
21	22	28	26	29	27	16	20	26	24
22	15	15	22	19	16	13	9	17	16
23	6	8	9	21	15	15	12	12	12
24	3	8	8	4	11	13	5	7	7
7-19	530	441	440	478	471	395	306	472	437
6-22	603	522	514	566	546	441	349	550	506
6-24	612	538	531	591	572	469	366	569	526
0-24	619	547	539	602	584	485	391	578	538



Automatic Classified Counts, Rochdale

LOCATION: GREENVALE (EASTERN SITE)

Direction : WESTBOUND

AVERAGE SPEEDS							
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24
1	15.5	18.8	18.8	25.5	22.2	17.2	17.2
2	-	15.5	-	15.5	20.5	21.5	24.4
3	-	25.5	20.5	26.3	25.5	25.5	20.5
4	25.5	15.5	-	15.5	15.5	20.5	19.5
5	15.5	25.5	-	-	15.5	15.5	20.5
6	15.5	15.5	18.8	21.5	15.5	25.5	25.5
7	20.5	16.9	18.4	17.5	17.5	15.5	15.5
8	19.0	21.8	17.5	21.1	20.1	18.8	15.5
9	17.1	16.6	16.2	17.4	17.8	18.9	15.5
10	17.4	16.9	16.4	16.6	16.4	17.9	18.0
11	18.4	16.3	19.4	18.0	17.9	17.8	18.7
12	18.3	16.8	17.6	16.2	16.8	16.8	18.1
13	16.8	17.5	16.5	16.3	16.7	16.3	18.7
14	17.9	16.5	16.3	17.0	16.4	18.4	17.7
15	16.6	17.2	18.1	15.2	17.8	16.7	17.6
16	16.4	15.3	16.7	16.6	17.1	18.7	18.3
17	17.0	17.0	17.3	18.1	17.4	16.3	17.3
18	18.4	18.5	17.7	18.0	17.8	18.0	19.0
19	17.8	17.7	19.4	17.7	18.3	18.5	17.0
20	18.4	17.4	17.6	18.3	19.6	16.8	19.3
21	18.2	18.3	18.1	18.9	18.0	18.0	18.5
22	16.8	18.2	18.2	17.5	18.0	19.2	15.5
23	18.8	19.3	21.1	19.2	16.2	20.5	16.3
24	22.2	20.5	18.0	18.0	18.9	18.6	19.5
10-12	18.4	16.5	18.5	17.1	17.4	17.3	18.4
14-16	16.5	16.2	17.4	15.9	17.5	17.7	18.0
0-24	18.1	18.1	18.0	18.3	18.1	18.6	18.5

85TH PERCENTILE							
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24
1	15.5	24.6	24.6	-	27.3	21.2	21.2
2	-	-	-	-	27.6	27.0	35.3
3	-	-	27.6	37.6	-	-	27.6
4	-	-	-	-	-	27.6	25.0
5	-	-	-	-	-	-	27.6
6	15.5	15.5	24.6	27.0	-	-	-
7	27.6	25.9	23.2	22.0	22.0	-	-
8	26.7	27.6	21.6	26.2	25.2	24.0	15.5
9	21.5	21.8	22.5	22.1	22.0	27.5	15.5
10	22.5	22.6	20.7	21.5	20.7	23.5	22.6
11	23.9	19.0	26.1	23.1	22.8	22.4	24.5
12	24.5	21.1	25.1	18.8	22.5	21.4	22.5
13	21.0	23.1	21.9	20.4	20.8	21.0	23.8
14	22.2	24.1	21.0	22.5	20.0	23.0	21.9
15	20.7	21.0	22.5	20.6	23.3	22.0	21.8
16	20.2	19.1	20.9	20.3	20.8	23.4	22.8
17	21.0	21.3	21.7	23.5	21.7	20.6	22.8
18	23.6	24.3	22.3	22.7	22.6	22.4	25.3
19	22.7	22.4	24.4	22.3	23.6	23.7	21.7
20	23.1	21.5	21.8	23.2	24.6	22.9	24.4
21	22.8	23.3	23.1	25.4	23.0	22.5	23.2
22	23.2	22.7	22.8	22.4	22.5	27.2	20.5
23	24.0	24.4	26.3	24.8	20.7	27.2	19.2
24	27.9	25.8	22.6	23.0	25.1	23.4	25.0
10-12	24.2	20.0	25.6	20.9	22.7	21.9	23.5
14-16	20.4	20.0	21.7	20.4	22.0	22.7	22.3
0-24	22.5	22.6	23.2	23.5	22.9	23.7	23.2

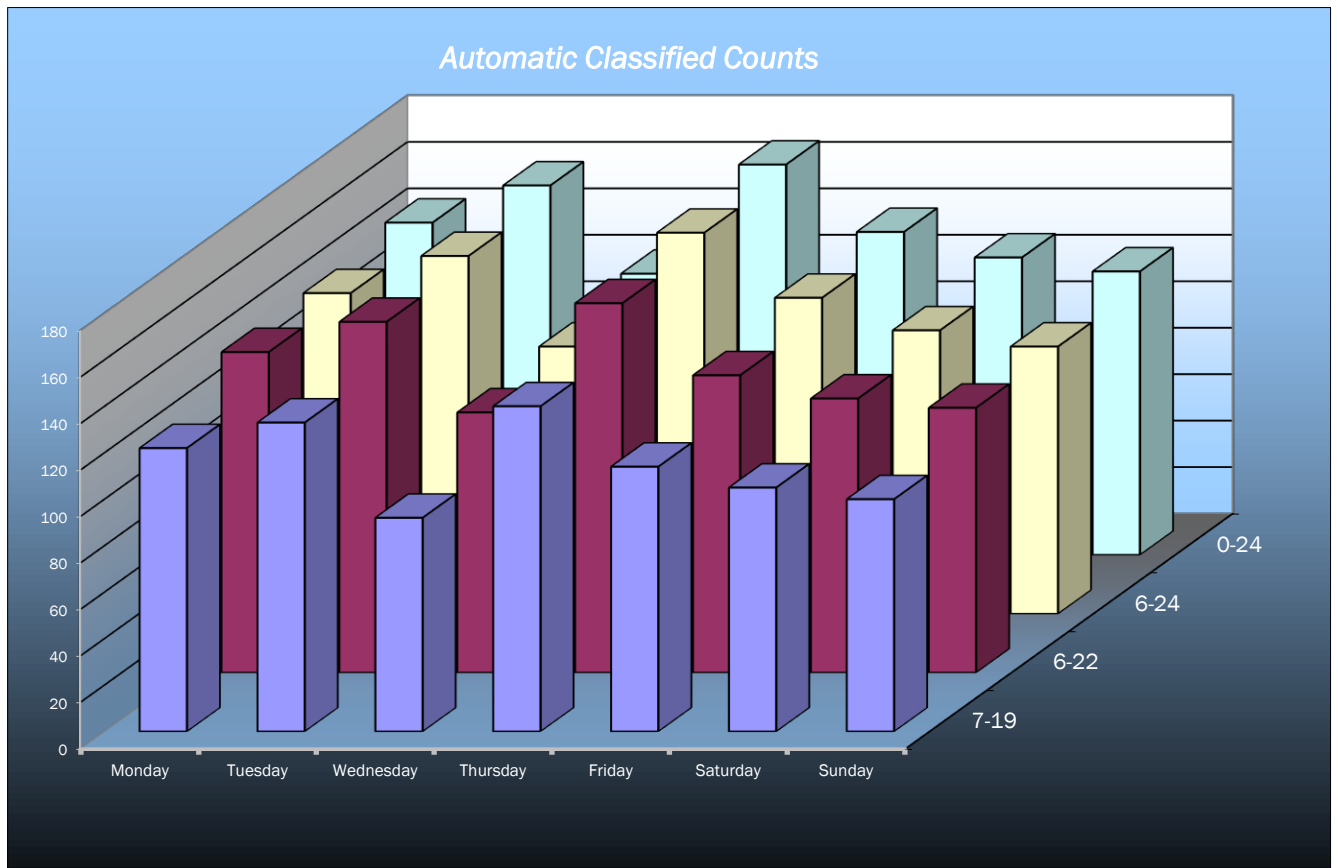
7 DAY AVERAGE SPEED	18.3
7 DAY AVERAGE 85th PERCENTILE	23.1
5 DAY OFF PEAK AVERAGE SPEED	17.1
5 DAY OFF PEAK AVERAGE 85th PERCENTILE	21.8

Automatic Classified Counts, Rochdale

LOCATION: GREENVALE (WESTERN SITE)

Direction : EASTBOUND

EASTBOUND									
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24	WEEKDAY AVERAGE	WEEK AVERAGE
1	1	2	1	0	0	4	2	1	1
2	0	0	0	0	1	1	2	0	1
3	0	0	0	0	0	0	1	0	0
4	0	0	1	0	0	0	1	0	0
5	1	2	0	0	1	1	1	1	1
6	3	1	4	4	1	0	0	3	2
7	7	8	8	6	3	0	0	6	5
8	10	16	9	14	10	2	0	12	9
9	10	9	13	11	11	8	7	11	10
10	10	8	8	12	10	11	6	10	9
11	10	9	8	11	11	16	7	10	10
12	7	14	7	11	7	9	15	9	10
13	9	12	7	7	11	15	10	9	10
14	12	9	4	14	6	6	9	9	9
15	13	4	10	6	13	11	8	9	9
16	10	7	10	14	7	9	6	10	9
17	10	18	2	15	9	6	14	11	11
18	9	8	8	9	9	8	8	9	8
19	12	19	6	16	10	4	10	13	11
20	6	6	8	5	6	6	5	6	6
21	2	3	1	6	3	3	3	3	3
22	1	1	3	2	2	4	6	2	3
23	0	1	2	5	3	2	1	2	2
24	0	2	1	0	5	2	0	2	1
7-19	122	133	92	140	114	105	100	120	115
6-22	138	151	112	159	128	118	114	138	131
6-24	138	154	115	164	136	122	115	141	135
0-24	143	159	121	168	139	128	122	146	140



Automatic Classified Counts, Rochdale

LOCATION: GREENVALE (WESTERN SITE)

Direction : EASTBOUND

AVERAGE SPEEDS							
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24
1	15.5	15.5	15.5	-	-	18.0	15.5
2	-	-	-	-	15.5	15.5	15.5
3	-	-	-	-	-	-	15.5
4	-	-	15.5	-	-	-	15.5
5	15.5	15.5	-	-	15.5	5.5	15.5
6	15.5	15.5	13.0	15.5	15.5	-	-
7	16.9	16.8	20.5	15.5	18.8	-	-
8	19.5	19.3	19.9	19.1	18.5	20.5	-
9	16.5	16.6	16.3	16.4	14.6	19.3	19.8
10	14.5	15.5	15.5	15.5	16.5	21.9	20.5
11	15.5	14.4	11.8	14.6	15.5	14.9	14.1
12	16.9	14.8	16.9	18.2	14.1	16.6	18.2
13	14.4	17.2	14.1	16.9	12.8	15.5	15.5
14	16.3	14.4	15.5	16.9	18.8	17.2	16.6
15	17.0	15.5	17.5	15.5	16.3	14.6	16.8
16	15.5	12.6	16.5	15.5	14.1	15.5	15.5
17	16.5	16.1	15.5	16.8	17.7	18.8	16.2
18	18.8	15.5	18.0	19.9	15.5	15.5	18.0
19	18.0	19.2	18.8	16.1	18.5	20.5	18.5
20	17.2	15.5	16.8	19.5	17.2	18.8	21.5
21	25.5	15.5	25.5	17.2	18.8	15.5	15.5
22	15.5	25.5	15.5	20.5	20.5	18.0	13.8
23	-	15.5	20.5	17.5	12.2	15.5	5.5
24	-	15.5	25.5	-	15.5	20.5	-
10-12	16.2	14.6	14.3	16.4	14.8	15.7	16.1
14-16	16.3	14.1	17.0	15.5	15.2	15.0	16.1
0-24	16.9	16.3	17.4	17.1	16.3	16.9	16.2

85TH PERCENTILE							
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24
1	-	15.5	-	-	-	23.0	15.5
2	-	-	-	-	-	-	15.5
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	-	29.6	-	-	-	-	-
6	15.5	-	18.0	15.5	-	-	-
7	20.7	20.3	25.8	21.8	24.6	-	-
8	24.7	25.4	27.2	25.4	25.2	27.6	-
9	22.2	19.9	21.2	19.4	20.0	24.4	25.1
10	20.2	15.5	15.5	15.5	19.7	26.9	26.0
11	20.2	17.7	16.9	20.0	20.0	19.3	17.9
12	20.7	20.9	23.8	22.9	17.9	22.6	22.7
13	20.4	21.1	17.9	20.7	17.4	20.8	20.2
14	21.5	17.7	23.7	20.6	24.0	24.7	19.9
15	22.6	15.5	23.8	21.8	21.2	20.0	20.3
16	20.2	17.5	19.7	19.4	17.9	15.5	15.5
17	22.2	20.2	15.5	20.4	24.4	24.0	18.9
18	23.8	15.5	22.6	25.2	15.5	20.8	22.6
19	22.5	24.1	24.0	20.6	23.3	26.3	23.3
20	21.2	21.8	23.2	25.0	21.2	24.0	27.0
21	25.5	15.5	-	21.2	24.6	15.5	15.5
22	-	-	15.5	27.6	27.6	23.0	17.9
23	-	-	27.6	22.0	17.9	15.5	-
24	-	15.5	-	-	22.6	27.6	-
10-12	20.5	19.3	20.4	21.4	18.9	21.0	20.3
14-16	21.4	16.5	21.7	20.6	19.5	17.7	17.9
0-24	21.5	19.4	21.3	21.4	21.4	22.3	20.2

7 DAY AVERAGE SPEED	16.7
7 DAY AVERAGE 85th PERCENTILE	21.1
5 DAY OFF PEAK AVERAGE SPEED	15.4
5 DAY OFF PEAK AVERAGE 85th PERCENTILE	20.0

Attachment 5 – Visibility Calculations

Calculation of suggested visibility splay Y-distances and

Image 1: SSD formula

$$SSD = vt + \frac{v^2}{2(d + 0.1a)}$$

Diagram illustrating the SSD formula with labels:

- speed (m/s) points to v
- reaction time (s) points to t
- Deceleration rates (m/s²) points to d
- Approach Gradient (%) points to a

Calculation of the visibility splay Y-distance looking to the right

Table 1: Recorded 85th %tile approach speeds

Eastern ATC, Westbound	
Speed (mph)	23.1
Speed (m/s)	10.3

Table 2: Visibility Splay Y Distance and Forward Stopping Sight Distance Calculations for the approach speed shown in Table 1

			Source of SSD
			Manual for Streets
SSD Parameters	Reaction time	t (s)	1.5
	deceleration rate	d (m/ss)	4.41
	gradient	a (%)	0
Y Distance (m)=			27.4
FSSD=			29.8

Calculation of the visibility splay Y-distance looking to the left

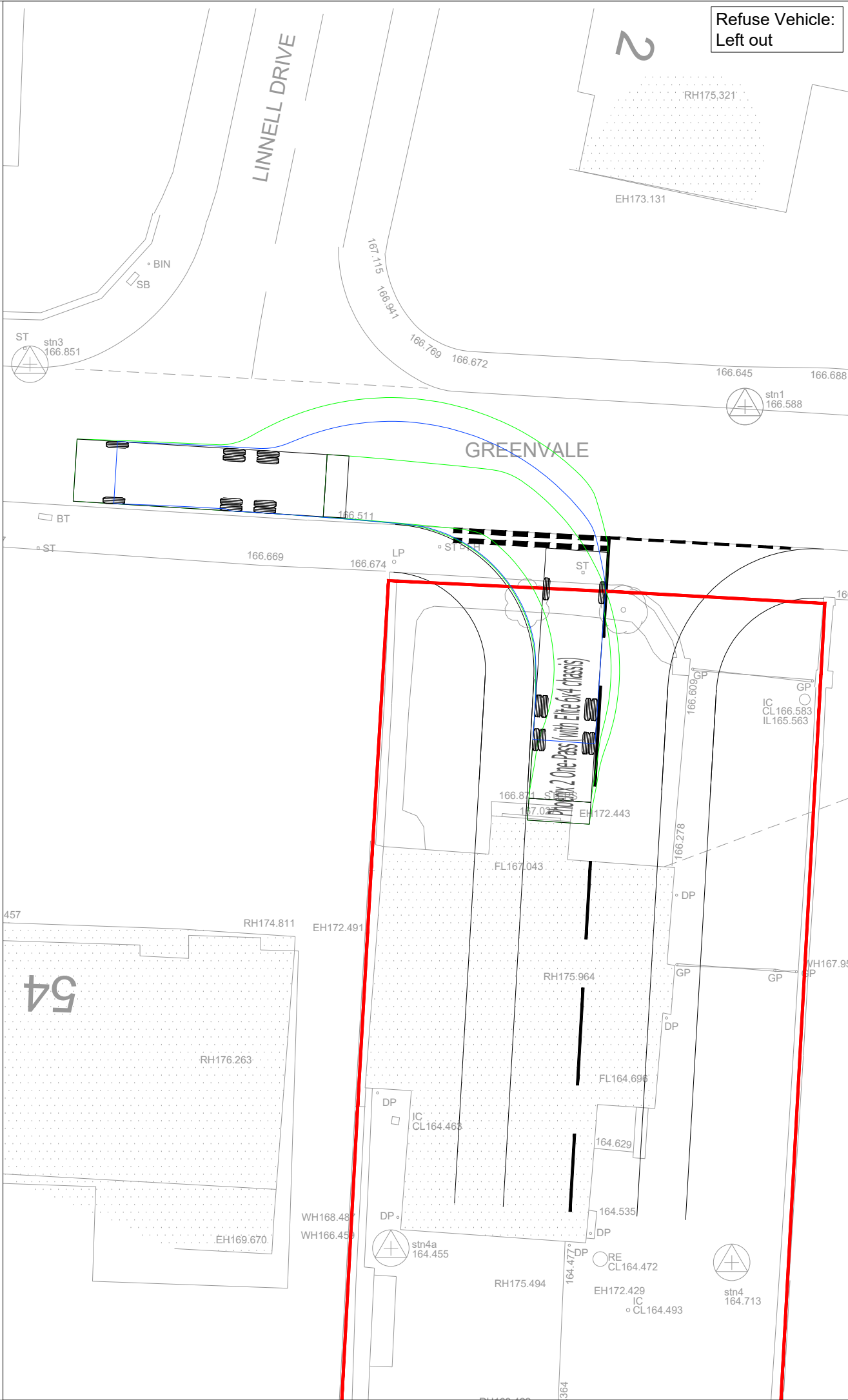
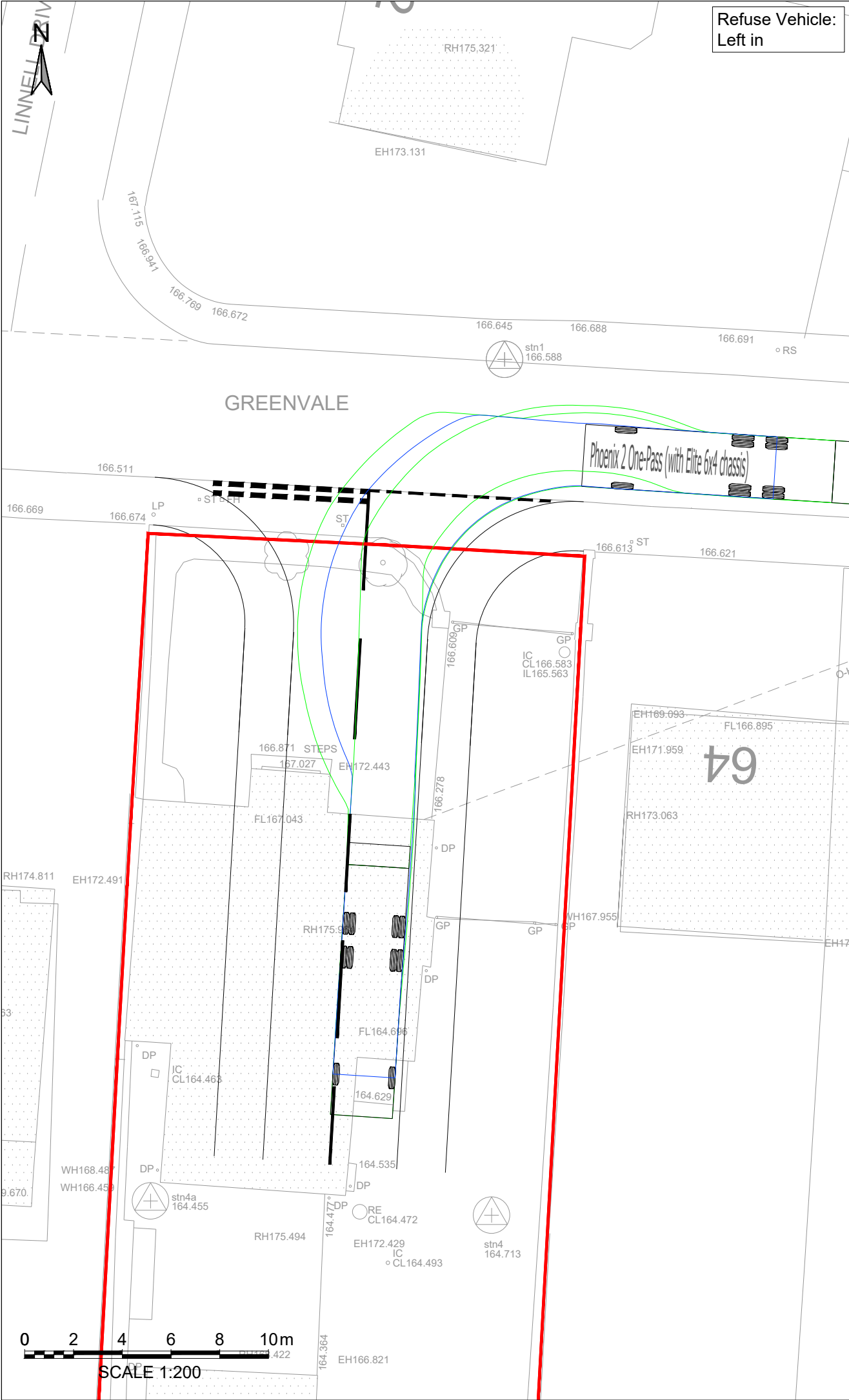
Table 3: Recorded 85th %tile approach speeds

Western ATC, Eastbound	
Speed (mph)	21.1
Speed (m/s)	9.4

Table 4: Visibility Splay Y Distance and Forward Stopping Sight Distance Calculations for the approach speed shown in Table 3

			Source of SSD
			Manual for Streets
SSD Parameters	Reaction time	t (s)	1.5
	deceleration rate	d (m/ss)	4.41
	gradient	a (%)	0
Y Distance (m)=			24.0
FSSD=			26.4

Attachment 6 - Site Access Tracking
784-B068938-00-XX-TR-O-001 P01



Notes:

- This drawing is based on a Topographical Survey and OS mapping drawing provided by Wain Homes. Tetra Tech does not take responsibility for any discrepancies.
- All measurements are in metres unless stated otherwise

Key:

- Red line site boundary provided by client
- Wheel tracking
- Body tracking

Phoenix 2 One-Pass (with Elite 6x4 chassis)

Overall Length	11.180m
Overall Width	2.550m
Overall Body Height	3.760m
Min Body Ground Clearance	0.312m
Track Width	2.550m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	10.150m

PRELIMINARY ISSUE

P01	PRELIMINARY FIRST ISSUE	07.08.2024	AB	MT	MT
Rev	Description	Date	Drawn	Checked	App
Document Control					

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Client

Wain Homes

Project Name

**Proposed Residential Development:
Land off Greenvale**

Sheet Title

**Proposed Site Access: Refuse Vehicle
Tracking**

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @	Suitability
784-B068938	AB	Aug '24	MT	Aug '24	MT	Aug '24	As Shown	S0

Client Project Number	Originator	Volume/System Level/Location	Type/Code	Role	Number	Revision
B068938	- TTE	- 00 - XX	- TR	- O -	001	P01

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TTE_MT_v1

Attachment 7 – Multi-Modal Trip Generation Table

Table 1: Multi-modal Trip Rates and Trip Generation associated with 65 Houses

Time Period	Trip Rates (per house)			Trip Generation (65 houses)		
	Arrivals	Departures	Total	Arrivals	Departure	Total
Total People						
08:00-09:00	0.197	0.732	0.929	13	48	60
17:00-18:00	0.542	0.213	0.755	35	14	49
Pedestrians						
08:00-09:00	0.030	0.055	0.085	2	4	6
17:00-18:00	0.028	0.022	0.050	2	1	3
Cyclists						
08:00-09:00	0.006	0.005	0.011	0	0	1
17:00-18:00	0.004	0.006	0.010	0	0	1
Public Transport User						
08:00-09:00	0.000	0.023	0.023	0	1	1
17:00-18:00	0.013	0.004	0.017	1	0	1
Vehicle Driver (no. of vehicles)						
08:00-09:00	0.133	0.388	0.521	9	25	34
17:00-18:00	0.337	0.132	0.469	22	9	30
Vehicle Passengers (calculated from vehicle occupant rate minus vehicle rate)						
08:00-09:00	0.028	0.261	0.289	2	17	19
17:00-18:00	0.159	0.049	0.208	10	3	14

**Attachment 8 - TRICS Private Houses - Midlands & North England -
exc Covid & Bungalows**

Calculation Reference: AUDIT-705118-241120-1109

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

05	EAST MIDLANDS	
	DY DERBY	1 days
	LE LEICESTERSHIRE	1 days
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
	WK WARWICKSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	2 days
09	NORTH	
	DH DURHAM	1 days

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

Tetra Tech Quay West Manchester

Licence No: 705118

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: No of Dwellings
Actual Range: 24 to 371 (units:)
Range Selected by User: 6 to 432 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 18/05/17 to 18/05/22

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:

Monday	1 days
Tuesday	1 days
Wednesday	1 days
Thursday	2 days
Friday	3 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)	1
Edge of Town	5
Neighbourhood Centre (PPS6 Local 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:

Residential Zone	6
Village	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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	8 days - Selected
Servicing vehicles Excluded	3 days - Selected

Secondary Filtering selection:**Use Class:**

C3	8 days
----	--------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	3 days
10,001 to 15,000	4 days

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

Population within 5 miles:

50,001 to 75,000	2 days
75,001 to 100,000	2 days
125,001 to 250,000	3 days
250,001 to 500,000	1 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	2 days
1.1 to 1.5	6 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:

Yes	1 days
No	7 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.

Tetra Tech Quay West Manchester

Licence No: 705118

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AC-03-A-06	DETACHED HOUSES		CESHIRE WEST & CHESTER
	COMMON LANE			
	NEAR CHESTER			
	WAVERTON			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	99		
	Survey date: FRIDAY	29/04/22	Survey Type: MANUAL	
3	DH-03-A-03	SEMI-DETACHED & TERRACED		DURHAM
	PILGRIMS WAY			
	DURHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	57		
	Survey date: FRIDAY	19/10/18	Survey Type: MANUAL	
4	DY-03-A-01	MIXED HOUSES		DERBY
	RADBOURNE LANE			
	DERBY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	371		
	Survey date: TUESDAY	10/07/18	Survey Type: MANUAL	
5	LE-03-A-02	DETACHED & OTHERS		LEICESTERSHIRE
	MELBOURNE ROAD			
	IBSTOCK			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	85		
	Survey date: THURSDAY	28/06/18	Survey Type: MANUAL	
6	NT-03-A-08	DETACHED HOUSES		NOTTINGHAMSHIRE
	WIGHAY ROAD			
	HUCKNALL			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	36		
	Survey date: MONDAY	18/10/21	Survey Type: MANUAL	
7	ST-03-A-07	DETACHED & SEMI-DETACHED		STAFFORDSHIRE
	BEACONSIDE			
	STAFFORD			
	MARSTON GATE			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	248		
	Survey date: WEDNESDAY	22/11/17	Survey Type: MANUAL	
8	WK-03-A-04	DETACHED HOUSES		WARWICKSHIRE
	DALEHOUSE LANE			
	KENILWORTH			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	49		
	Survey date: FRIDAY	27/09/19	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 SITES

Site Ref	Reason for Deselection
AC-03-A-05	COVID
NY-03-A-14	Bungalow

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.62

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.094	8	121	0.391	8	121	0.485
08:00 - 09:00	8	121	0.133	8	121	0.388	8	121	0.521
09:00 - 10:00	8	121	0.120	8	121	0.176	8	121	0.296
10:00 - 11:00	8	121	0.120	8	121	0.148	8	121	0.268
11:00 - 12:00	8	121	0.128	8	121	0.120	8	121	0.248
12:00 - 13:00	8	121	0.150	8	121	0.165	8	121	0.315
13:00 - 14:00	8	121	0.143	8	121	0.134	8	121	0.277
14:00 - 15:00	8	121	0.164	8	121	0.153	8	121	0.317
15:00 - 16:00	8	121	0.239	8	121	0.168	8	121	0.407
16:00 - 17:00	8	121	0.277	8	121	0.167	8	121	0.444
17:00 - 18:00	8	121	0.337	8	121	0.132	8	121	0.469
18:00 - 19:00	8	121	0.277	8	121	0.112	8	121	0.389
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.182			2.254			4.436

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:	24 - 371 (units:)
Survey date range:	18/05/17 - 18/05/22
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	2

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.

Tetra Tech Quay West Manchester

Licence No: 705118

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.000	8	121	0.000	8	121	0.000
08:00 - 09:00	8	121	0.008	8	121	0.007	8	121	0.015
09:00 - 10:00	8	121	0.004	8	121	0.004	8	121	0.008
10:00 - 11:00	8	121	0.004	8	121	0.004	8	121	0.008
11:00 - 12:00	8	121	0.000	8	121	0.000	8	121	0.000
12:00 - 13:00	8	121	0.002	8	121	0.002	8	121	0.004
13:00 - 14:00	8	121	0.003	8	121	0.002	8	121	0.005
14:00 - 15:00	8	121	0.005	8	121	0.005	8	121	0.010
15:00 - 16:00	8	121	0.004	8	121	0.004	8	121	0.008
16:00 - 17:00	8	121	0.002	8	121	0.002	8	121	0.004
17:00 - 18:00	8	121	0.002	8	121	0.002	8	121	0.004
18:00 - 19:00	8	121	0.001	8	121	0.003	8	121	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.035			0.035			0.070

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.

Tetra Tech Quay West Manchester

Licence No: 705118

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.002	8	121	0.000	8	121	0.002
08:00 - 09:00	8	121	0.006	8	121	0.004	8	121	0.010
09:00 - 10:00	8	121	0.003	8	121	0.003	8	121	0.006
10:00 - 11:00	8	121	0.004	8	121	0.004	8	121	0.008
11:00 - 12:00	8	121	0.002	8	121	0.000	8	121	0.002
12:00 - 13:00	8	121	0.006	8	121	0.008	8	121	0.014
13:00 - 14:00	8	121	0.007	8	121	0.004	8	121	0.011
14:00 - 15:00	8	121	0.001	8	121	0.005	8	121	0.006
15:00 - 16:00	8	121	0.003	8	121	0.005	8	121	0.008
16:00 - 17:00	8	121	0.002	8	121	0.002	8	121	0.004
17:00 - 18:00	8	121	0.000	8	121	0.001	8	121	0.001
18:00 - 19:00	8	121	0.001	8	121	0.001	8	121	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.037			0.037			0.074

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.

Tetra Tech Quay West Manchester

Licence No: 705118

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.000	8	121	0.000	8	121	0.000
08:00 - 09:00	8	121	0.000	8	121	0.000	8	121	0.000
09:00 - 10:00	8	121	0.000	8	121	0.000	8	121	0.000
10:00 - 11:00	8	121	0.000	8	121	0.000	8	121	0.000
11:00 - 12:00	8	121	0.000	8	121	0.000	8	121	0.000
12:00 - 13:00	8	121	0.000	8	121	0.000	8	121	0.000
13:00 - 14:00	8	121	0.000	8	121	0.000	8	121	0.000
14:00 - 15:00	8	121	0.000	8	121	0.000	8	121	0.000
15:00 - 16:00	8	121	0.000	8	121	0.000	8	121	0.000
16:00 - 17:00	8	121	0.000	8	121	0.000	8	121	0.000
17:00 - 18:00	8	121	0.000	8	121	0.000	8	121	0.000
18:00 - 19:00	8	121	0.001	8	121	0.001	8	121	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.001			0.002

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.004	8	121	0.003	8	121	0.007
08:00 - 09:00	8	121	0.006	8	121	0.005	8	121	0.011
09:00 - 10:00	8	121	0.003	8	121	0.003	8	121	0.006
10:00 - 11:00	8	121	0.004	8	121	0.001	8	121	0.005
11:00 - 12:00	8	121	0.002	8	121	0.007	8	121	0.009
12:00 - 13:00	8	121	0.001	8	121	0.000	8	121	0.001
13:00 - 14:00	8	121	0.002	8	121	0.001	8	121	0.003
14:00 - 15:00	8	121	0.001	8	121	0.002	8	121	0.003
15:00 - 16:00	8	121	0.004	8	121	0.007	8	121	0.011
16:00 - 17:00	8	121	0.007	8	121	0.001	8	121	0.008
17:00 - 18:00	8	121	0.004	8	121	0.006	8	121	0.010
18:00 - 19:00	8	121	0.004	8	121	0.007	8	121	0.011
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.042			0.043			0.085

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.

Tetra Tech Quay West Manchester

Licence No: 705118

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.112	8	121	0.541	8	121	0.653
08:00 - 09:00	8	121	0.161	8	121	0.649	8	121	0.810
09:00 - 10:00	8	121	0.155	8	121	0.231	8	121	0.386
10:00 - 11:00	8	121	0.147	8	121	0.186	8	121	0.333
11:00 - 12:00	8	121	0.165	8	121	0.162	8	121	0.327
12:00 - 13:00	8	121	0.212	8	121	0.219	8	121	0.431
13:00 - 14:00	8	121	0.193	8	121	0.184	8	121	0.377
14:00 - 15:00	8	121	0.227	8	121	0.216	8	121	0.443
15:00 - 16:00	8	121	0.378	8	121	0.235	8	121	0.613
16:00 - 17:00	8	121	0.430	8	121	0.236	8	121	0.666
17:00 - 18:00	8	121	0.496	8	121	0.181	8	121	0.677
18:00 - 19:00	8	121	0.402	8	121	0.156	8	121	0.558
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.078			3.196			6.274

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.018	8	121	0.029	8	121	0.047
08:00 - 09:00	8	121	0.030	8	121	0.055	8	121	0.085
09:00 - 10:00	8	121	0.019	8	121	0.019	8	121	0.038
10:00 - 11:00	8	121	0.020	8	121	0.019	8	121	0.039
11:00 - 12:00	8	121	0.022	8	121	0.019	8	121	0.041
12:00 - 13:00	8	121	0.014	8	121	0.010	8	121	0.024
13:00 - 14:00	8	121	0.009	8	121	0.014	8	121	0.023
14:00 - 15:00	8	121	0.019	8	121	0.025	8	121	0.044
15:00 - 16:00	8	121	0.060	8	121	0.033	8	121	0.093
16:00 - 17:00	8	121	0.034	8	121	0.018	8	121	0.052
17:00 - 18:00	8	121	0.028	8	121	0.022	8	121	0.050
18:00 - 19:00	8	121	0.030	8	121	0.026	8	121	0.056
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.303			0.289			0.592

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.000	8	121	0.018	8	121	0.018
08:00 - 09:00	8	121	0.000	8	121	0.018	8	121	0.018
09:00 - 10:00	8	121	0.004	8	121	0.008	8	121	0.012
10:00 - 11:00	8	121	0.009	8	121	0.005	8	121	0.014
11:00 - 12:00	8	121	0.006	8	121	0.009	8	121	0.015
12:00 - 13:00	8	121	0.003	8	121	0.005	8	121	0.008
13:00 - 14:00	8	121	0.003	8	121	0.004	8	121	0.007
14:00 - 15:00	8	121	0.005	8	121	0.005	8	121	0.010
15:00 - 16:00	8	121	0.021	8	121	0.005	8	121	0.026
16:00 - 17:00	8	121	0.021	8	121	0.001	8	121	0.022
17:00 - 18:00	8	121	0.012	8	121	0.004	8	121	0.016
18:00 - 19:00	8	121	0.013	8	121	0.000	8	121	0.013
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.097			0.082			0.179

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.000	8	121	0.005	8	121	0.005
08:00 - 09:00	8	121	0.000	8	121	0.005	8	121	0.005
09:00 - 10:00	8	121	0.000	8	121	0.003	8	121	0.003
10:00 - 11:00	8	121	0.000	8	121	0.002	8	121	0.002
11:00 - 12:00	8	121	0.001	8	121	0.001	8	121	0.002
12:00 - 13:00	8	121	0.000	8	121	0.001	8	121	0.001
13:00 - 14:00	8	121	0.001	8	121	0.000	8	121	0.001
14:00 - 15:00	8	121	0.002	8	121	0.000	8	121	0.002
15:00 - 16:00	8	121	0.007	8	121	0.000	8	121	0.007
16:00 - 17:00	8	121	0.006	8	121	0.000	8	121	0.006
17:00 - 18:00	8	121	0.001	8	121	0.000	8	121	0.001
18:00 - 19:00	8	121	0.001	8	121	0.000	8	121	0.001
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.019			0.017			0.036

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.000	8	121	0.023	8	121	0.023
08:00 - 09:00	8	121	0.000	8	121	0.023	8	121	0.023
09:00 - 10:00	8	121	0.004	8	121	0.011	8	121	0.015
10:00 - 11:00	8	121	0.009	8	121	0.007	8	121	0.016
11:00 - 12:00	8	121	0.007	8	121	0.010	8	121	0.017
12:00 - 13:00	8	121	0.003	8	121	0.006	8	121	0.009
13:00 - 14:00	8	121	0.004	8	121	0.004	8	121	0.008
14:00 - 15:00	8	121	0.007	8	121	0.005	8	121	0.012
15:00 - 16:00	8	121	0.028	8	121	0.005	8	121	0.033
16:00 - 17:00	8	121	0.027	8	121	0.001	8	121	0.028
17:00 - 18:00	8	121	0.013	8	121	0.004	8	121	0.017
18:00 - 19:00	8	121	0.014	8	121	0.000	8	121	0.014
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.116			0.099			0.215

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 1.62

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.134	8	121	0.595	8	121	0.729
08:00 - 09:00	8	121	0.197	8	121	0.732	8	121	0.929
09:00 - 10:00	8	121	0.181	8	121	0.264	8	121	0.445
10:00 - 11:00	8	121	0.180	8	121	0.213	8	121	0.393
11:00 - 12:00	8	121	0.196	8	121	0.198	8	121	0.394
12:00 - 13:00	8	121	0.230	8	121	0.235	8	121	0.465
13:00 - 14:00	8	121	0.208	8	121	0.203	8	121	0.411
14:00 - 15:00	8	121	0.254	8	121	0.248	8	121	0.502
15:00 - 16:00	8	121	0.470	8	121	0.281	8	121	0.751
16:00 - 17:00	8	121	0.498	8	121	0.256	8	121	0.754
17:00 - 18:00	8	121	0.542	8	121	0.213	8	121	0.755
18:00 - 19:00	8	121	0.451	8	121	0.189	8	121	0.640
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.541			3.627			7.168

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.*

Tetra Tech Quay West Manchester

Licence No: 705118

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.068	8	121	0.373	8	121	0.441
08:00 - 09:00	8	121	0.102	8	121	0.356	8	121	0.458
09:00 - 10:00	8	121	0.094	8	121	0.149	8	121	0.243
10:00 - 11:00	8	121	0.091	8	121	0.119	8	121	0.210
11:00 - 12:00	8	121	0.102	8	121	0.097	8	121	0.199
12:00 - 13:00	8	121	0.119	8	121	0.130	8	121	0.249
13:00 - 14:00	8	121	0.116	8	121	0.108	8	121	0.224
14:00 - 15:00	8	121	0.135	8	121	0.122	8	121	0.257
15:00 - 16:00	8	121	0.205	8	121	0.130	8	121	0.335
16:00 - 17:00	8	121	0.252	8	121	0.139	8	121	0.391
17:00 - 18:00	8	121	0.316	8	121	0.122	8	121	0.438
18:00 - 19:00	8	121	0.264	8	121	0.101	8	121	0.365
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.864			1.946			3.810

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.

Tetra Tech Quay West Manchester

Licence No: 705118

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL LGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.023	8	121	0.018	8	121	0.041
08:00 - 09:00	8	121	0.017	8	121	0.020	8	121	0.037
09:00 - 10:00	8	121	0.019	8	121	0.021	8	121	0.040
10:00 - 11:00	8	121	0.021	8	121	0.021	8	121	0.042
11:00 - 12:00	8	121	0.024	8	121	0.023	8	121	0.047
12:00 - 13:00	8	121	0.023	8	121	0.025	8	121	0.048
13:00 - 14:00	8	121	0.017	8	121	0.020	8	121	0.037
14:00 - 15:00	8	121	0.021	8	121	0.019	8	121	0.040
15:00 - 16:00	8	121	0.027	8	121	0.029	8	121	0.056
16:00 - 17:00	8	121	0.019	8	121	0.023	8	121	0.042
17:00 - 18:00	8	121	0.020	8	121	0.005	8	121	0.025
18:00 - 19:00	8	121	0.007	8	121	0.006	8	121	0.013
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.238			0.230			0.468

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.

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL MOTOR CYCLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.001	8	121	0.001	8	121	0.002
08:00 - 09:00	8	121	0.000	8	121	0.001	8	121	0.001
09:00 - 10:00	8	121	0.000	8	121	0.000	8	121	0.000
10:00 - 11:00	8	121	0.000	8	121	0.000	8	121	0.000
11:00 - 12:00	8	121	0.000	8	121	0.000	8	121	0.000
12:00 - 13:00	8	121	0.000	8	121	0.000	8	121	0.000
13:00 - 14:00	8	121	0.001	8	121	0.000	8	121	0.001
14:00 - 15:00	8	121	0.002	8	121	0.002	8	121	0.004
15:00 - 16:00	8	121	0.000	8	121	0.000	8	121	0.000
16:00 - 17:00	8	121	0.002	8	121	0.001	8	121	0.003
17:00 - 18:00	8	121	0.000	8	121	0.002	8	121	0.002
18:00 - 19:00	8	121	0.002	8	121	0.000	8	121	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.007			0.015

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.

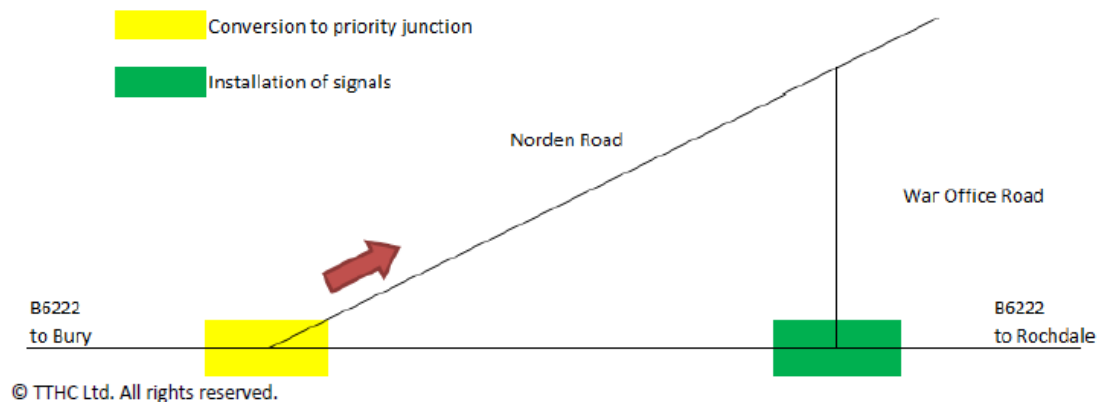
To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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.

Attachment 9 - Appendix D of PfE for JPA17

Allocation Name	Transport Interventions
	Supporting • A627 (M) Junction 1 / A627 Chadderton Way / A663 Broadway – localised roundabout improvements • A671 Rochdale Road / B6195 High Barn Street / A671 Oldham Road / B6195 Middleton Road junction improvements
JPA15 Land South of Coal Pit Lane (Ashton Road)	Necessary • Coal Pit Lane / A627 Ashton Road - junction improvements including localised improvement of Coal Pit Lane • Active travel improvements including pedestrian and cycle route between Coal Pit Lane / Ashton Road Junction and White Bank Road Supporting • Rochdale-Oldham-Ashton Quality Bus Transit corridor
JPA16 South of Rosary Road	Necessary • Active travel improvements including PRow connections to Bardsey Bridleway • Minor traffic management improvements to address local highway concerns Supporting • Rochdale-Oldham-Ashton Quality Bus Transit corridor
JPA17 Bamford and Norden	Necessary • · Norden Road / War Office Road – modifications to traffic circulation and local junction improvements • · Norden Road – new pedestrian crossing • · Bus stop upgrades at the Norden Road / War Office Road junction • · Active travel improvements including Furbarn Road improvements and North-South Greenway corridor through the site Supporting N/A
JPA18 Castleton Sidings	Necessary

Attachment 10 - Schematic Figure showing Norden Rd - War Office
Rd modifications to traffic circulation and local junction
improvements

Figure 3. Proposed mitigation scheme at B6222 Bury and Rochdale Old Road/Norden Road/War Office Road interchange



4.4.17 The results of the assessment of the mitigation are presented in Table 6. In accordance with the methodology in the Locality Assessment, one-way traffic flows on Norden Road have been provided from the GMVDM to reflect the diversions that would take place.

Table 6. GMA20 Bamford and Norden junction capacity assessments (June 2021) (after mitigation)

JUNCTION	2040 reference case AM PEAK HOUR	2040 reference case PM PEAK HOUR	2040 high scenario AM PEAK HOUR	2040 high scenario PM PEAK HOUR
B6222 Bury and Rochdale Old Road/ Queen's Park Road	81%	106%	83%	108%
B6222 Bury and Rochdale Old Road/War Office Road	60%	52%	80%	67%

4.4.23 The results demonstrate that the operational performance of each junction is very similar with and without the addition of the allocation flows. Therefore, it can be

Appendix C: TfGM Initial Pre-App Comments – 02.12.2024



Transport for
Greater Manchester

**Transport for
Greater Manchester**

2 Piccadilly Place
Manchester M1 3BG

Phone: 0161 244 1000
beenetwork.com

Your ref: PREAPP/00115/24

Our ref: ROC/24/373

Rochdale Council, Economy Directorate
Planning and Development
Number One Riverside
Smith Street
Rochdale
OL16 1XU

1st November 2024

Location: **Land South of Greenvale, Bamford, Rochdale**

Development: **Erection of 65 dwellings and access from Greenvale (PfE JPA17)**

Dear Ryan Kileen

Thank you for consulting Transport for Greater Manchester (TfGM) on the above pre-planning application. The following comments are offered as advice on transport issues for you to balance against other factors and are made in the context of TfGM's role in the planning process, as set out in the footnote below.

TfGM scoping advice has been requested from Rochdale Council in respect of a residential development comprising 65 dwellings. The site is an allocation in the Greater Manchester Plan, Places for Everyone and is covered by policy JPA 17.

Any proposals for this allocation must be in accordance with a comprehensive masterplan that has been approved by the LPA. It shall include a clear phasing strategy as part of an integrated approach to the delivery of infrastructure to support the scale of the whole development in line with Policy JP-D1 'Infrastructure Implementation.'

Development in this allocation will be required to:

¹TfGM does not have any planning powers and is not a statutory consultee in the planning process. The purpose of the advice offered is to suggest the best way to improve land use / transport integration through the development proposals. Advice is based on the information provided by the applicant, and it is not TfGM's role to undertake detailed verification unless specifically commissioned to do so. ²TfGM control and manage the traffic signals in Greater Manchester, as such any schemes that alter signalised junctions need to be agreed with TfGM. Additionally, where developments impact on signalised junctions, TfGM have a duty of care to ensure that these impacts are satisfactorily mitigated as part of the planning process.



Every journey. Every day.

1. Deliver around 450 new homes including significant provision of larger (4, 5 and 6 bedroom) houses in spacious plots, to reflect the grain and density of the surrounding residential areas, or similar types of larger homes as agreed with the Local Planning Authority and affordable housing in accordance with relevant local plan requirements.
2. Retain and significantly enhance the existing recreational facilities as part of an integrated green and blue infrastructure network on the site. The residential development on the site will provide contributions towards the improvement of the facilities which will create a high quality recreational and sports 'hub' serving the local area and the borough as a whole. The development should incorporate existing public rights of way along with new routes for active travel into a high quality integrated green infrastructure network that links to existing public rights of way in the countryside to the west and north west of the site.
3. Achieve excellent design and sustainability through masterplanning and the use of design codes for the whole site to ensure comprehensive development This will include the need for an infrastructure phasing and delivery strategy in accordance with policy JP-D1.
6. Make provision for new and improved sustainable transport and highways infrastructure having regard to the indicative transport interventions set out in Appendix D in accordance with policy JP-C8.
10. Make financial contributions for offsite additional primary and secondary school provision to meet needs generated by the development in accordance with policy JP-P5.

Policy JP-D1: Infrastructure Implementation

To ensure the effective development and implementation of the infrastructure needed to deliver the vision and objectives of the Plan: We will:

7. Require applicants to prepare an infrastructure phasing and delivery strategy to be agreed by the local planning authority for sites where build out will be delivered by different developers or in phases. This strategy must outline what needs to be provided by when and who will fund and deliver it.



Every journey. Every day.

TfGM would suggest that eventually a full Transport Assessment (TA) should be provided as part of the application. The TA should contain the information specified within the following sections of this letter.

1. Site Specific Comments

- I. It is critical that the PfE model should not be used to form the Transport Assessment. Strategic model flows should not be used to inform junction assessments or for trip distribution purposes. Traffic counts should be collected accordingly with queue surveys.
- II. A trip generation and distribution note should be provided as soon as possible to ensure that junction modelling is agreed at an early stage.
- III. The development allocation should be assessed as a whole, not on an incremental basis i.e. only 65 dwellings. TfGM need to understand the overall impact from the whole allocation, as this will inform the mitigation that is required. An assessment which only covers 65 dwellings will not cater for this.
- IV. In terms of traffic distribution, this should be calculated by using counted data. PfE model distribution is not acceptable and Census 2011 data is outdated. It is important to have specific reliable data to inform traffic distribution.
- V. Any junctions which are predicted to have an increase of over 30 vehicles per/hour should be assessed. The junctions to be assessed should be confirmed with TfGM and the Local Authority prior to any data collection and subsequent analysis.
- VI. Traffic modelling should use signal timing information provided by TfGM UTC unit – signal timing information can be provided from gmutc@tfgm.com.
- VII. The area is heavily congested and as such TfGM require an understanding of current traffic conditions at all junctions along Norden Road and Bagslate Road up to and including the junction with the A680 and at the junction of Bury Road / Norden Road, junction of bury road / queen's park road.
- VIII. It should be noted that a number of the potential junctions are oversaturated in traffic terms during peak periods and as such the traffic counts would not reflect the actual traffic volumes. This is because the counts would only record the flows proceeding through the green at the junction and not reflecting the traffic



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not clearing the junction. Care should be taken in the specification of the counts to ensure that the true traffic demand is recorded. TfGM will be able to advise as necessary in more detail.

- IX. Following the analysis of the impact of the development traffic, then suitable mitigation should be identified. If there are changes proposed at existing traffic signal installations (junctions and crossings) or there are new traffic signal installations, then TfGM would be happy to meet to discuss any proposals prior to submission of the full planning application and TA.
- X. Suitable and substantive sustainable measures should be provided – these should provide real and attractive alternatives to use of the private vehicle trips.
- XI. GMAL should be used to determine the accessibility of the site for public transport.
- XII. A review of public transport is required to identify provision for either existing re-routed or new services to support the development.
- XIII. Whilst the full site allocation is substantially more than the development quantum proposed under this application, mitigation to improve sustainable trips should be provided from first occupation. This is to reduce reliance on private car trips.
- XIV. In order to determine if sites were suitable to be allocated in the Places for Everyone Plan from a transport perspective; high level strategic transport modelling was undertaken using GM wide strategic trip rates. This enabled the development of high level indicative transport mitigation for a single strategic “worst-case” scenario being identified in relation to the Plan allocations. These are contained in Appendix D of the plan and an extract is shown below.

Necessary:

- Norden Road / War Office Road – modifications to traffic circulation and local junction improvements
- Norden Road – new pedestrian crossing
- Bus stop upgrades at the Norden Road / War Office Road junction
- Active travel improvements including Furbarn Road improvements and North-South Greenway corridor through the site



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For each PfE allocation, there is now a need for more detailed TA work to be undertaken as part of the Master Plan process, aligned with an infrastructure phasing and delivery strategy. This TA work should set out a transport vision for the total quantum of development proposed on the allocation site and then test a set of detailed scenarios, underpinned by local traffic counts and appropriate site-specific trip rates for all modes, to determine the optimum design and transport infrastructure requirements to mitigate the impacts. When developing effective detailed mitigation, sustainable interventions that support active travel and facilitate access to public transport should be considered in the first instance. Highway interventions should only be considered to mitigate the impact of development, once the effectiveness of sustainable interventions is understood.

Until this Master Plan work is completed and an associated TA and infrastructure phasing and delivery strategy have been produced, it is not possible to determine what infrastructure would be required to facilitate individual parcels of development, when they would be required and how they will be funded.

- XV. Additional mitigation beyond that defined in the PfE JPA 17 may be required.
- XVI. The development doesn't appear to have any access other than via the road network. Some permeability for walking, wheeling and cycling should be considered other than the convoluted connections by the footway.
- XVII. The full allocation includes various sports facilities and greenspace, which builds in activity for this development and surrounding housing. However, many of these sports facilities are prone to generating vehicle movements. Therefore ensuring that active travel networks are well linked and that public transport is available will be a key consideration.
- XVIII. Norford Way is on TfGM's bee network map as a preferred route for active travel, and it is also expected that the nearby section of Bury Road will become a route that would connect this both to Bury and Rochdale centres. TfGM would therefore expect the development to connect to these routes and facilitate travel along them.



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2. General Comments

- I. A description of current baseline traffic conditions in the area.
- II. An analysis of injury accidents during the most recent five-year period, commenting on whether there are any underlying patterns of injury accidents that might be affected by the development.
- III. Up-to-date traffic counts should be used in any assessments - scope to be agreed with the Local Highway Authority (LHA), TfGM UTC and HFAS. TfGM UTC can be contacted in respect of the availability of any traffic counts in the area that could be used for the assessment.
- IV. A clear estimate of the level of new traffic likely to be associated with the development, based on an inspection of similar (and similarly-located) developments across the UK (excluding London) via the TRICS (or similar) database. The assessment work should be undertaken using a person-trip approach and applying the appropriate modal share percentages from local Census data. Other methodologies to determine trip rates are acceptable but these should be fully explained in the TA.
- V. A clearly defined methodology for determining the distribution / assignment of development trips onto the network i.e. understanding of where such new traffic is likely to distribute to/from, based on data sources such as a Census Journey-to-Work statistics and/or vehicle turning proportions at nearby junctions.
- VI. An assessment of traffic levels and impacts at the specified year of opening of the development, and at a future year at least five years later, with due regard for traffic growth (if any).
- VII. An understanding of the likely impacts of the proposed development considered alongside any other nearby committed developments.
- VIII. In the relevant TA, clear diagrams should be provided illustrating the following elements, each individually:
 - Base Flows
 - Committed Development Flows
 - Proposed Flows
 - Proposed Distribution



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- Base plus Committed plus proposed development
 - Future plus Committed plus proposed development
- IX. TfGM HFAS recommends an increase of about 30vehs/hr at a junction as an appropriate threshold for considering the necessity of a traffic impact assessment; this is in preference to a percentage-increase threshold, which tends to favour development in already heavily-trafficked areas.
 - X. The scope of the junctions to be assessed by detailed modelling should be agreed with TfGM (UTC) and the LHA in advance and will depend upon the outcome of the trip assessment and distribution exercise. For this reason, TfGM would advise that a trip generation and distribution exercise should be issued before submission of the planning application. Once this is undertaken it will be possible to finalise TfGM requirements in terms of the TA. This will largely depend on the amount of trip generation.
 - XI. Clear details of proposed vehicular access arrangements including general servicing arrangements. An engineering drawing should be supplied showing the changes to the road network to fully understand the impact of the proposed development.
 - XII. A swept path analysis should be provided for any vehicular access.
 - XIII. A review of Traffic Regulation Orders on the surrounding streets in the vicinity of the development.
 - XIV. An assessment of the likely environmental/traffic impacts of HGVs during the construction process.

3. Site Accessibility by Sustainable Modes

Walking and cycling should form the natural mode choice for shorter trips, and also provide a viable option to facilitate longer trips through providing easy access to public transport. New developments should connect with, and enhance, existing walking and cycling networks in their vicinity, and also provide high quality facilities and networks for walking and cycling within development sites.

The TA should include a comprehensive review of the existing provision in the vicinity of the site for all pedestrians including those with disabilities. In addition to walking distances and pedestrian desire lines, pedestrian environment (including footway condition and widths) and pedestrian safety and security should be considered. An



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audit of the footways in the vicinity of the development should be undertaken and improvements identified.

A comprehensive review of the cycling infrastructure in the vicinity of the proposed development should also be undertaken. This should include an assessment of the connectivity of the site with existing cycle routes. The quality and condition of existing infrastructure, cyclist safety and security should also be considered.

The catchment area for cycling, walking and public transport should be captured in maps. The quality of the routes for pedestrians and cyclists should be described and this should include a description of any signing for cycle routes as appropriate.

The TA should provide a review of existing public transport services (including service frequency and location of nearest stations/stops), with a view to supporting improvements to existing public transport services as required, in particular, assess the quality of the surrounding bus infrastructure i.e. upgrade to shelters etc.

The TA should include a plan clearly showing details of the proposed pedestrian and cycle access points serving the site and linkages into the surrounding area. Connectivity with local public transport networks should be highlighted. The applicant should consider measures to encourage access by sustainable modes. Possible measures include but are not limited to the provision of pedestrian crossings, cycleways, cycle parking, new/improved footway ensuring that there are linkages into existing cycle and pedestrian facilities, as well as upgrades to existing bus stops (where appropriate).

TfGM would suggest that a pedestrian survey is carried out in the vicinity of the site, as per guidance <https://www.livingstreets.org.uk/media/1434/street-review-guidance-for-web.pdf> and included as part of the TA.

It should be highlighted that LTN/120 has been introduced by the DfT and this has changed the requirements for the design of cycling provision.

Details of cycle parking facilities for the proposed development (e.g., number of spaces, location and type) should be provided and shown on plan.

4. Mitigation Measures

Impacts of the development should be identified through the above assessment work. The applicant should identify appropriate mitigation to accommodate any increases in traffic generation and increased pedestrian and cyclist movements. Any appropriate



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mitigation should be identified in conjunction with TfGM UTC and the LHA who will be happy to work with the developer to agree an approach.

The TA should consider the impact of the development on the existing public transport networks in terms of extension of bus services, additional person trips. Mitigation measures should be considered where appropriate.

5. Travel Plan

A Framework Travel Plan for the development should accompany any future planning application.

6. Other

If there are any changes planned for bus infrastructure, for example relocation of existing bus stops or the creation of new bus parking areas, TfGM would request that the applicant liaise directly with TfGM's bus infrastructure team who can be contacted at Shelters@tfgm.com.

7. Suggested Useful Guidance

In relation to walking, the importance of providing and maintaining good quality footways, free from obstruction and wide enough for when they are at their busiest, is critical to encourage and maximise walking levels associated with new developments. Useful guidance on street layouts which encourage walking is provided in Manual for Streets (Department for Transport, 2007). MfS provides guidance on lightly trafficked residential streets, and Manual for Streets 2 (CIHT, 2010) further develops the principles of the first Manual for Streets for application in wider circumstances on busier streets, including town and district centres.

In relation to cycling, infrastructure should be designed in accordance with current Greater Manchester Cycling Design Standards, the latest version of which is available from the TfGM website or by emailing cycling@tfgm.com. In particular, connections to/from and within developments should be designed in accordance with the Key Design Criteria of Safety, Coherence, Directness, Attractiveness and Comfort. A general principle is that infrastructure should be designed to be attractive to those who do not currently cycle, in order to drive the increase in cycling's mode share.

TfGM would encourage the applicant to review the Bee Network Map online via TfGM's website to determine whether there is an opportunity for this development to connect into the proposed Bee Network.



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I hope you find these comments useful in the pre-application process. Should you wish to discuss any matter further please do not hesitate to contact the Landuse team via the details below.

Yours faithfully

Landuse Team
Highways Department
Transport for Greater Manchester
Email: landuse@tfgm.com



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Appendix D: Automated Traffic Counts – Raw Data

ATC Location Plan

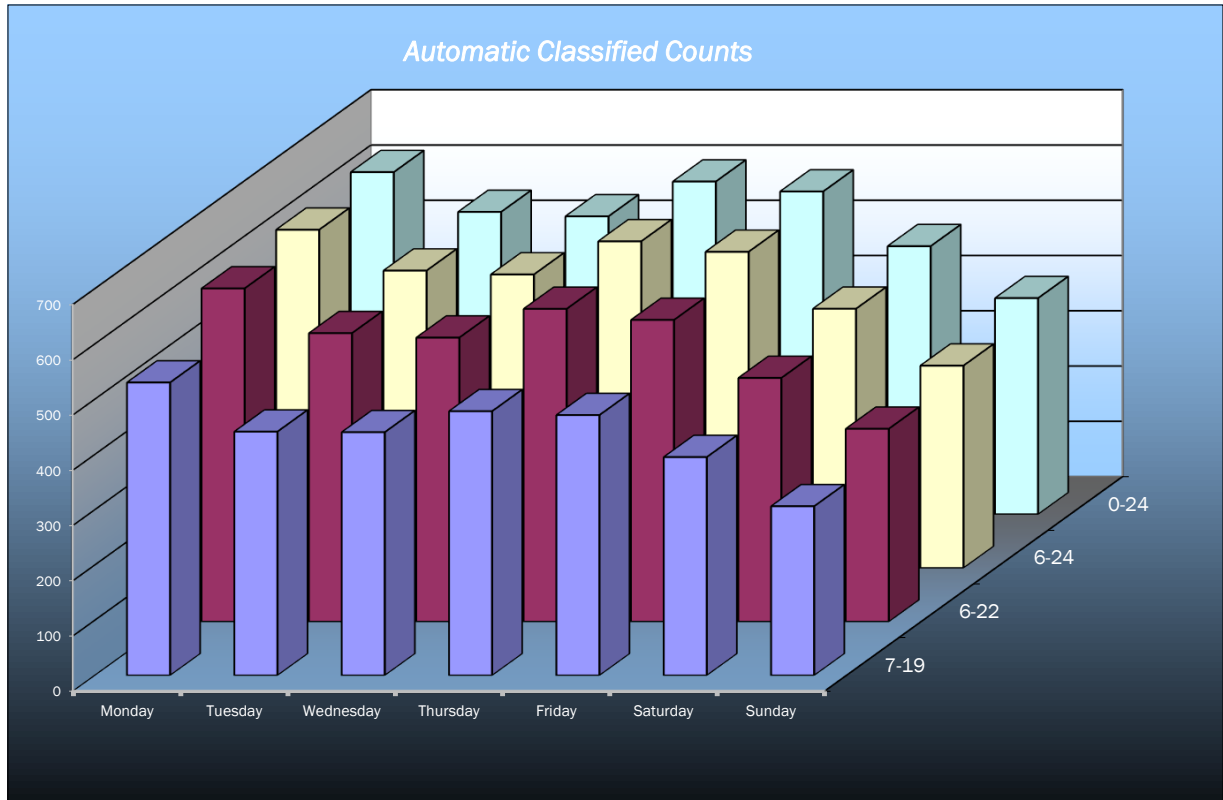


Automatic Classified Counts, Rochdale

LOCATION: GREENVALE (EASTERN SITE)

Direction : WESTBOUND

VEHICLE FLOWS									
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24	WEEKDAY AVERAGE	WEEK AVERAGE
1	3	3	3	1	6	6	6	3	4
2	0	1	0	1	2	5	9	1	3
3	0	1	2	3	1	1	2	1	1
4	1	1	0	1	1	2	5	1	2
5	1	1	0	0	1	1	2	1	1
6	2	2	3	5	1	1	1	3	2
7	2	7	7	5	5	1	1	5	4
8	15	17	15	16	26	6	5	18	14
9	32	33	24	32	31	8	7	30	24
10	21	19	22	28	22	17	8	22	20
11	24	26	29	23	28	43	19	26	27
12	31	31	30	28	30	45	46	30	34
13	38	40	31	48	34	40	37	38	38
14	34	30	40	34	44	41	41	36	38
15	35	30	39	39	44	49	28	37	38
16	137	49	52	55	63	44	36	71	62
17	60	65	45	57	59	37	31	57	51
18	68	56	62	72	50	36	22	62	52
19	35	45	51	46	40	29	26	43	39
20	34	31	19	35	27	16	13	29	25
21	22	28	26	29	27	16	20	26	24
22	15	15	22	19	16	13	9	17	16
23	6	8	9	21	15	15	12	12	12
24	3	8	8	4	11	13	5	7	7
7-19	530	441	440	478	471	395	306	472	437
6-22	603	522	514	566	546	441	349	550	506
6-24	612	538	531	591	572	469	366	569	526
0-24	619	547	539	602	584	485	391	578	538

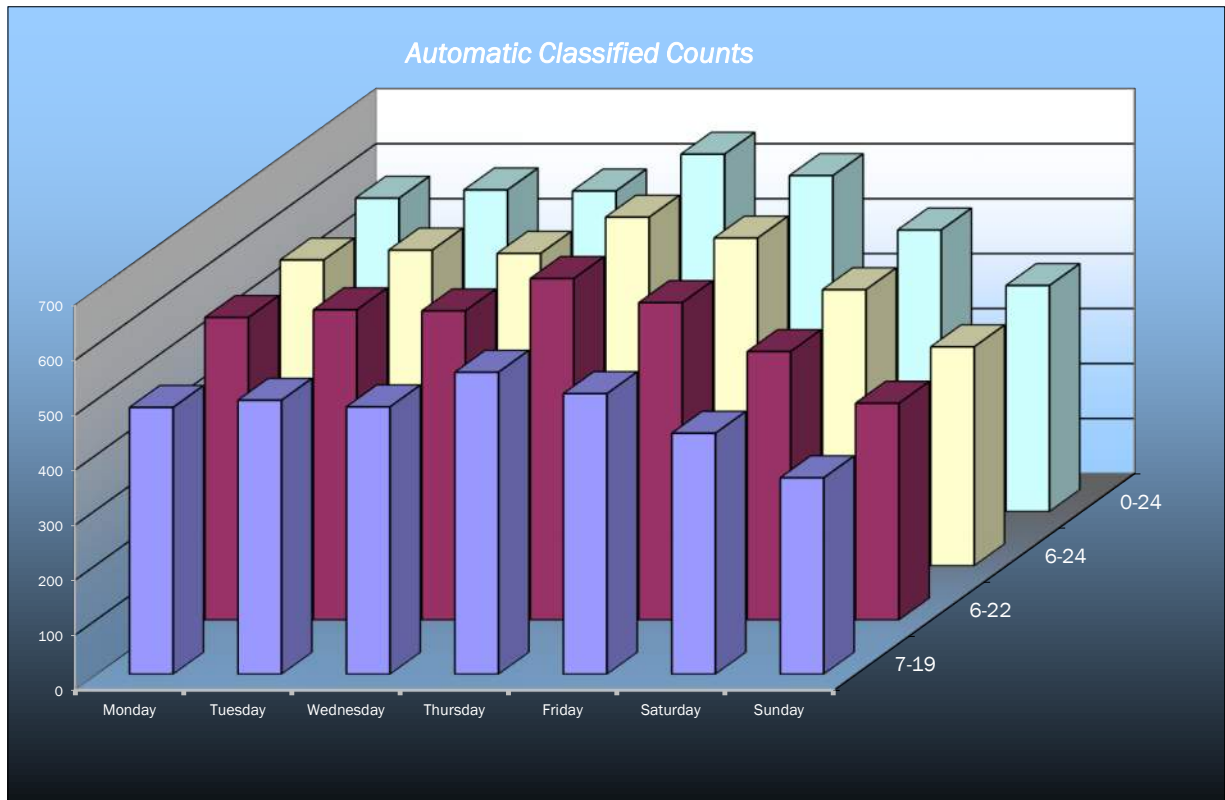


Automatic Classified Counts, Rochdale

LOCATION: GREENVALE (EASTERN SITE)

Direction : EASTBOUND

EASTBOUND									
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24	WEEKDAY AVERAGE	WEEK AVERAGE
1	0	1	0	1	2	4	4	1	2
2	1	0	2	0	1	4	4	1	2
3	0	0	1	1	0	1	1	0	1
4	1	0	0	1	0	0	3	0	1
5	3	3	0	1	0	0	1	1	1
6	9	7	12	12	12	1	0	10	8
7	27	27	38	25	27	4	5	29	22
8	61	62	61	65	62	17	3	62	47
9	57	59	73	60	59	39	14	62	52
10	44	49	42	59	53	56	36	49	48
11	31	37	39	44	40	54	46	38	42
12	30	38	33	38	39	37	45	36	37
13	32	28	31	31	27	56	39	30	35
14	23	36	21	31	34	34	40	29	31
15	46	24	44	38	52	29	30	41	38
16	55	32	40	48	40	31	20	43	38
17	30	50	31	41	38	30	32	38	36
18	40	33	38	40	30	26	20	36	32
19	36	50	33	54	36	29	32	42	39
20	24	23	20	23	24	19	13	23	21
21	4	10	8	17	10	13	14	10	11
22	10	6	10	7	6	14	5	8	8
23	5	3	3	10	12	7	2	7	6
24	1	7	3	3	7	7	2	4	4
7-19	485	498	486	549	510	438	357	506	475
6-22	550	564	562	621	577	488	394	575	537
6-24	556	574	568	634	596	502	398	586	547
0-24	570	585	583	650	611	512	411	600	560



Automatic Classified Counts, Rochdale

LOCATION: GREENVALE (EASTERN SITE)

Direction : WESTBOUND

AVERAGE SPEEDS							
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24
1	15.5	18.8	18.8	25.5	22.2	17.2	17.2
2	-	15.5	-	15.5	20.5	21.5	24.4
3	-	25.5	20.5	26.3	25.5	25.5	20.5
4	25.5	15.5	-	15.5	15.5	20.5	19.5
5	15.5	25.5	-	-	15.5	15.5	20.5
6	15.5	15.5	18.8	21.5	15.5	25.5	25.5
7	20.5	16.9	18.4	17.5	17.5	15.5	15.5
8	19.0	21.8	17.5	21.1	20.1	18.8	15.5
9	17.1	16.6	16.2	17.4	17.8	18.9	15.5
10	17.4	16.9	16.4	16.6	16.4	17.9	18.0
11	18.4	16.3	19.4	18.0	17.9	17.8	18.7
12	18.3	16.8	17.6	16.2	16.8	16.8	18.1
13	16.8	17.5	16.5	16.3	16.7	16.3	18.7
14	17.9	16.5	16.3	17.0	16.4	18.4	17.7
15	16.6	17.2	18.1	15.2	17.8	16.7	17.6
16	16.4	15.3	16.7	16.6	17.1	18.7	18.3
17	17.0	17.0	17.3	18.1	17.4	16.3	17.3
18	18.4	18.5	17.7	18.0	17.8	18.0	19.0
19	17.8	17.7	19.4	17.7	18.3	18.5	17.0
20	18.4	17.4	17.6	18.3	19.6	16.8	19.3
21	18.2	18.3	18.1	18.9	18.0	18.0	18.5
22	16.8	18.2	18.2	17.5	18.0	19.2	15.5
23	18.8	19.3	21.1	19.2	16.2	20.5	16.3
24	22.2	20.5	18.0	18.0	18.9	18.6	19.5

10-12	18.4	16.5	18.5	17.1	17.4	17.3	18.4
14-16	16.5	16.2	17.4	15.9	17.5	17.7	18.0
0-24	18.1	18.1	18.0	18.3	18.1	18.6	18.5

85TH PERCENTILE							
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24
1	15.5	24.6	24.6	-	27.3	21.2	21.2
2	-	-	-	-	27.6	27.0	35.3
3	-	-	27.6	37.6	-	-	27.6
4	-	-	-	-	-	27.6	25.0
5	-	-	-	-	-	-	27.6
6	15.5	15.5	24.6	27.0	-	-	-
7	27.6	25.9	23.2	22.0	22.0	-	-
8	26.7	27.6	21.6	26.2	25.2	24.0	15.5
9	21.5	21.8	22.5	22.1	22.0	27.5	15.5
10	22.5	22.6	20.7	21.5	20.7	23.5	22.6
11	23.9	19.0	26.1	23.1	22.8	22.4	24.5
12	24.5	21.1	25.1	18.8	22.5	21.4	22.5
13	21.0	23.1	21.9	20.4	20.8	21.0	23.8
14	22.2	24.1	21.0	22.5	20.0	23.0	21.9
15	20.7	21.0	22.5	20.6	23.3	22.0	21.8
16	20.2	19.1	20.9	20.3	20.8	23.4	22.8
17	21.0	21.3	21.7	23.5	21.7	20.6	22.8
18	23.6	24.3	22.3	22.7	22.6	22.4	25.3
19	22.7	22.4	24.4	22.3	23.6	23.7	21.7
20	23.1	21.5	21.8	23.2	24.6	22.9	24.4
21	22.8	23.3	23.1	25.4	23.0	22.5	23.2
22	23.2	22.7	22.8	22.4	22.5	27.2	20.5
23	24.0	24.4	26.3	24.8	20.7	27.2	19.2
24	27.9	25.8	22.6	23.0	25.1	23.4	25.0

10-12	24.2	20.0	25.6	20.9	22.7	21.9	23.5
14-16	20.4	20.0	21.7	20.4	22.0	22.7	22.3
0-24	22.5	22.6	23.2	23.5	22.9	23.7	23.2

7 DAY AVERAGE SPEED	18.3
7 DAY AVERAGE 85th PERCENTILE	23.1

5 DAY OFF PEAK AVERAGE SPEED	17.1
5 DAY OFF PEAK AVERAGE 85th PERCENTILE	21.8

Automatic Classified Counts, Rochdale

LOCATION: GREENVALE (EASTERN SITE)

Direction : EASTBOUND

AVERAGE SPEEDS							
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24
1	-	25.5	-	15.5	15.5	15.5	20.5
2	15.5	-	20.5	-	25.5	18.0	18.0
3	-	-	15.5	25.5	-	25.5	15.5
4	15.5	-	-	15.5	-	-	15.5
5	12.2	25.5	-	15.5	-	-	33.0
6	17.7	16.9	16.3	18.0	16.3	15.5	-
7	17.4	18.5	18.9	18.2	16.9	10.5	13.5
8	16.0	16.8	16.4	17.8	17.1	16.1	15.5
9	16.2	16.2	15.6	17.2	15.0	16.6	19.1
10	14.8	15.1	16.0	14.5	15.1	15.8	15.8
11	14.9	14.4	15.0	14.8	17.3	16.8	14.2
12	15.2	14.6	13.7	16.2	15.5	15.8	18.5
13	14.3	16.9	14.5	14.9	16.2	16.6	16.5
14	15.8	14.1	15.0	15.5	16.5	15.5	16.6
15	16.3	15.1	17.5	13.1	16.5	15.5	16.1
16	15.1	14.9	16.3	14.6	15.3	15.2	16.0
17	16.2	15.3	15.2	15.2	16.2	17.4	16.7
18	16.9	16.4	16.8	18.1	16.2	17.4	17.5
19	17.1	16.3	16.7	17.0	17.5	17.1	15.2
20	17.6	15.9	18.5	15.1	17.1	17.1	17.8
21	20.5	17.5	16.8	17.9	17.5	16.1	16.6
22	15.5	17.2	19.5	12.6	17.2	16.4	21.5
23	13.5	12.2	15.5	15.5	14.7	14.1	15.5
24	43.0	19.8	15.5	15.5	16.9	16.9	15.5
10-12	15.0	14.5	14.3	15.5	16.4	16.3	16.3
14-16	15.7	15.0	16.9	13.9	15.9	15.3	16.0
0-24	17.1	16.9	16.5	16.2	16.8	16.4	17.4

85TH PERCENTILE							
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24
1	-	-	-	-	15.5	23.7	26.3
2	-	-	27.6	-	-	23.0	23.0
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	15.5
5	17.9	25.5	-	-	-	-	-
6	22.1	23.8	23.0	24.2	21.5	-	-
7	24.2	25.2	23.7	24.7	22.6	16.3	21.9
8	22.5	23.5	22.9	23.5	22.6	20.4	15.5
9	21.8	21.0	20.8	22.4	20.4	22.8	25.4
10	21.2	21.2	20.9	19.3	20.3	22.0	21.4
11	20.6	20.1	21.5	20.7	22.3	24.3	20.4
12	22.4	21.6	20.0	22.8	21.1	22.2	24.9
13	21.3	23.4	21.0	21.1	22.4	22.2	22.5
14	21.9	19.5	21.7	20.7	23.4	21.0	24.2
15	22.4	19.7	22.8	19.9	22.2	21.5	22.2
16	20.9	20.5	22.4	20.2	19.5	20.0	22.0
17	22.0	20.8	20.0	20.7	22.3	22.7	21.9
18	23.0	22.2	22.3	24.2	23.1	24.4	23.7
19	25.3	22.6	21.6	22.9	24.6	22.9	21.7
20	23.5	20.7	23.2	19.8	22.4	22.1	25.1
21	26.3	25.4	20.3	22.2	23.8	21.9	25.3
22	20.2	21.2	26.5	17.5	21.2	26.0	27.0
23	21.9	17.9	25.5	22.2	21.4	21.0	15.5
24	-	25.1	25.5	15.5	20.7	20.7	29.6
10-12	21.5	20.8	20.7	21.7	21.7	23.3	22.6
14-16	21.7	20.1	22.6	20.0	20.8	20.7	22.1
0-24	22.2	22.1	22.7	21.3	21.7	22.0	22.6

7 DAY AVERAGE SPEED	16.8
7 DAY AVERAGE 85th PERCENTILE	22.1

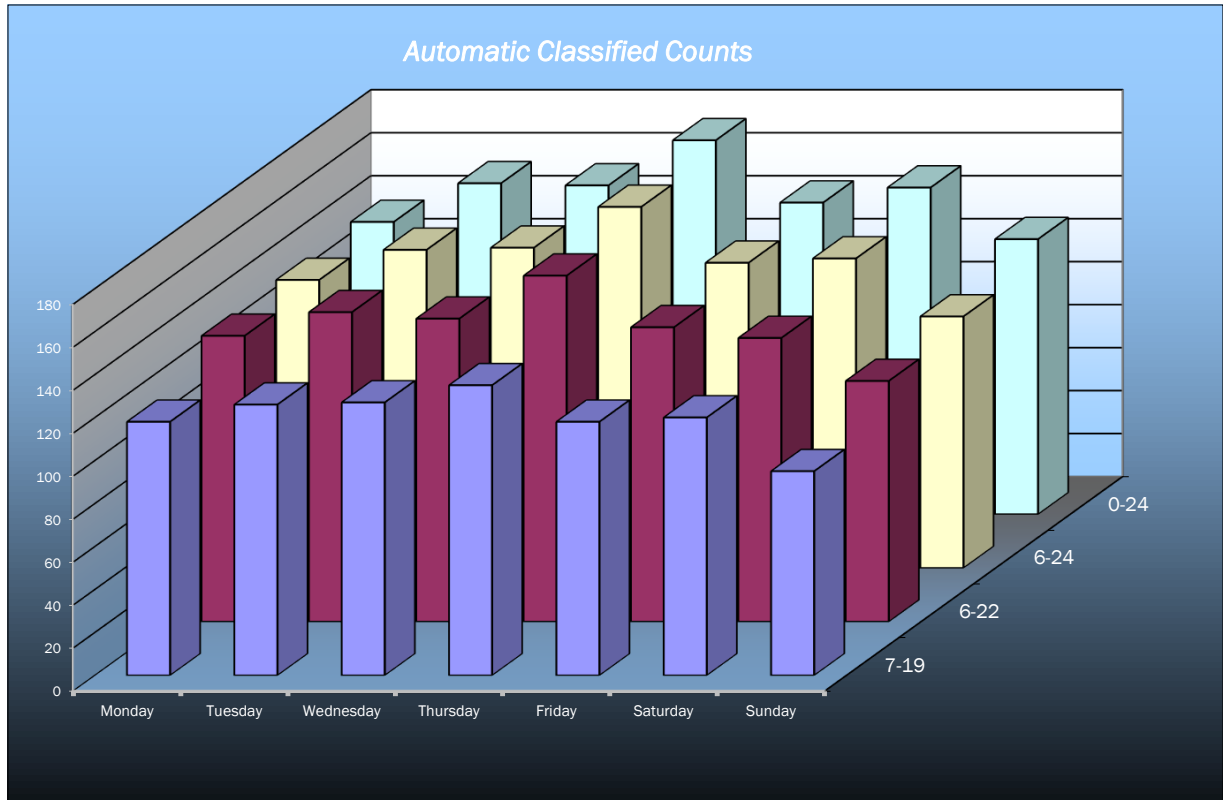
5 DAY OFF PEAK AVERAGE SPEED	15.3
5 DAY OFF PEAK AVERAGE 85th PERCENTILE	21.2

Automatic Classified Counts, Rochdale

LOCATION: GREENVALE (WESTERN SITE)

Direction : WESTBOUND

VEHICLE FLOWS									
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24	WEEKDAY AVERAGE	WEEK AVERAGE
1	1	4	1	1	1	2	2	2	2
2	0	0	0	1	1	2	4	0	1
3	0	1	1	2	1	1	1	1	1
4	1	0	0	0	0	1	3	0	1
5	0	1	0	0	0	1	1	0	0
6	0	0	2	2	0	1	0	1	1
7	1	1	0	0	2	0	0	1	1
8	5	10	4	6	13	2	1	8	6
9	11	7	6	11	10	6	0	9	7
10	8	5	8	7	4	4	3	6	6
11	7	7	9	8	12	16	11	9	10
12	15	12	16	5	7	10	12	11	11
13	9	15	12	9	13	15	12	12	12
14	12	12	10	13	12	11	14	12	12
15	7	9	11	13	6	18	8	9	10
16	15	7	9	13	13	16	13	11	12
17	11	16	15	16	15	9	6	15	13
18	12	15	12	24	9	8	10	14	13
19	6	11	15	10	4	5	5	9	8
20	9	9	4	12	8	4	4	8	7
21	4	5	7	8	7	5	8	6	6
22	1	3	3	6	2	3	5	3	3
23	1	1	5	6	2	7	3	3	4
24	0	3	3	1	3	5	2	2	2
7-19	118	126	127	135	118	120	95	125	120
6-22	133	144	141	161	137	132	112	143	137
6-24	134	148	149	168	142	144	117	148	143
0-24	136	154	153	174	145	152	128	152	149

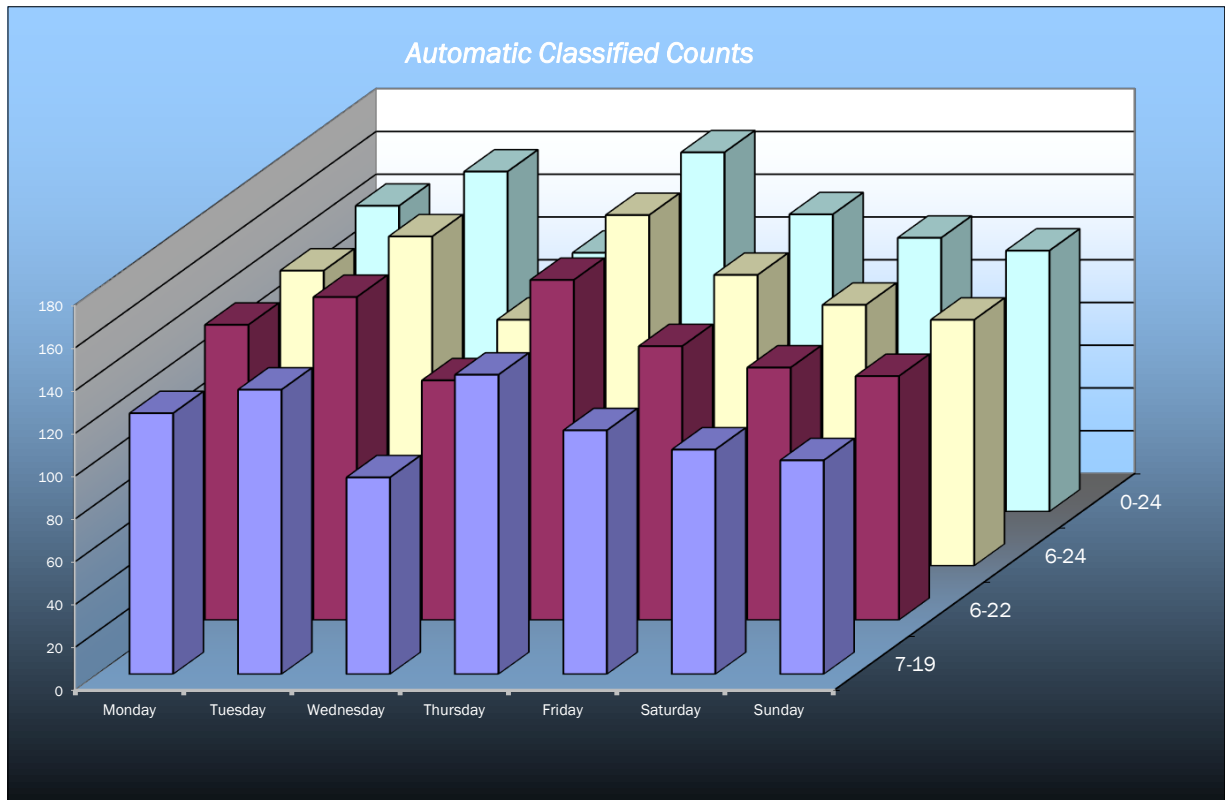


Automatic Classified Counts, Rochdale

LOCATION: GREENVALE (WESTERN SITE)

Direction : EASTBOUND

EASTBOUND									
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24	WEEKDAY AVERAGE	WEEK AVERAGE
1	1	2	1	0	0	4	2	1	1
2	0	0	0	0	1	1	2	0	1
3	0	0	0	0	0	0	1	0	0
4	0	0	1	0	0	0	1	0	0
5	1	2	0	0	1	1	1	1	1
6	3	1	4	4	1	0	0	3	2
7	7	8	8	6	3	0	0	6	5
8	10	16	9	14	10	2	0	12	9
9	10	9	13	11	11	8	7	11	10
10	10	8	8	12	10	11	6	10	9
11	10	9	8	11	11	16	7	10	10
12	7	14	7	11	7	9	15	9	10
13	9	12	7	7	11	15	10	9	10
14	12	9	4	14	6	6	9	9	9
15	13	4	10	6	13	11	8	9	9
16	10	7	10	14	7	9	6	10	9
17	10	18	2	15	9	6	14	11	11
18	9	8	8	9	9	8	8	9	8
19	12	19	6	16	10	4	10	13	11
20	6	6	8	5	6	6	5	6	6
21	2	3	1	6	3	3	3	3	3
22	1	1	3	2	2	4	6	2	3
23	0	1	2	5	3	2	1	2	2
24	0	2	1	0	5	2	0	2	1
7-19	122	133	92	140	114	105	100	120	115
6-22	138	151	112	159	128	118	114	138	131
6-24	138	154	115	164	136	122	115	141	135
0-24	143	159	121	168	139	128	122	146	140



Automatic Classified Counts, Rochdale

LOCATION: GREENVALE (WESTERN SITE)

Direction : WESTBOUND

AVERAGE SPEEDS							
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24
1	15.5	15.5	15.5	25.5	15.5	15.5	15.5
2	-	-	-	15.5	15.5	20.5	19.9
3	-	15.5	15.5	20.5	15.5	15.5	15.5
4	15.5	-	-	-	-	15.5	22.2
5	-	15.5	-	-	-	15.5	25.5
6	-	-	20.5	20.5	-	15.5	-
7	25.5	15.5	-	-	20.5	-	-
8	19.5	17.5	20.5	20.5	19.3	15.5	15.5
9	17.3	19.8	20.5	17.3	16.5	20.5	-
10	13.0	17.5	16.8	16.9	20.5	15.5	18.8
11	15.5	15.5	16.6	16.8	14.7	16.8	16.4
12	14.8	16.3	16.1	15.5	14.1	16.5	18.0
13	16.6	17.5	15.5	15.5	15.5	15.5	18.8
14	15.5	18.0	14.5	17.8	14.7	18.2	16.9
15	16.9	17.7	15.5	16.3	17.2	17.2	15.5
16	18.2	14.1	16.6	16.3	16.3	18.0	15.5
17	17.3	17.4	17.5	16.1	16.8	17.7	20.5
18	22.2	18.0	18.8	17.6	16.6	19.3	19.5
19	15.5	16.4	18.2	17.5	15.5	19.5	15.5
20	18.8	14.4	23.0	19.7	16.8	18.0	20.5
21	20.5	17.5	24.1	20.2	21.2	15.5	18.0
22	15.5	15.5	25.5	17.2	15.5	18.8	17.5
23	15.5	25.5	21.5	20.5	15.5	19.8	18.8
24	-	15.5	15.5	15.5	18.8	15.5	20.5
10-12	15.2	15.9	16.4	16.1	14.4	16.6	17.2
14-16	17.5	15.9	16.1	16.3	16.7	17.6	15.5
0-24	17.3	17.0	18.4	18.1	16.8	17.2	18.3

85TH PERCENTILE							
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24
1	-	15.5	-	-	-	15.5	15.5
2	-	-	-	-	-	27.6	28.6
3	-	-	-	27.6	-	-	-
4	-	-	-	-	-	-	27.9
5	-	-	-	-	-	-	-
6	-	-	27.6	27.6	-	-	-
7	-	-	-	-	27.6	-	-
8	25.0	23.8	26.3	26.0	25.9	15.5	-
9	21.4	25.1	26.0	23.3	22.2	26.0	-
10	17.6	22.0	23.2	20.7	26.3	23.7	24.6
11	15.5	15.5	19.9	20.3	17.6	20.2	23.4
12	19.4	23.0	20.6	22.6	17.9	23.9	22.5
13	19.9	23.1	22.9	22.6	21.3	22.0	25.3
14	21.5	24.2	17.7	22.2	21.4	22.9	23.6
15	20.7	22.1	15.5	19.0	21.2	22.3	20.8
16	24.1	17.9	19.9	21.2	19.0	22.5	15.5
17	23.3	22.8	23.1	22.9	20.4	22.1	26.0
18	27.1	23.4	23.8	22.7	22.6	24.4	24.7
19	21.8	21.8	22.7	21.7	23.7	25.0	22.6
20	25.9	20.4	28.0	24.8	23.2	23.0	26.3
21	30.5	25.9	27.9	27.1	26.6	15.5	22.6
22	-	15.5	25.5	21.2	15.5	24.6	22.0
23	-	-	27.0	26.0	15.5	27.7	24.6
24	-	15.5	15.5	-	24.6	15.5	27.6
10-12	17.5	19.3	20.2	21.4	17.7	22.0	23.0
14-16	22.4	20.0	17.7	20.1	20.1	22.4	18.2
0-24	22.4	21.0	22.9	23.3	21.8	22.1	23.6

7 DAY AVERAGE SPEED	17.6
7 DAY AVERAGE 85th PERCENTILE	22.5

5 DAY OFF PEAK AVERAGE SPEED	16.0
5 DAY OFF PEAK AVERAGE 85th PERCENTILE	19.6

Automatic Classified Counts, Rochdale

LOCATION: GREENVALE (WESTERN SITE)

Direction : EASTBOUND

AVERAGE SPEEDS							
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24
1	15.5	15.5	15.5	-	-	18.0	15.5
2	-	-	-	-	15.5	15.5	15.5
3	-	-	-	-	-	-	15.5
4	-	-	15.5	-	-	-	15.5
5	15.5	15.5	-	-	15.5	5.5	15.5
6	15.5	15.5	13.0	15.5	15.5	-	-
7	16.9	16.8	20.5	15.5	18.8	-	-
8	19.5	19.3	19.9	19.1	18.5	20.5	-
9	16.5	16.6	16.3	16.4	14.6	19.3	19.8
10	14.5	15.5	15.5	15.5	16.5	21.9	20.5
11	15.5	14.4	11.8	14.6	15.5	14.9	14.1
12	16.9	14.8	16.9	18.2	14.1	16.6	18.2
13	14.4	17.2	14.1	16.9	12.8	15.5	15.5
14	16.3	14.4	15.5	16.9	18.8	17.2	16.6
15	17.0	15.5	17.5	15.5	16.3	14.6	16.8
16	15.5	12.6	16.5	15.5	14.1	15.5	15.5
17	16.5	16.1	15.5	16.8	17.7	18.8	16.2
18	18.8	15.5	18.0	19.9	15.5	15.5	18.0
19	18.0	19.2	18.8	16.1	18.5	20.5	18.5
20	17.2	15.5	16.8	19.5	17.2	18.8	21.5
21	25.5	15.5	25.5	17.2	18.8	15.5	15.5
22	15.5	25.5	15.5	20.5	20.5	18.0	13.8
23	-	15.5	20.5	17.5	12.2	15.5	5.5
24	-	15.5	25.5	-	15.5	20.5	-

10-12	16.2	14.6	14.3	16.4	14.8	15.7	16.1
14-16	16.3	14.1	17.0	15.5	15.2	15.0	16.1
0-24	16.9	16.3	17.4	17.1	16.3	16.9	16.2

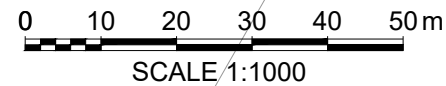
85TH PERCENTILE							
Hr Ending	Monday 4-Nov-24	Tuesday 5-Nov-24	Wednesday 6-Nov-24	Thursday 7-Nov-24	Friday 8-Nov-24	Saturday 9-Nov-24	Sunday 10-Nov-24
1	-	15.5	-	-	-	23.0	15.5
2	-	-	-	-	-	-	15.5
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	-	29.6	-	-	-	-	-
6	15.5	-	18.0	15.5	-	-	-
7	20.7	20.3	25.8	21.8	24.6	-	-
8	24.7	25.4	27.2	25.4	25.2	27.6	-
9	22.2	19.9	21.2	19.4	20.0	24.4	25.1
10	20.2	15.5	15.5	15.5	19.7	26.9	26.0
11	20.2	17.7	16.9	20.0	20.0	19.3	17.9
12	20.7	20.9	23.8	22.9	17.9	22.6	22.7
13	20.4	21.1	17.9	20.7	17.4	20.8	20.2
14	21.5	17.7	23.7	20.6	24.0	24.7	19.9
15	22.6	15.5	23.8	21.8	21.2	20.0	20.3
16	20.2	17.5	19.7	19.4	17.9	15.5	15.5
17	22.2	20.2	15.5	20.4	24.4	24.0	18.9
18	23.8	15.5	22.6	25.2	15.5	20.8	22.6
19	22.5	24.1	24.0	20.6	23.3	26.3	23.3
20	21.2	21.8	23.2	25.0	21.2	24.0	27.0
21	25.5	15.5	-	21.2	24.6	15.5	15.5
22	-	-	15.5	27.6	27.6	23.0	17.9
23	-	-	27.6	22.0	17.9	15.5	-
24	-	15.5	-	-	22.6	27.6	-

10-12	20.5	19.3	20.4	21.4	18.9	21.0	20.3
14-16	21.4	16.5	21.7	20.6	19.5	17.7	17.9
0-24	21.5	19.4	21.3	21.4	21.4	22.3	20.2

7 DAY AVERAGE SPEED	16.7
7 DAY AVERAGE 85th PERCENTILE	21.1

5 DAY OFF PEAK AVERAGE SPEED	15.4
5 DAY OFF PEAK AVERAGE 85th PERCENTILE	20.0

Appendix E: Proposed Site Layout: Swept Paths and Forward Stopping Sight Distances



- Notes:
1. All dimensions are in metres unless specified otherwise.
 2. This drawing is based MCK Associates Limited Drawing no.23-025-401C Rev D. Tetra Tech does not take responsibility for any discrepancies.

Key:

— Approx site boundary

Overview Plan for
Turning Heads 1 & 2
and FSSD 1 & 2

PRELIMINARY ISSUE

P02	Revised Site Layout	02.04.2025	JT	MT	AK
P01	Preliminary first issue	14.03.2025	AB	MT	AK
Rev	Description	Date	By	CHK	App

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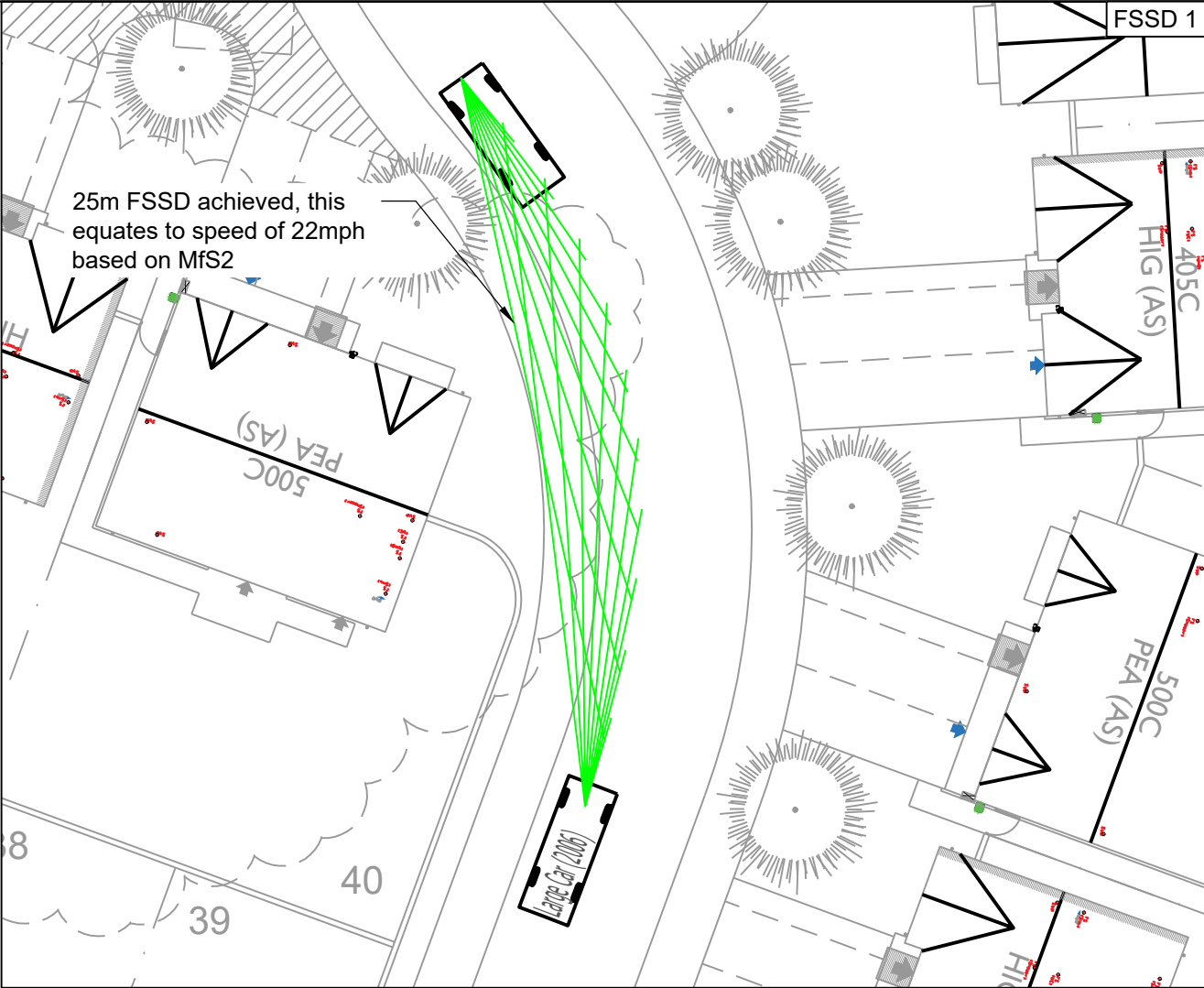
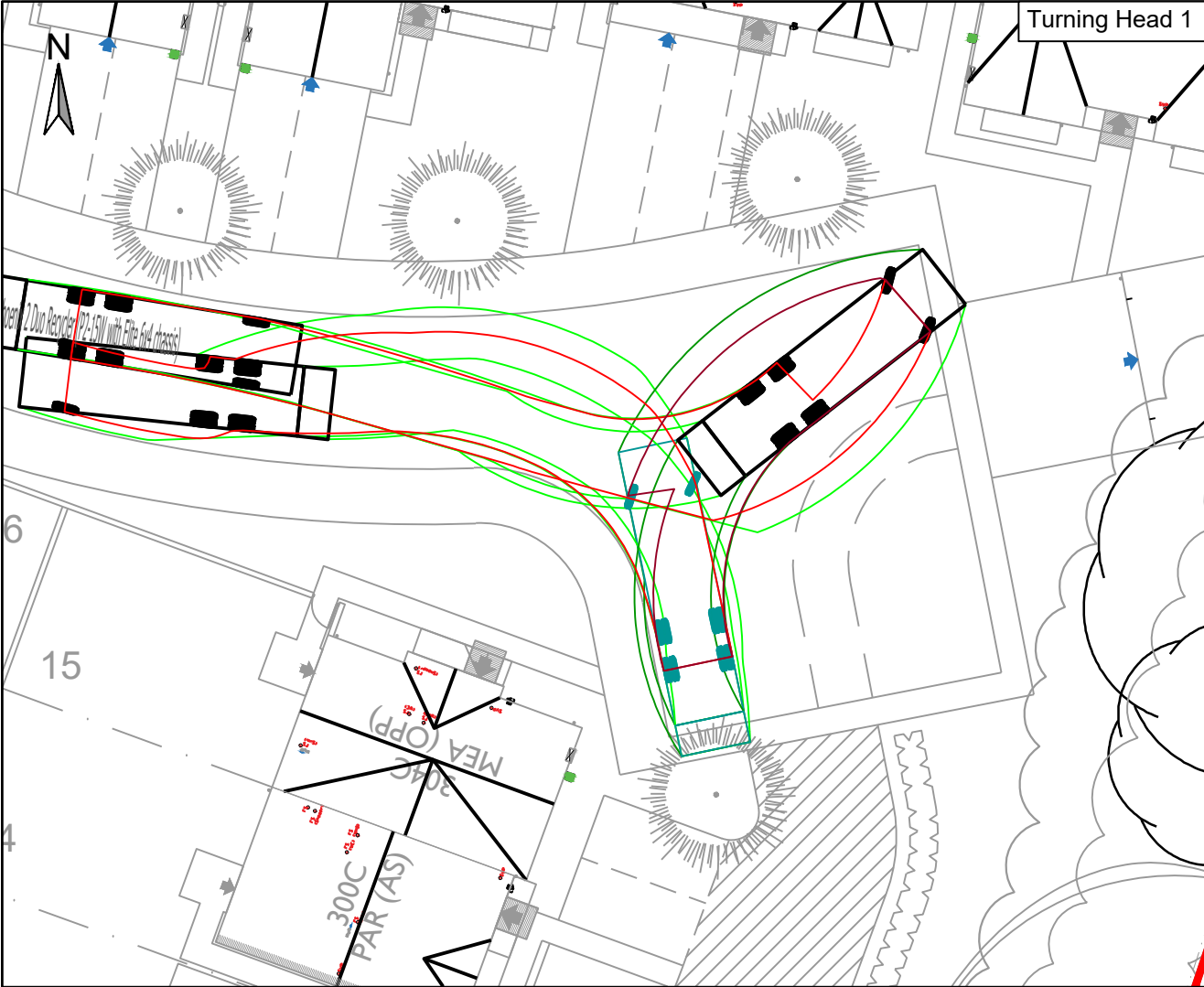


Client

Project Name
Proposed Residential Development:
Land off Greenvale, Bamford, Rochdale

Sheet Title
Proposed Internal Site Layout: Swept Path Analysis
and Foward Stopping Sight Distance Checks:
Overview - Sheet 1 of 2

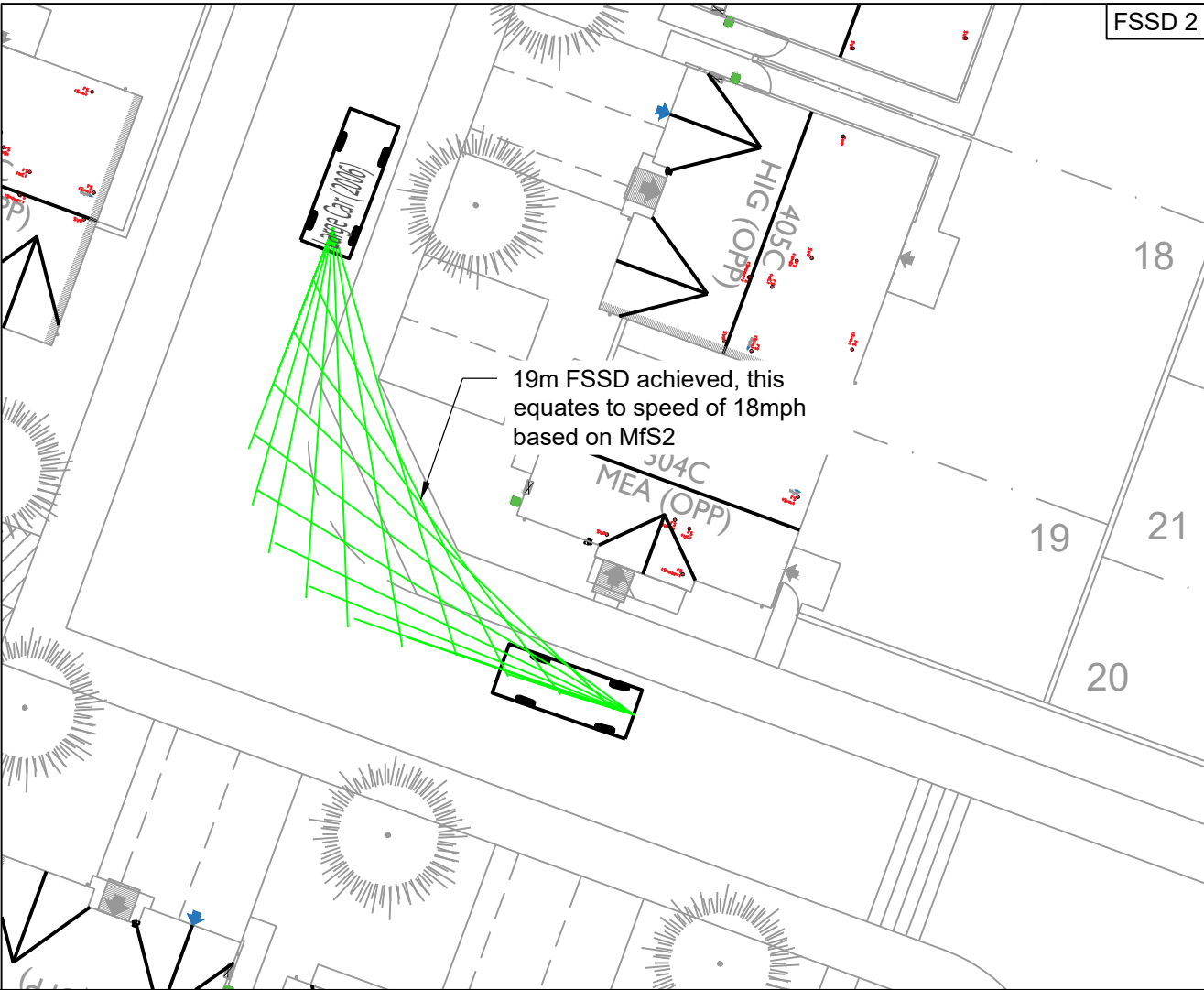
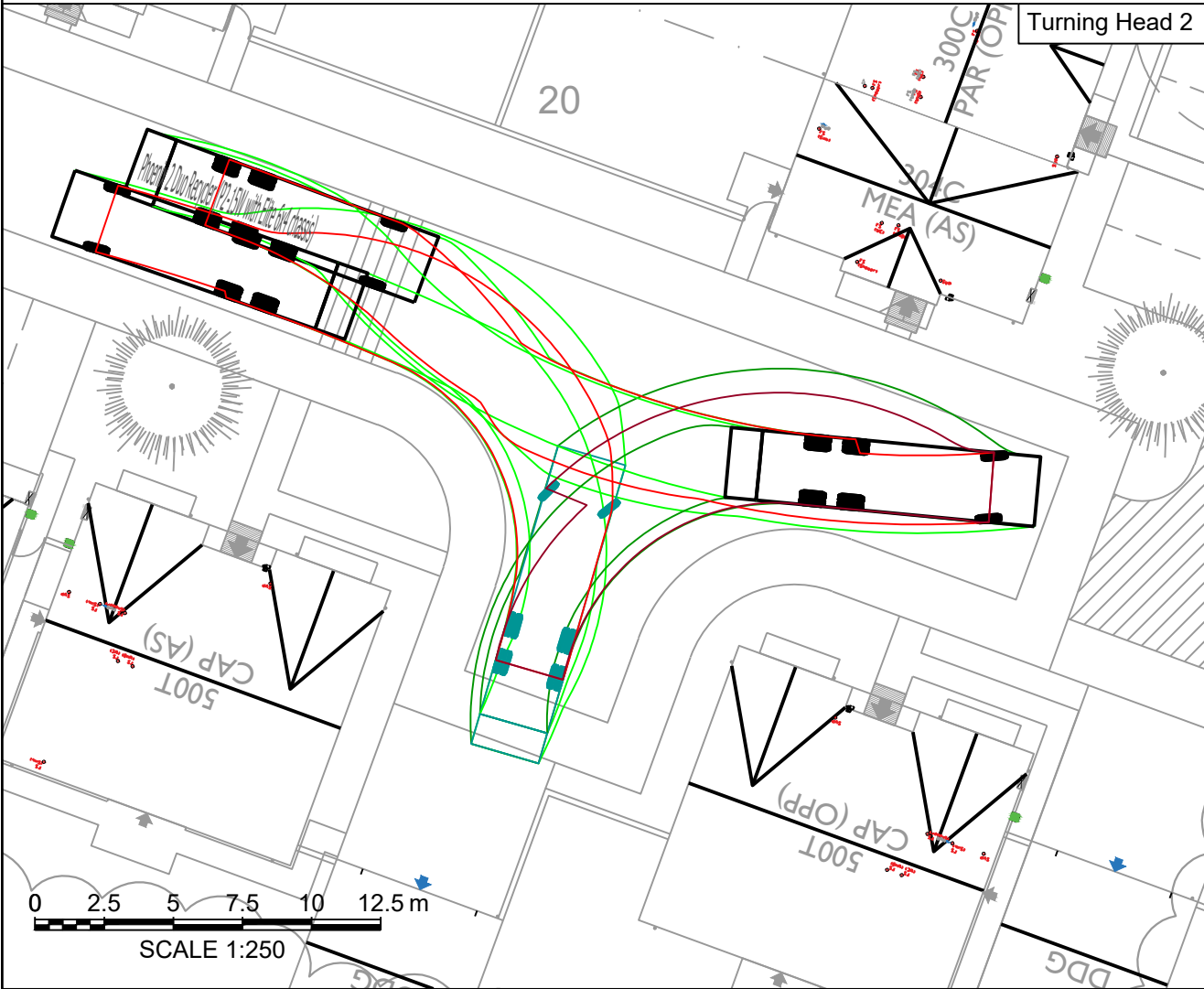
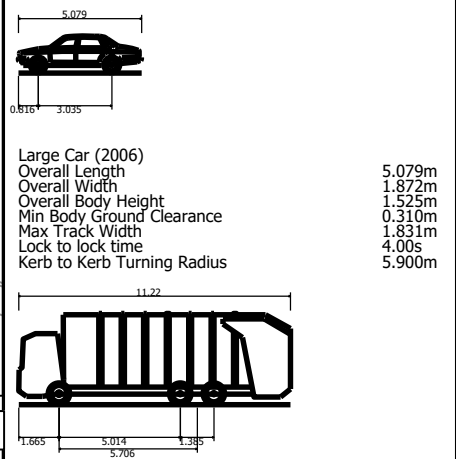
TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @	Suitability
784-B068938	AB	Mar '25	MT	Mar '25	AK	Mar '25	As Shown	S0
Client Project Number	Originator	Volume/System Level/Location	Type/Code	Role	Number	Revision		
B068938	- TTE	- 00 - XX - TR	- O - 003-01	P02				



- Notes:
1. All dimensions are in metres unless specified otherwise.
 2. This drawing is based MCK Associates Limited Drawing no.23-025-401C Rev D. Tetra Tech does not take responsibility for any discrepancies.
 3. For location of the turning heads shown this drawing, refer to TetraTech Overview Plan (Drg no. 784-B068938-TTE-00-XX-TR-O-003-01 P01)

Key:

- Body track
- Wheel track
- Forward stopping sight distance (FSSD)



PRELIMINARY ISSUE

P02	Revised Site Layout	02.04.2025	JT	MT	AK
P01	Preliminary first issue	14.03.2025	AB	MT	AK

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HUTCHESON

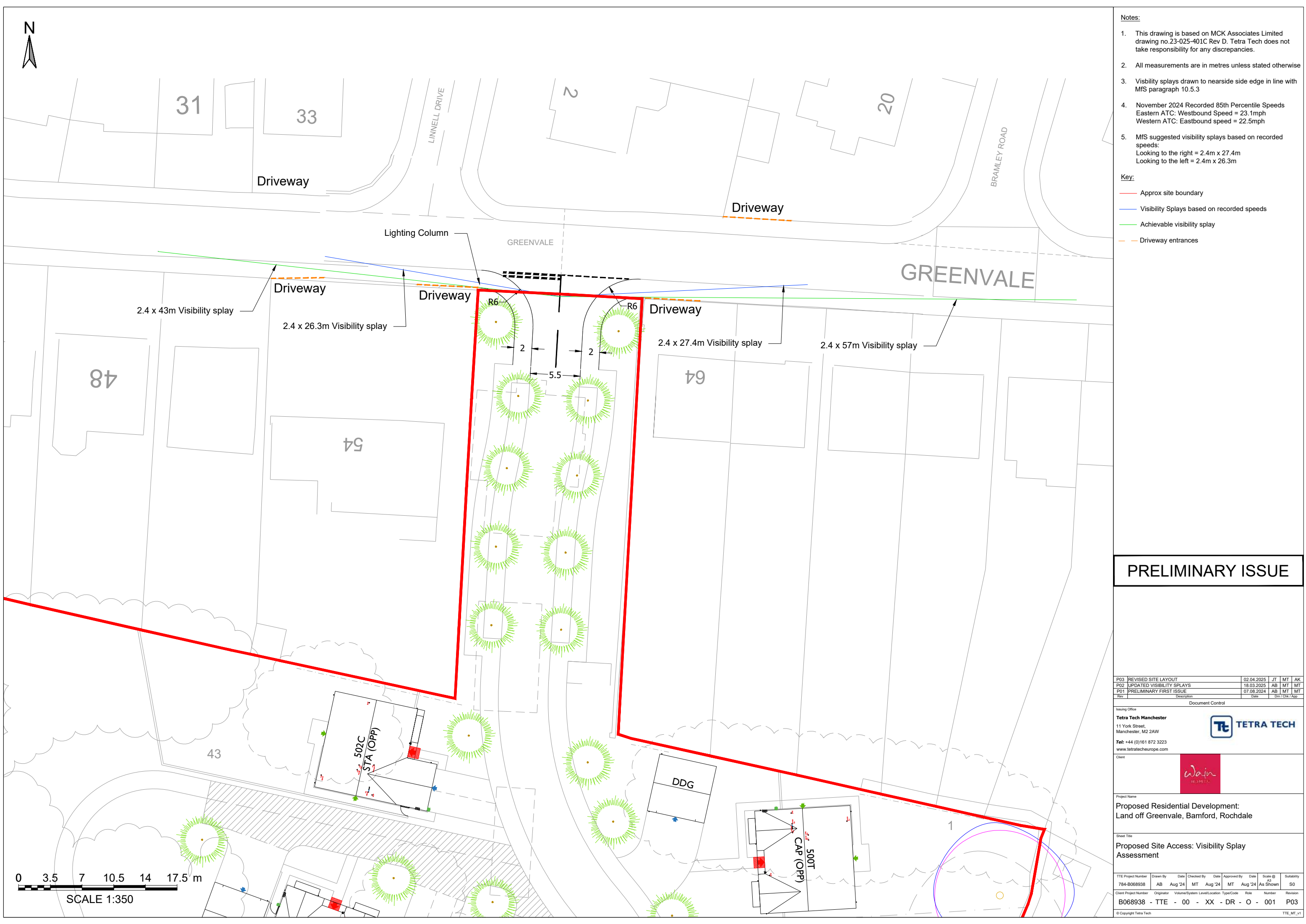
Project Name
**Proposed Residential Development:
Land off Greenvale, Bamford, Rochdale**

Sheet Title
**Proposed Internal Site Layout: Swept Path Analysis
and Forward Stopping Sight Distance Checks:
Turning Heads 1 & 2 - Sheet 2 of 2**

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A3	Subsidiary
784-B068938	AB	Mar '25	MT	Mar '25	AK	Mar '25	As Shown	S0
Client Project Number	Originator	Volume/System Level/Location	Type/Code	Role	Number	Revision		
B068938	- TTE	- 00	- XX	- TR	- O	- 003-02	P02	

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Appendix F: Proposed Site Access: Preliminary Layout



1. This drawing is based on MCK Associates Limited drawing no.23-025-401C Rev D. Tetra Tech does not take responsibility for any discrepancies.
2. All measurements are in metres unless stated otherwise
3. Visibility plays drawn to nearside side edge in line with MfS paragraph 10.5.3
4. November 2024 Recorded 85th Percentile Speeds
Eastern ATC: Westbound Speed = 23.1mph
Western ATC: Eastbound speed = 22.5mph
5. MfS suggested visibility plays based on recorded speeds:
Looking to the right = 2.4 m x 27.4 m
Looking to the left = 2.4 m x 26.3 m

- Approx site boundary
- Visibility Splays based on recorded speeds
- Achievable visibility splay
- Driveway entrances

PRELIMINARY ISSUE

Client



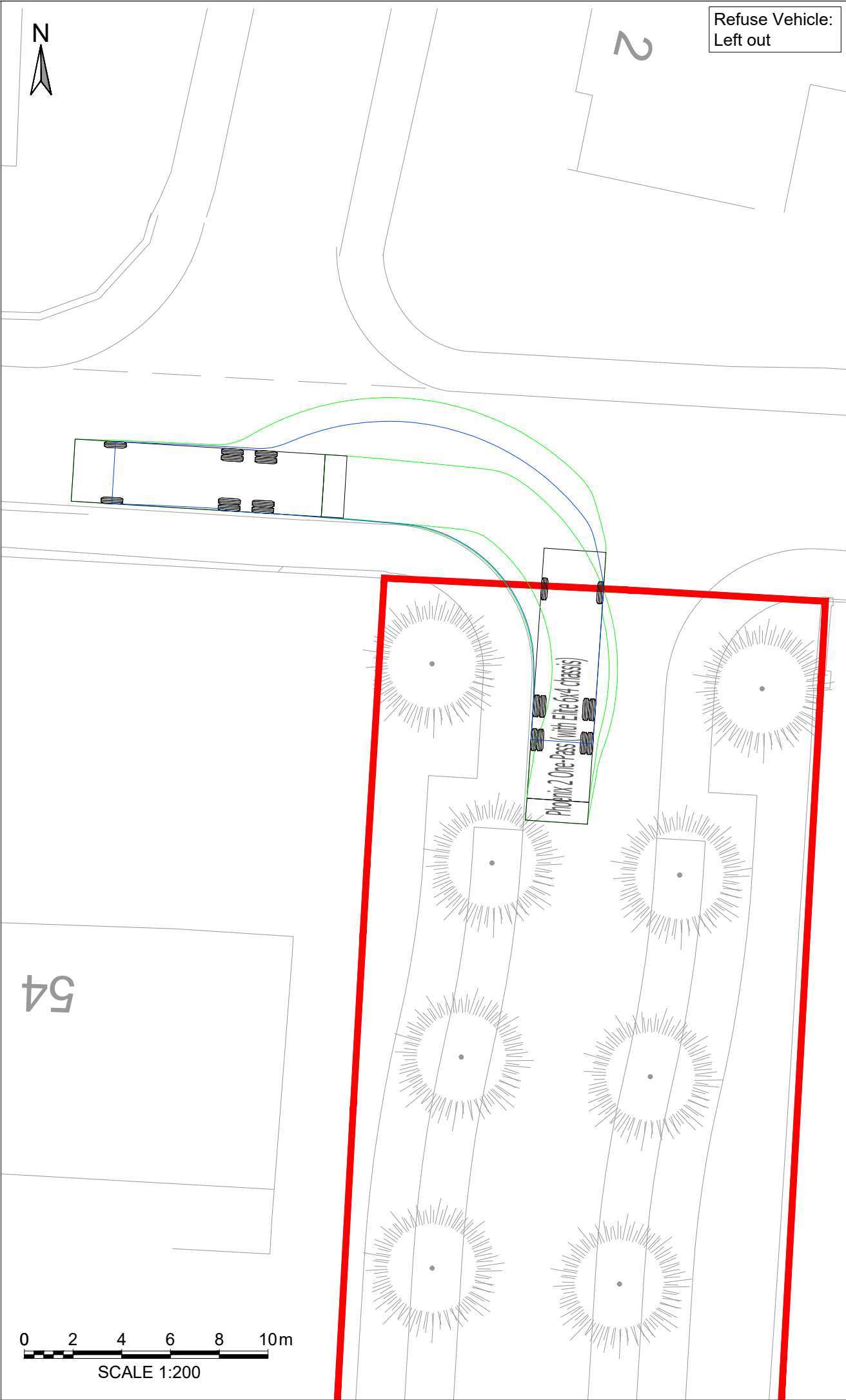
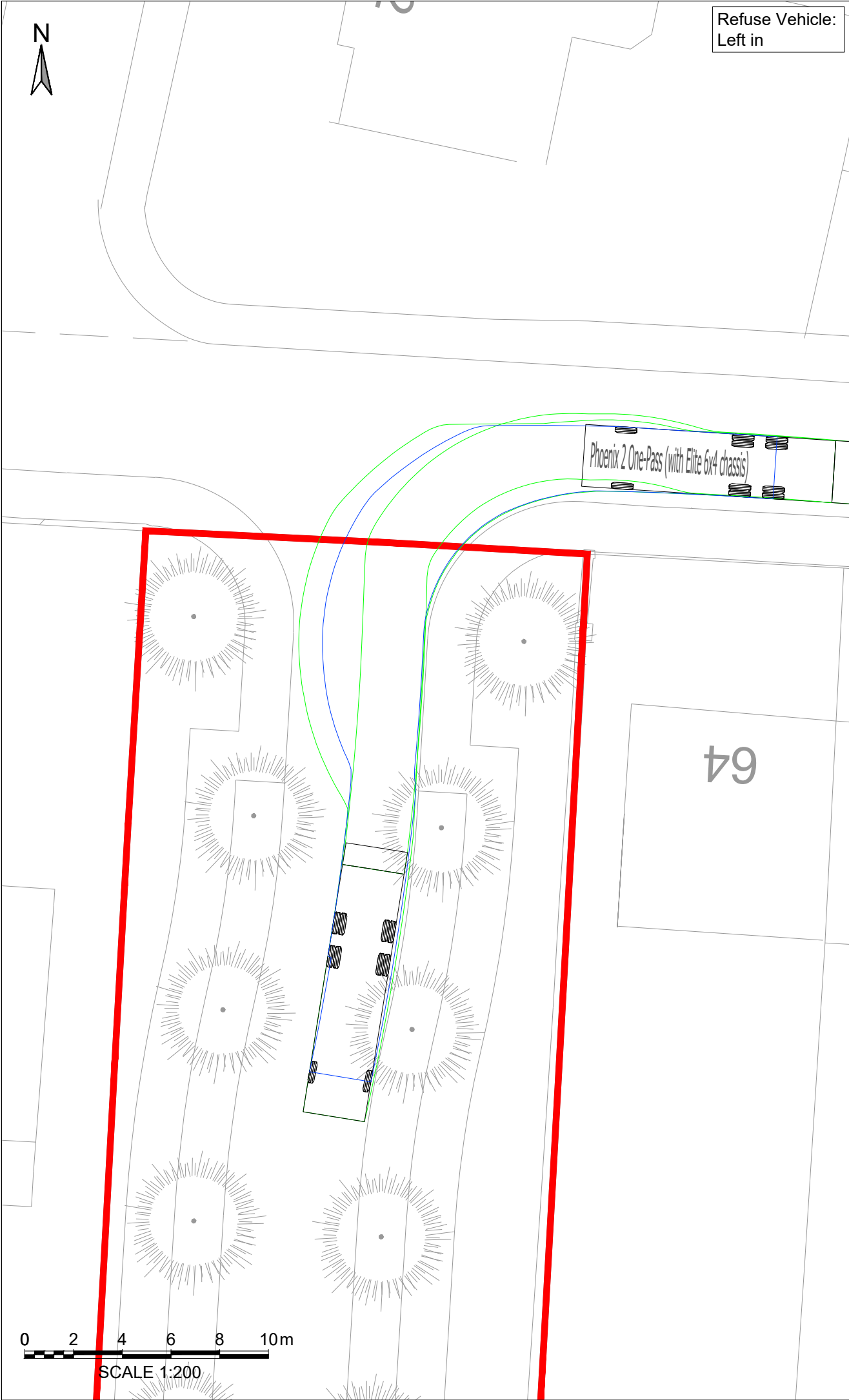
Proposed Residential Development:
Land off Greenvale, Bamford, Rochdale

Proposed Site Access: Visibility Splay Assessment

Client Project Number	Originator	Volume/System Level/Location	Type/Code	Role	Number	Revision
B068938	- TTE	- 00 - XX	- DR - O	-	001	P03

TTE_MT_v1

Appendix G: Proposed Site Access: Swept Paths



Notes:

- All measurements are in metres unless stated otherwise.
- This drawing is based MCK Associates Limited Drawing no.23-025-401C Rev D. Tetra Tech does not take responsibility for any discrepancies.

Key:

- Red line site boundary
- Wheel tracking
- Body tracking

Phoenix 2 One-Pass (with Elite 6x4 chassis)

Overall Length	11.180m
Overall Width	2.550m
Overall Body Height	3.760m
Min Body Ground Clearance	0.312m
Track Width	2.550m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	10.150m

PRELIMINARY ISSUE

P03	REVISED SITE LAYOUT REV D INCLUDED	02.04.2025	JT	MT	AK
P02	PROPOSED SITE LAYOUT REV C INCLUDED	14.03.2025	AB	MT	AK
P01	PRELIMINARY FIRST ISSUE	07.08.2024	AB	MT	MT

Rev. Description Date Drawn / CDR / App

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Manchester, M2 2AW

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www.tetrattechurope.com

Client

Wain

Project Name

**Proposed Residential Development:
Land off Greenvale, Bamford, Rochdale**

Sheet Title

**Proposed Site Access: Refuse Vehicle
Tracking**

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @	Suitability
784-B068938	AB	Aug '24	MT	Aug '24	MT	Aug '24	As Shown	S0

Client Project Number Originator Volume/System Level/Location Type/Code Role Number Revision

B068938 - TTE - 00 - XX - TR - O - 002 P03

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Appendix H: Multi-Modal TRICS Output

Calculation Reference: AUDIT-705118-241120-1109

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

05	EAST MIDLANDS	
	DY DERBY	1 days
	LE LEICESTERSHIRE	1 days
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
	WK WARWICKSHIRE	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	2 days
09	NORTH	
	DH DURHAM	1 days

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

Tetra Tech Quay West Manchester

Licence No: 705118

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: No of Dwellings
Actual Range: 24 to 371 (units:)
Range Selected by User: 6 to 432 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 18/05/17 to 18/05/22

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:

Monday	1 days
Tuesday	1 days
Wednesday	1 days
Thursday	2 days
Friday	3 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)	1
Edge of Town	5
Neighbourhood Centre (PPS6 Local 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:

Residential Zone	6
Village	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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	8 days - Selected
Servicing vehicles Excluded	3 days - Selected

Secondary Filtering selection:**Use Class:**

C3 8 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	3 days
10,001 to 15,000	4 days

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

Population within 5 miles:

50,001 to 75,000	2 days
75,001 to 100,000	2 days
125,001 to 250,000	3 days
250,001 to 500,000	1 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	2 days
1.1 to 1.5	6 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:

Yes	1 days
No	7 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
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This data displays the number of selected surveys with PTAL Ratings.

Tetra Tech Quay West Manchester

Licence No: 705118

LIST OF SITES relevant to selection parameters

1	AC-03-A-04	TOWN HOUSES		CESHIRE WEST & CHESTER
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	24		
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL	
2	AC-03-A-06	DETACHED HOUSES		CESHIRE WEST & CHESTER
	COMMON LANE			
	NEAR CHESTER			
	WAVERTON			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	99		
	Survey date: FRIDAY	29/04/22	Survey Type: MANUAL	
3	DH-03-A-03	SEMI-DETACHED & TERRACED		DURHAM
	PILGRIMS WAY			
	DURHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	57		
	Survey date: FRIDAY	19/10/18	Survey Type: MANUAL	
4	DY-03-A-01	MIXED HOUSES		DERBY
	RADBOURNE LANE			
	DERBY			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	371		
	Survey date: TUESDAY	10/07/18	Survey Type: MANUAL	
5	LE-03-A-02	DETACHED & OTHERS		LEICESTERSHIRE
	MELBOURNE ROAD			
	IBSTOCK			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:	85		
	Survey date: THURSDAY	28/06/18	Survey Type: MANUAL	
6	NT-03-A-08	DETACHED HOUSES		NOTTINGHAMSHIRE
	WIGHAY ROAD			
	HUCKNALL			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	36		
	Survey date: MONDAY	18/10/21	Survey Type: MANUAL	
7	ST-03-A-07	DETACHED & SEMI-DETACHED		STAFFORDSHIRE
	BEACONSIDE			
	STAFFORD			
	MARSTON GATE			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	248		
	Survey date: WEDNESDAY	22/11/17	Survey Type: MANUAL	
8	WK-03-A-04	DETACHED HOUSES		WARWICKSHIRE
	DALEHOUSE LANE			
	KENILWORTH			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:	49		
	Survey date: FRIDAY	27/09/19	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 SITES

Site Ref	Reason for Deselection
AC-03-A-05	COVID
NY-03-A-14	Bungalow

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.62

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.094	8	121	0.391	8	121	0.485
08:00 - 09:00	8	121	0.133	8	121	0.388	8	121	0.521
09:00 - 10:00	8	121	0.120	8	121	0.176	8	121	0.296
10:00 - 11:00	8	121	0.120	8	121	0.148	8	121	0.268
11:00 - 12:00	8	121	0.128	8	121	0.120	8	121	0.248
12:00 - 13:00	8	121	0.150	8	121	0.165	8	121	0.315
13:00 - 14:00	8	121	0.143	8	121	0.134	8	121	0.277
14:00 - 15:00	8	121	0.164	8	121	0.153	8	121	0.317
15:00 - 16:00	8	121	0.239	8	121	0.168	8	121	0.407
16:00 - 17:00	8	121	0.277	8	121	0.167	8	121	0.444
17:00 - 18:00	8	121	0.337	8	121	0.132	8	121	0.469
18:00 - 19:00	8	121	0.277	8	121	0.112	8	121	0.389
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.182			2.254			4.436

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:	24 - 371 (units:)
Survey date range:	18/05/17 - 18/05/22
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	2

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.

Tetra Tech Quay West Manchester

Licence No: 705118

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.000	8	121	0.000	8	121	0.000
08:00 - 09:00	8	121	0.008	8	121	0.007	8	121	0.015
09:00 - 10:00	8	121	0.004	8	121	0.004	8	121	0.008
10:00 - 11:00	8	121	0.004	8	121	0.004	8	121	0.008
11:00 - 12:00	8	121	0.000	8	121	0.000	8	121	0.000
12:00 - 13:00	8	121	0.002	8	121	0.002	8	121	0.004
13:00 - 14:00	8	121	0.003	8	121	0.002	8	121	0.005
14:00 - 15:00	8	121	0.005	8	121	0.005	8	121	0.010
15:00 - 16:00	8	121	0.004	8	121	0.004	8	121	0.008
16:00 - 17:00	8	121	0.002	8	121	0.002	8	121	0.004
17:00 - 18:00	8	121	0.002	8	121	0.002	8	121	0.004
18:00 - 19:00	8	121	0.001	8	121	0.003	8	121	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.035			0.035			0.070

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.

Tetra Tech Quay West Manchester

Licence No: 705118

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.002	8	121	0.000	8	121	0.002
08:00 - 09:00	8	121	0.006	8	121	0.004	8	121	0.010
09:00 - 10:00	8	121	0.003	8	121	0.003	8	121	0.006
10:00 - 11:00	8	121	0.004	8	121	0.004	8	121	0.008
11:00 - 12:00	8	121	0.002	8	121	0.000	8	121	0.002
12:00 - 13:00	8	121	0.006	8	121	0.008	8	121	0.014
13:00 - 14:00	8	121	0.007	8	121	0.004	8	121	0.011
14:00 - 15:00	8	121	0.001	8	121	0.005	8	121	0.006
15:00 - 16:00	8	121	0.003	8	121	0.005	8	121	0.008
16:00 - 17:00	8	121	0.002	8	121	0.002	8	121	0.004
17:00 - 18:00	8	121	0.000	8	121	0.001	8	121	0.001
18:00 - 19:00	8	121	0.001	8	121	0.001	8	121	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.037			0.037			0.074

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.

Tetra Tech Quay West Manchester

Licence No: 705118

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.000	8	121	0.000	8	121	0.000
08:00 - 09:00	8	121	0.000	8	121	0.000	8	121	0.000
09:00 - 10:00	8	121	0.000	8	121	0.000	8	121	0.000
10:00 - 11:00	8	121	0.000	8	121	0.000	8	121	0.000
11:00 - 12:00	8	121	0.000	8	121	0.000	8	121	0.000
12:00 - 13:00	8	121	0.000	8	121	0.000	8	121	0.000
13:00 - 14:00	8	121	0.000	8	121	0.000	8	121	0.000
14:00 - 15:00	8	121	0.000	8	121	0.000	8	121	0.000
15:00 - 16:00	8	121	0.000	8	121	0.000	8	121	0.000
16:00 - 17:00	8	121	0.000	8	121	0.000	8	121	0.000
17:00 - 18:00	8	121	0.000	8	121	0.000	8	121	0.000
18:00 - 19:00	8	121	0.001	8	121	0.001	8	121	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.001			0.002

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.004	8	121	0.003	8	121	0.007
08:00 - 09:00	8	121	0.006	8	121	0.005	8	121	0.011
09:00 - 10:00	8	121	0.003	8	121	0.003	8	121	0.006
10:00 - 11:00	8	121	0.004	8	121	0.001	8	121	0.005
11:00 - 12:00	8	121	0.002	8	121	0.007	8	121	0.009
12:00 - 13:00	8	121	0.001	8	121	0.000	8	121	0.001
13:00 - 14:00	8	121	0.002	8	121	0.001	8	121	0.003
14:00 - 15:00	8	121	0.001	8	121	0.002	8	121	0.003
15:00 - 16:00	8	121	0.004	8	121	0.007	8	121	0.011
16:00 - 17:00	8	121	0.007	8	121	0.001	8	121	0.008
17:00 - 18:00	8	121	0.004	8	121	0.006	8	121	0.010
18:00 - 19:00	8	121	0.004	8	121	0.007	8	121	0.011
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.042			0.043			0.085

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.

Tetra Tech Quay West Manchester

Licence No: 705118

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.112	8	121	0.541	8	121	0.653
08:00 - 09:00	8	121	0.161	8	121	0.649	8	121	0.810
09:00 - 10:00	8	121	0.155	8	121	0.231	8	121	0.386
10:00 - 11:00	8	121	0.147	8	121	0.186	8	121	0.333
11:00 - 12:00	8	121	0.165	8	121	0.162	8	121	0.327
12:00 - 13:00	8	121	0.212	8	121	0.219	8	121	0.431
13:00 - 14:00	8	121	0.193	8	121	0.184	8	121	0.377
14:00 - 15:00	8	121	0.227	8	121	0.216	8	121	0.443
15:00 - 16:00	8	121	0.378	8	121	0.235	8	121	0.613
16:00 - 17:00	8	121	0.430	8	121	0.236	8	121	0.666
17:00 - 18:00	8	121	0.496	8	121	0.181	8	121	0.677
18:00 - 19:00	8	121	0.402	8	121	0.156	8	121	0.558
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.078			3.196			6.274

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.018	8	121	0.029	8	121	0.047
08:00 - 09:00	8	121	0.030	8	121	0.055	8	121	0.085
09:00 - 10:00	8	121	0.019	8	121	0.019	8	121	0.038
10:00 - 11:00	8	121	0.020	8	121	0.019	8	121	0.039
11:00 - 12:00	8	121	0.022	8	121	0.019	8	121	0.041
12:00 - 13:00	8	121	0.014	8	121	0.010	8	121	0.024
13:00 - 14:00	8	121	0.009	8	121	0.014	8	121	0.023
14:00 - 15:00	8	121	0.019	8	121	0.025	8	121	0.044
15:00 - 16:00	8	121	0.060	8	121	0.033	8	121	0.093
16:00 - 17:00	8	121	0.034	8	121	0.018	8	121	0.052
17:00 - 18:00	8	121	0.028	8	121	0.022	8	121	0.050
18:00 - 19:00	8	121	0.030	8	121	0.026	8	121	0.056
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.303				0.289	0.592	

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
 MULTI-MODAL BUS/TRAM PASSENGERS
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.000	8	121	0.018	8	121	0.018
08:00 - 09:00	8	121	0.000	8	121	0.018	8	121	0.018
09:00 - 10:00	8	121	0.004	8	121	0.008	8	121	0.012
10:00 - 11:00	8	121	0.009	8	121	0.005	8	121	0.014
11:00 - 12:00	8	121	0.006	8	121	0.009	8	121	0.015
12:00 - 13:00	8	121	0.003	8	121	0.005	8	121	0.008
13:00 - 14:00	8	121	0.003	8	121	0.004	8	121	0.007
14:00 - 15:00	8	121	0.005	8	121	0.005	8	121	0.010
15:00 - 16:00	8	121	0.021	8	121	0.005	8	121	0.026
16:00 - 17:00	8	121	0.021	8	121	0.001	8	121	0.022
17:00 - 18:00	8	121	0.012	8	121	0.004	8	121	0.016
18:00 - 19:00	8	121	0.013	8	121	0.000	8	121	0.013
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.097			0.082			0.179

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.000	8	121	0.005	8	121	0.005
08:00 - 09:00	8	121	0.000	8	121	0.005	8	121	0.005
09:00 - 10:00	8	121	0.000	8	121	0.003	8	121	0.003
10:00 - 11:00	8	121	0.000	8	121	0.002	8	121	0.002
11:00 - 12:00	8	121	0.001	8	121	0.001	8	121	0.002
12:00 - 13:00	8	121	0.000	8	121	0.001	8	121	0.001
13:00 - 14:00	8	121	0.001	8	121	0.000	8	121	0.001
14:00 - 15:00	8	121	0.002	8	121	0.000	8	121	0.002
15:00 - 16:00	8	121	0.007	8	121	0.000	8	121	0.007
16:00 - 17:00	8	121	0.006	8	121	0.000	8	121	0.006
17:00 - 18:00	8	121	0.001	8	121	0.000	8	121	0.001
18:00 - 19:00	8	121	0.001	8	121	0.000	8	121	0.001
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.019			0.017			0.036

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.000	8	121	0.023	8	121	0.023
08:00 - 09:00	8	121	0.000	8	121	0.023	8	121	0.023
09:00 - 10:00	8	121	0.004	8	121	0.011	8	121	0.015
10:00 - 11:00	8	121	0.009	8	121	0.007	8	121	0.016
11:00 - 12:00	8	121	0.007	8	121	0.010	8	121	0.017
12:00 - 13:00	8	121	0.003	8	121	0.006	8	121	0.009
13:00 - 14:00	8	121	0.004	8	121	0.004	8	121	0.008
14:00 - 15:00	8	121	0.007	8	121	0.005	8	121	0.012
15:00 - 16:00	8	121	0.028	8	121	0.005	8	121	0.033
16:00 - 17:00	8	121	0.027	8	121	0.001	8	121	0.028
17:00 - 18:00	8	121	0.013	8	121	0.004	8	121	0.017
18:00 - 19:00	8	121	0.014	8	121	0.000	8	121	0.014
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.116			0.099			0.215

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 1.62

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.134	8	121	0.595	8	121	0.729
08:00 - 09:00	8	121	0.197	8	121	0.732	8	121	0.929
09:00 - 10:00	8	121	0.181	8	121	0.264	8	121	0.445
10:00 - 11:00	8	121	0.180	8	121	0.213	8	121	0.393
11:00 - 12:00	8	121	0.196	8	121	0.198	8	121	0.394
12:00 - 13:00	8	121	0.230	8	121	0.235	8	121	0.465
13:00 - 14:00	8	121	0.208	8	121	0.203	8	121	0.411
14:00 - 15:00	8	121	0.254	8	121	0.248	8	121	0.502
15:00 - 16:00	8	121	0.470	8	121	0.281	8	121	0.751
16:00 - 17:00	8	121	0.498	8	121	0.256	8	121	0.754
17:00 - 18:00	8	121	0.542	8	121	0.213	8	121	0.755
18:00 - 19:00	8	121	0.451	8	121	0.189	8	121	0.640
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.541			3.627			7.168

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.*

Tetra Tech Quay West Manchester

Licence No: 705118

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.068	8	121	0.373	8	121	0.441
08:00 - 09:00	8	121	0.102	8	121	0.356	8	121	0.458
09:00 - 10:00	8	121	0.094	8	121	0.149	8	121	0.243
10:00 - 11:00	8	121	0.091	8	121	0.119	8	121	0.210
11:00 - 12:00	8	121	0.102	8	121	0.097	8	121	0.199
12:00 - 13:00	8	121	0.119	8	121	0.130	8	121	0.249
13:00 - 14:00	8	121	0.116	8	121	0.108	8	121	0.224
14:00 - 15:00	8	121	0.135	8	121	0.122	8	121	0.257
15:00 - 16:00	8	121	0.205	8	121	0.130	8	121	0.335
16:00 - 17:00	8	121	0.252	8	121	0.139	8	121	0.391
17:00 - 18:00	8	121	0.316	8	121	0.122	8	121	0.438
18:00 - 19:00	8	121	0.264	8	121	0.101	8	121	0.365
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.864			1.946			3.810

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.

Tetra Tech Quay West Manchester

Licence No: 705118

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL LGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.023	8	121	0.018	8	121	0.041
08:00 - 09:00	8	121	0.017	8	121	0.020	8	121	0.037
09:00 - 10:00	8	121	0.019	8	121	0.021	8	121	0.040
10:00 - 11:00	8	121	0.021	8	121	0.021	8	121	0.042
11:00 - 12:00	8	121	0.024	8	121	0.023	8	121	0.047
12:00 - 13:00	8	121	0.023	8	121	0.025	8	121	0.048
13:00 - 14:00	8	121	0.017	8	121	0.020	8	121	0.037
14:00 - 15:00	8	121	0.021	8	121	0.019	8	121	0.040
15:00 - 16:00	8	121	0.027	8	121	0.029	8	121	0.056
16:00 - 17:00	8	121	0.019	8	121	0.023	8	121	0.042
17:00 - 18:00	8	121	0.020	8	121	0.005	8	121	0.025
18:00 - 19:00	8	121	0.007	8	121	0.006	8	121	0.013
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.238			0.230			0.468

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.

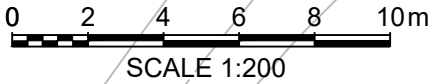
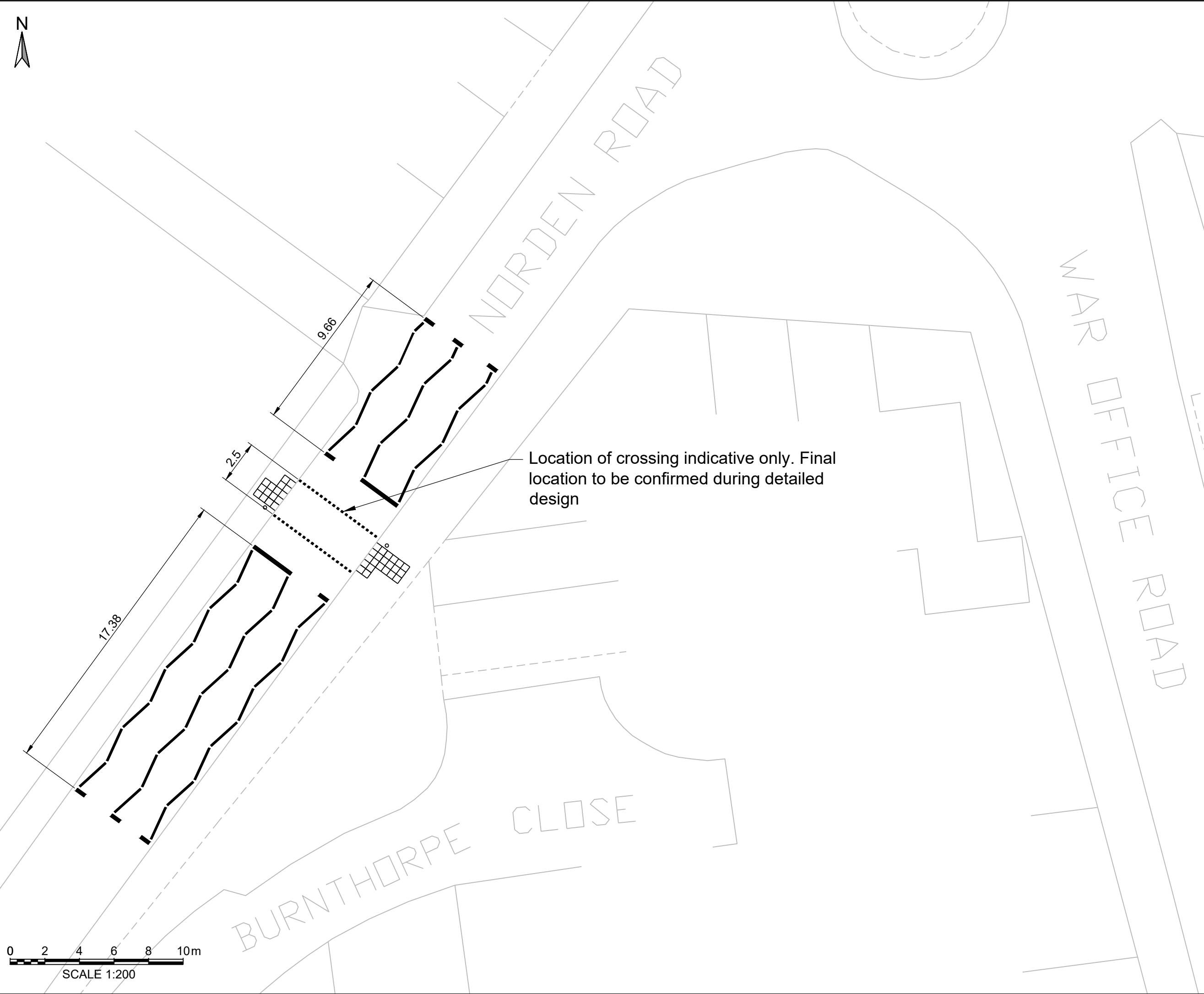
TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL MOTOR CYCLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	8	121	0.001	8	121	0.001	8	121	0.002
08:00 - 09:00	8	121	0.000	8	121	0.001	8	121	0.001
09:00 - 10:00	8	121	0.000	8	121	0.000	8	121	0.000
10:00 - 11:00	8	121	0.000	8	121	0.000	8	121	0.000
11:00 - 12:00	8	121	0.000	8	121	0.000	8	121	0.000
12:00 - 13:00	8	121	0.000	8	121	0.000	8	121	0.000
13:00 - 14:00	8	121	0.001	8	121	0.000	8	121	0.001
14:00 - 15:00	8	121	0.002	8	121	0.002	8	121	0.004
15:00 - 16:00	8	121	0.000	8	121	0.000	8	121	0.000
16:00 - 17:00	8	121	0.002	8	121	0.001	8	121	0.003
17:00 - 18:00	8	121	0.000	8	121	0.002	8	121	0.002
18:00 - 19:00	8	121	0.002	8	121	0.000	8	121	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.007			0.015

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.

Appendix I: Off-site Sustainable Transport Mitigation Drawings for JPA17



Notes:

1. All dimensions in metres unless stated otherwise.
2. This drawing should be read in relation to the subject of the title only. Other information shown on this drawing is to be considered indicative only. Reference should be made to appropriate drawing series / specifications for other information.
3. Tetra Tech does not take responsibility for any discrepancies with the base mapping data.

PRELIMINARY ISSUE

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Client



Project Name

Proposed Residential Development:
Land off Greenvale

Sheet Title

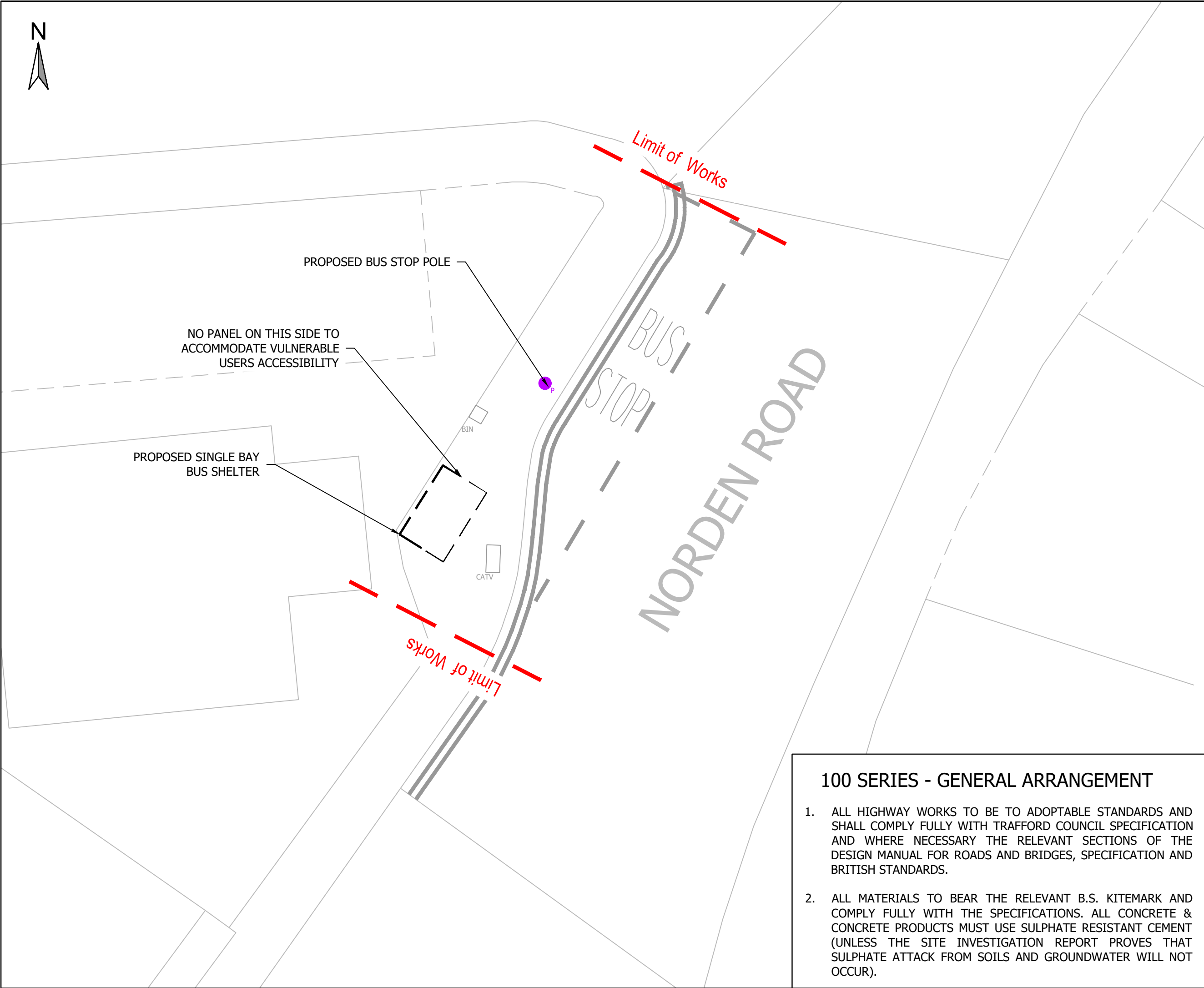
Proposed Puffin Crossing on Norden Road

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A3	Suitability
784-B068938	HM	Jan '25	AS	Jan '25	MT	Jan '25	As Shown	S0

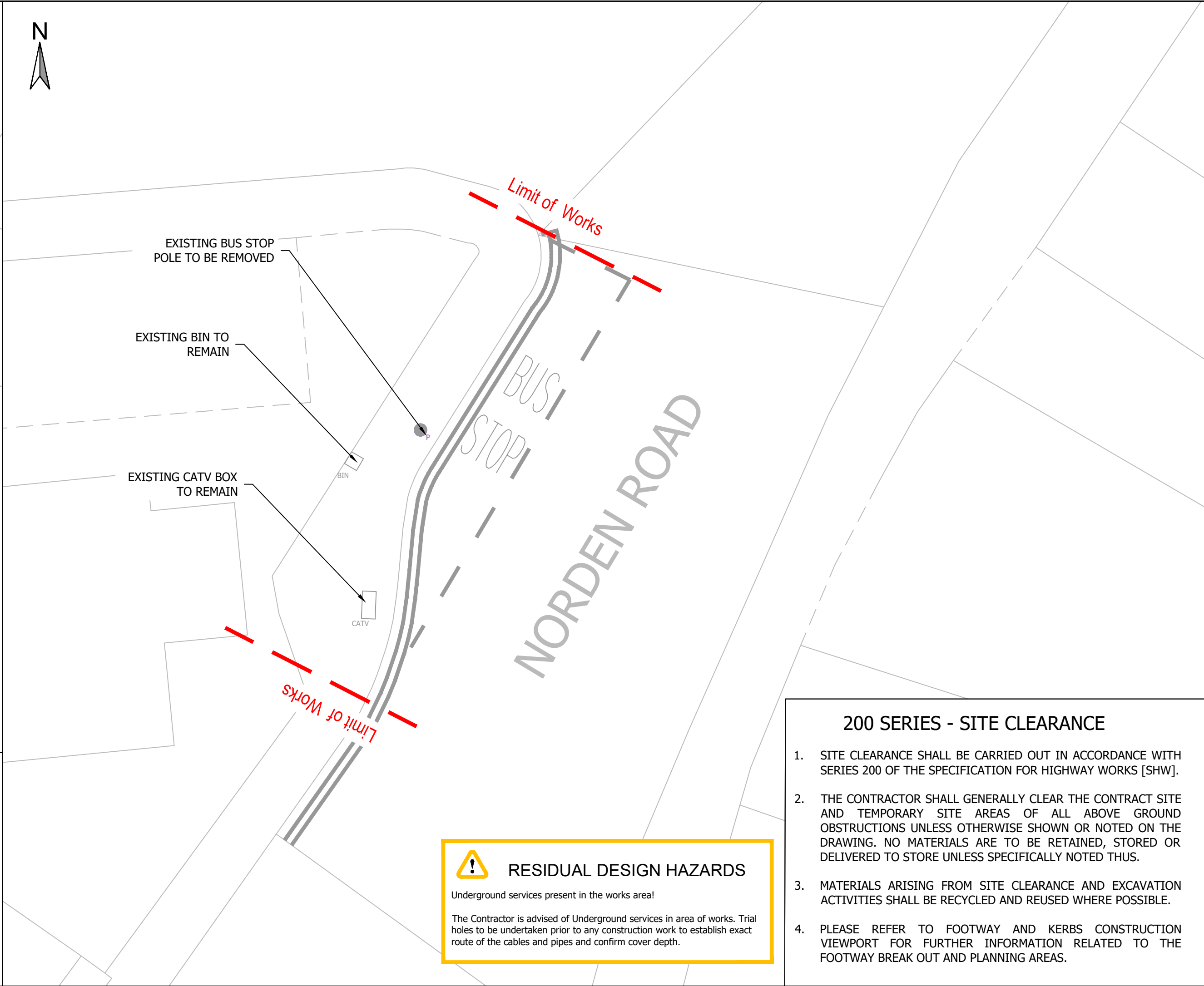
Client Project Number	Originator	Volume/System Level/Location	Type/Code	Role	Number	Revision
B068938	- TTE	- 00 - XX	- DR - O	- 003	P01	

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TTE_MT_v1

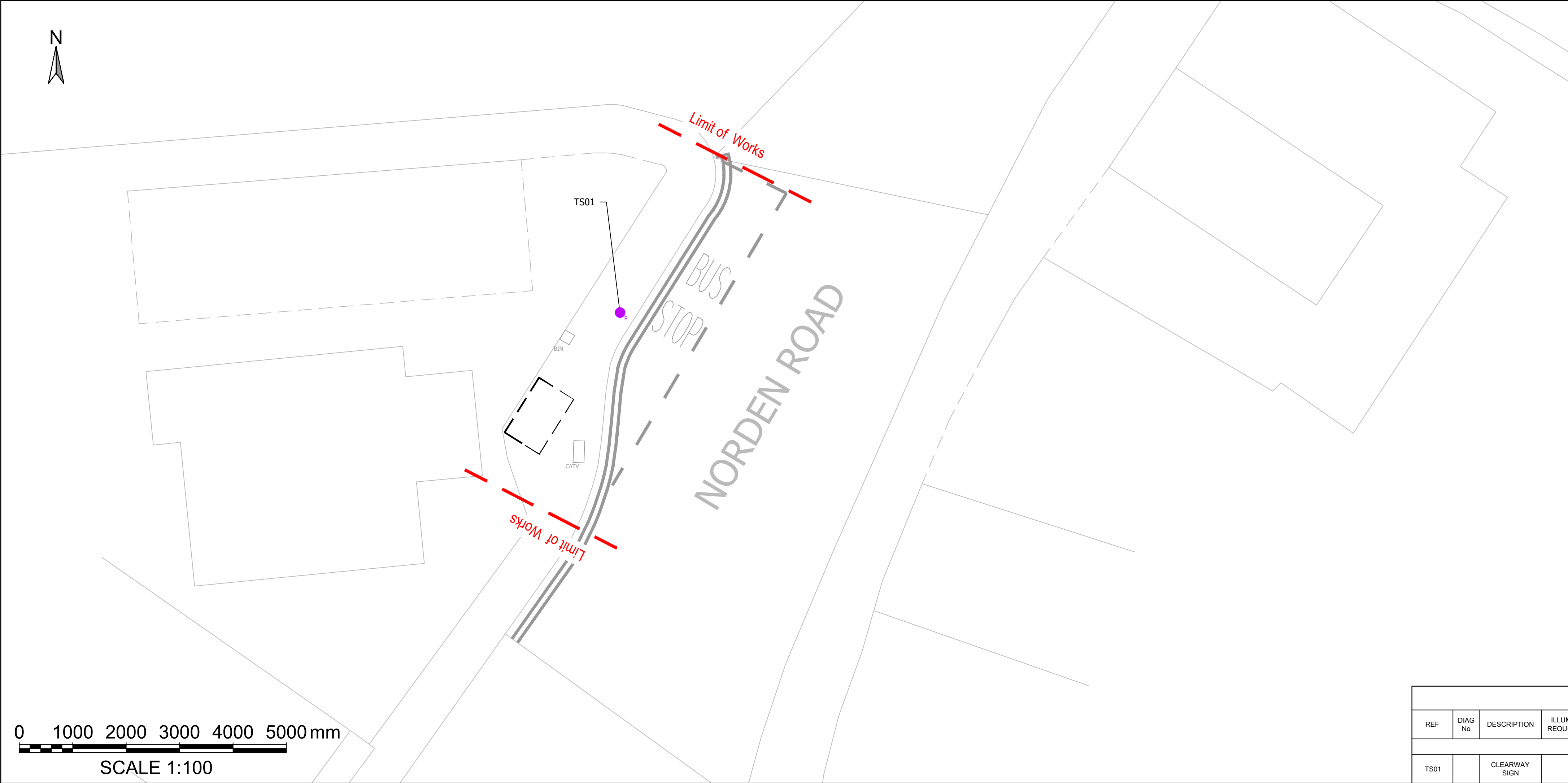


- ### 100 SERIES - GENERAL ARRANGEMENT
- ALL HIGHWAY WORKS TO BE TO ADOPTABLE STANDARDS AND SHALL COMPLY FULLY WITH TRAFFORD COUNCIL SPECIFICATION AND WHERE NECESSARY THE RELEVANT SECTIONS OF THE DESIGN MANUAL FOR ROADS AND BRIDGES, SPECIFICATION AND BRITISH STANDARDS.
 - ALL MATERIALS TO BEAR THE RELEVANT B.S. KITEMARK AND COMPLY FULLY WITH THE SPECIFICATIONS. ALL CONCRETE & CONCRETE PRODUCTS MUST USE SULPHATE RESISTANT CEMENT (UNLESS THE SITE INVESTIGATION REPORT PROVES THAT SULPHATE ATTACK FROM SOILS AND GROUNDWATER WILL NOT OCCUR).



RESIDUAL DESIGN HAZARDS
Underground services present in the works area!
The Contractor is advised of Underground services in area of works. Trial holes to be undertaken prior to any construction work to establish exact route of the cables and pipes and confirm cover depth.

- ### 200 SERIES - SITE CLEARANCE
- SITE CLEARANCE SHALL BE CARRIED OUT IN ACCORDANCE WITH SERIES 200 OF THE SPECIFICATION FOR HIGHWAY WORKS [SHW].
 - THE CONTRACTOR SHALL GENERALLY CLEAR THE CONTRACT SITE AND TEMPORARY SITE AREAS OF ALL ABOVE GROUND OBSTRUCTIONS UNLESS OTHERWISE SHOWN OR NOTED ON THE DRAWING. NO MATERIALS ARE TO BE RETAINED, STORED OR DELIVERED TO STORE UNLESS SPECIFICALLY NOTED THUS.
 - MATERIALS ARISING FROM SITE CLEARANCE AND EXCAVATION ACTIVITIES SHALL BE RECYCLED AND REUSED WHERE POSSIBLE.
 - PLEASE REFER TO FOOTWAY AND KERBS CONSTRUCTION VIEWPORT FOR FURTHER INFORMATION RELATED TO THE FOOTWAY BREAK OUT AND PLANNING AREAS.



- ### 1200 SERIES - TRAFFIC SIGNS AND ROAD MARKINGS
- ALL ROAD MARKINGS SHALL BE LAID IN ACCORDANCE WITH THE TRAFFIC SIGNS REGULATIONS AND GENERAL DIRECTIONS (TSRGD) 2016 AND TRAFFIC SIGNS MANUAL CHAPTER 5.
 - ALL EXISTING ROAD MARKINGS TO BE REMOVED IN ACCORDANCE WITH SUB-CLAUSE 1212.18 OF THE SPECIFICATION FOR HIGHWAY WORKS (SHW) ONCE THEY BECOME SUPERFLUOUS OR HAZARDOUS TO ROAD USERS USING HYDROBLASTING TECHNIQUE.
 - THE COLOUR OF PERMANENT ROAD MARKINGS SHALL BE AS IDENTIFIED IN THE ROAD MARKING SCHEDULE.
 - ALL PERMANENT WHITE ROAD MARKINGS SHALL BE OF APPLIED THERMOPLASTIC SCREED MATERIAL TO THE SHW AND BS 3262. APPLIED SCREED MARKINGS SHALL BE LAID 3MM THICK AND A MINIMUM OF 2MM. THIS THICKNESS IS EXCLUSIVE OF SURFACE APPLIED TO SOLID GLASS BEADS. THE METHOD OF THICKNESS MEASUREMENTS SHALL BE IN ACCORDANCE WITH BS EN 1436. MARKINGS SHOULD BE REFLECTORISED AS REQUIRED IN ACCORDANCE WITH TSRGD.
 - ALL SIGNS TO BE INSTALLED WITH A MINIMUM 450MM CLEAR OFFSET FROM THE CARRIAGEWAY EDGE. POSTS IN FOOTWAYS ARE TO BE LOCATED ONLY WITHIN THE FOLLOWING BANDS:
5.1. 450-750MM FROM FRONT OF FOOTWAY
5.2. WITHIN 450MM OF THE BACK OF FOOTWAY

TRAFFIC SIGNS SCHEDULE							
REF	DIAG No	DESCRIPTION	ILLUMINATION REQUIREMENTS	SIGN PLATE	POSTS	MINIMUM MOUNTING HEIGHT	COMMENTS
TS01		CLEARWAY SIGN	N/A	NEW SIGN PLATE	PROPOSED BUS STOP POLE	2100mm	

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS/INFORMATION
- THIS DRAWING SHOULD NOT BE SCALED AND ONLY USED FOR ITS INTENDED PURPOSE
- ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
- THIS DRAWING IS BASED ON OS MAPPING DRAWING PROVIDED BY WAIN HOMES. TETRA TECH DOES NOT TAKE RESPONSIBILITY FOR ANY DISCREPANCIES.
- ALL ROAD MARKINGS ON THIS DRAWINGS ARE INDICATIVE ONLY.
- ALL STATUTORY CONSENTS, OPENING NOTICES ETC. AS REQUIRED UNDER HIGHWAYS ACTS AND WATER INDUSTRIES ACTS ARE TO BE OBTAINED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF THE WORKS (UNLESS OTHERWISE STATED).
- CONTRACTOR TO LIAISE WITH APPROPRIATE STATUTORY UNDERTAKER REGARDING REPLACEMENT OF ANY EXISTING COVER FOUND DURING COURSE OF WORKS TO BE DEFECTIVE.
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- ALL LEVELS TO BE CHECKED BY THE CONTRACTOR AT THE START OF WORKS AND ANY DISCREPANCIES NOTIFIED TO THE ENGINEER.
- LAYOUT IS INDICATIVE ONLY SUBJECT TO CONSULTATION WITH TFGM AND ROCHE DALE COUNCIL

KEY:

APPROXIMATE EXTENT OF PROPOSED WORKS

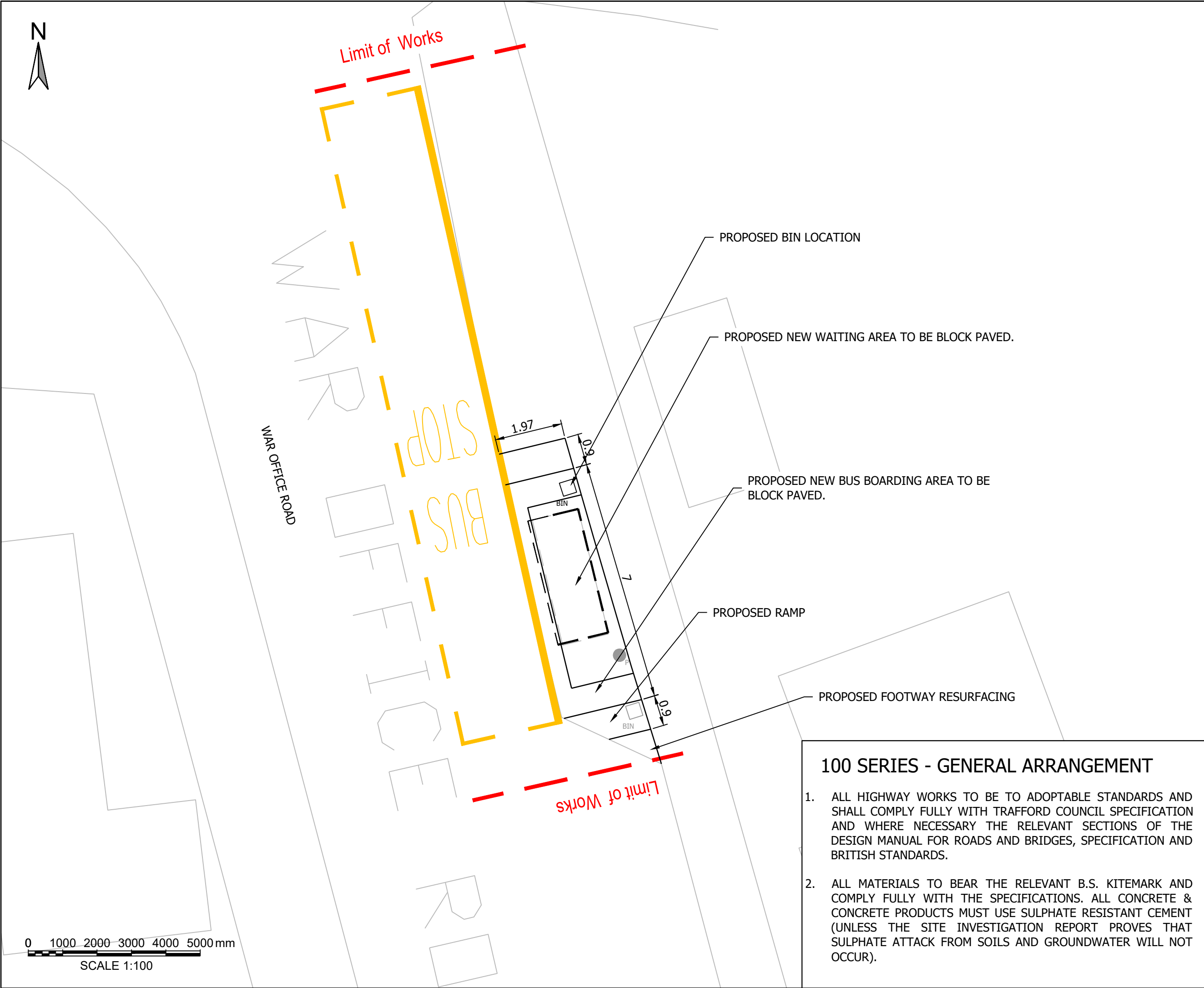
PROPOSED BUS STOP POLE

EXISTING BUS STOP POLE

PROPOSED BUS STOP SHELTER, WORKS ASSOCIATED WITH SHELTER LEVELS ADJUSTMENTS WILL BE ARRANGED BY TFGM PRIOR TO MAIN WORKS STARTING ON SITE

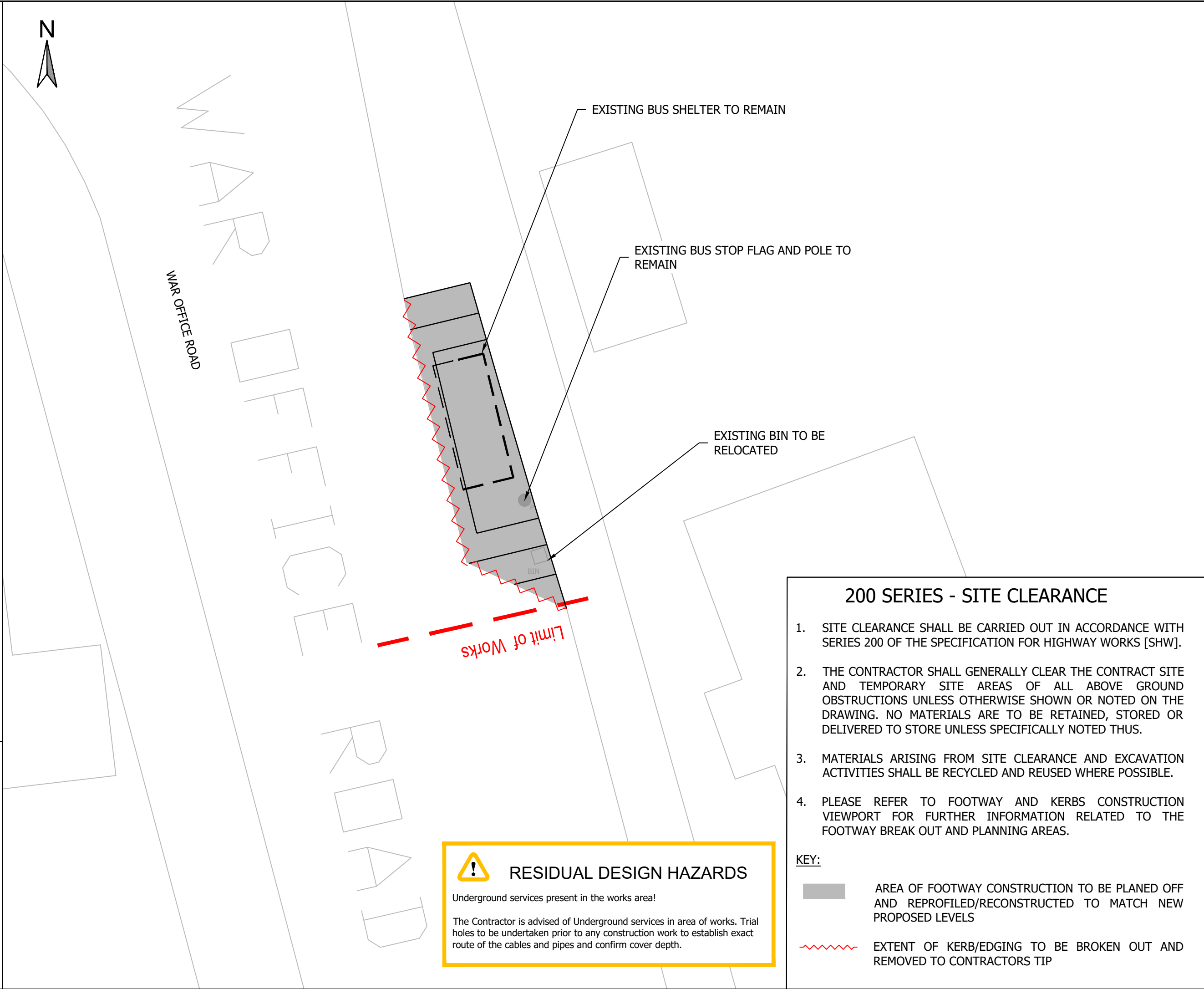
PRELIMINARY ISSUE

P01	PRELIMINARY FIRST ISSUE	30.01.2025	LJB	LB	LB
Rev.	Description	Date	Drawn	Checked	App.
Document Control					
Issuing Office					
Tetra Tech Manchester 2nd Floor, 11 York Street, Manchester, United Kingdom M2 2AW Tel: +44 (0)161 872 3223 www.tetrattechurope.com					
Client					
Project Name					
Proposed Residential Development: Land off Greenvale					
Sheet Title					
Bus Stop Upgrade: 59 Norden Road					
TTE Project Number					
784-B068938	LJB	Jan '25	LB	Jan '25	LB
Client Project Number					
B068938	- TTE	- 00	- XX	- DR	- H
Scale @ A1					
1:200	Number	004	Revision	P01	
© Copyright Tetra Tech					
TTE_MT_v1					



100 SERIES - GENERAL ARRANGEMENT

- ALL HIGHWAY WORKS TO BE TO ADOPTABLE STANDARDS AND SHALL COMPLY FULLY WITH TRAFFORD COUNCIL SPECIFICATION AND WHERE NECESSARY THE RELEVANT SECTIONS OF THE DESIGN MANUAL FOR ROADS AND BRIDGES, SPECIFICATION AND BRITISH STANDARDS.
- ALL MATERIALS TO BEAR THE RELEVANT B.S. KITEMARK AND COMPLY FULLY WITH THE SPECIFICATIONS. ALL CONCRETE & CONCRETE PRODUCTS MUST USE SULPHATE RESISTANT CEMENT (UNLESS THE SITE INVESTIGATION REPORT PROVES THAT SULPHATE ATTACK FROM SOILS AND GROUNDWATER WILL NOT OCCUR).

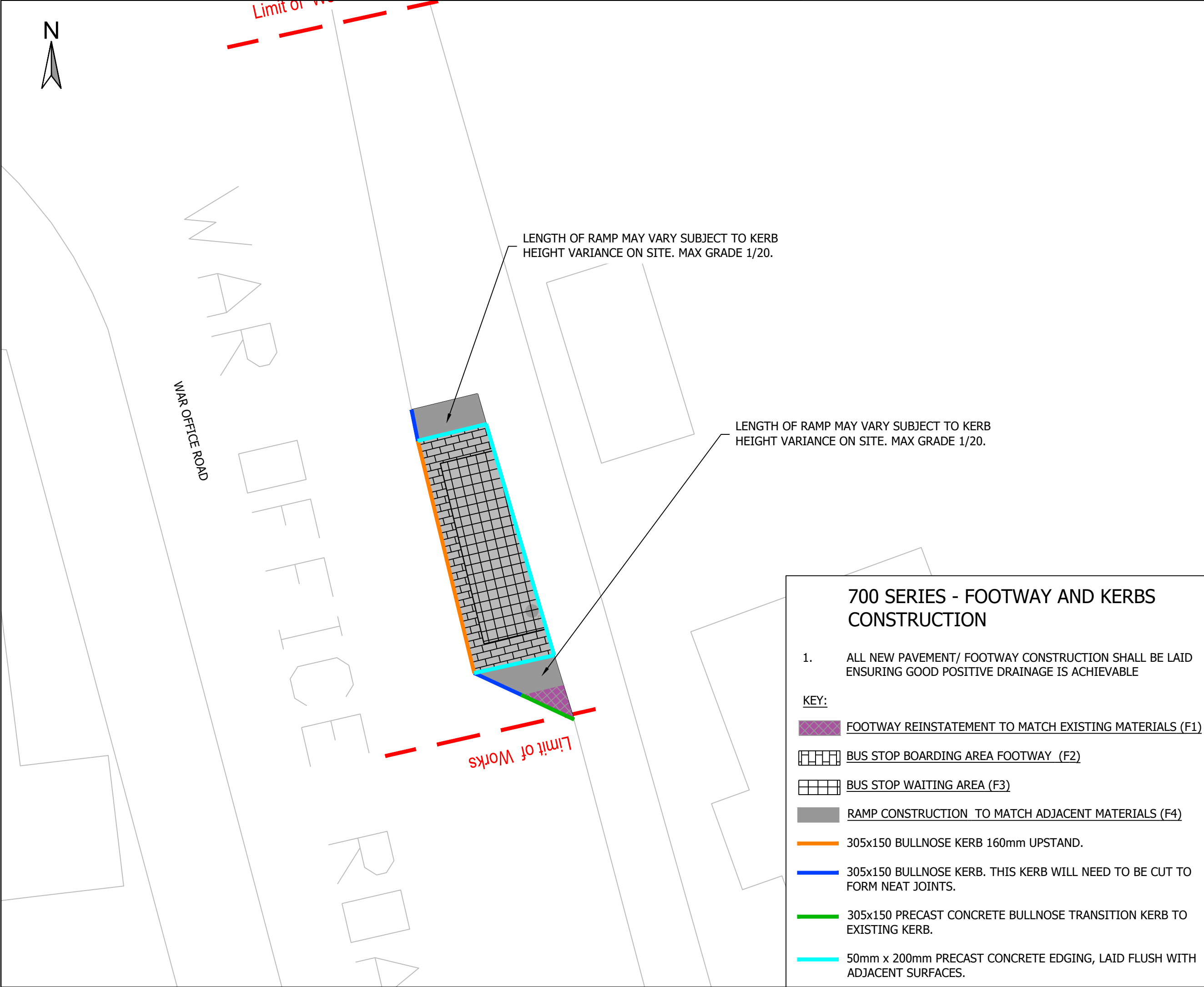


200 SERIES - SITE CLEARANCE

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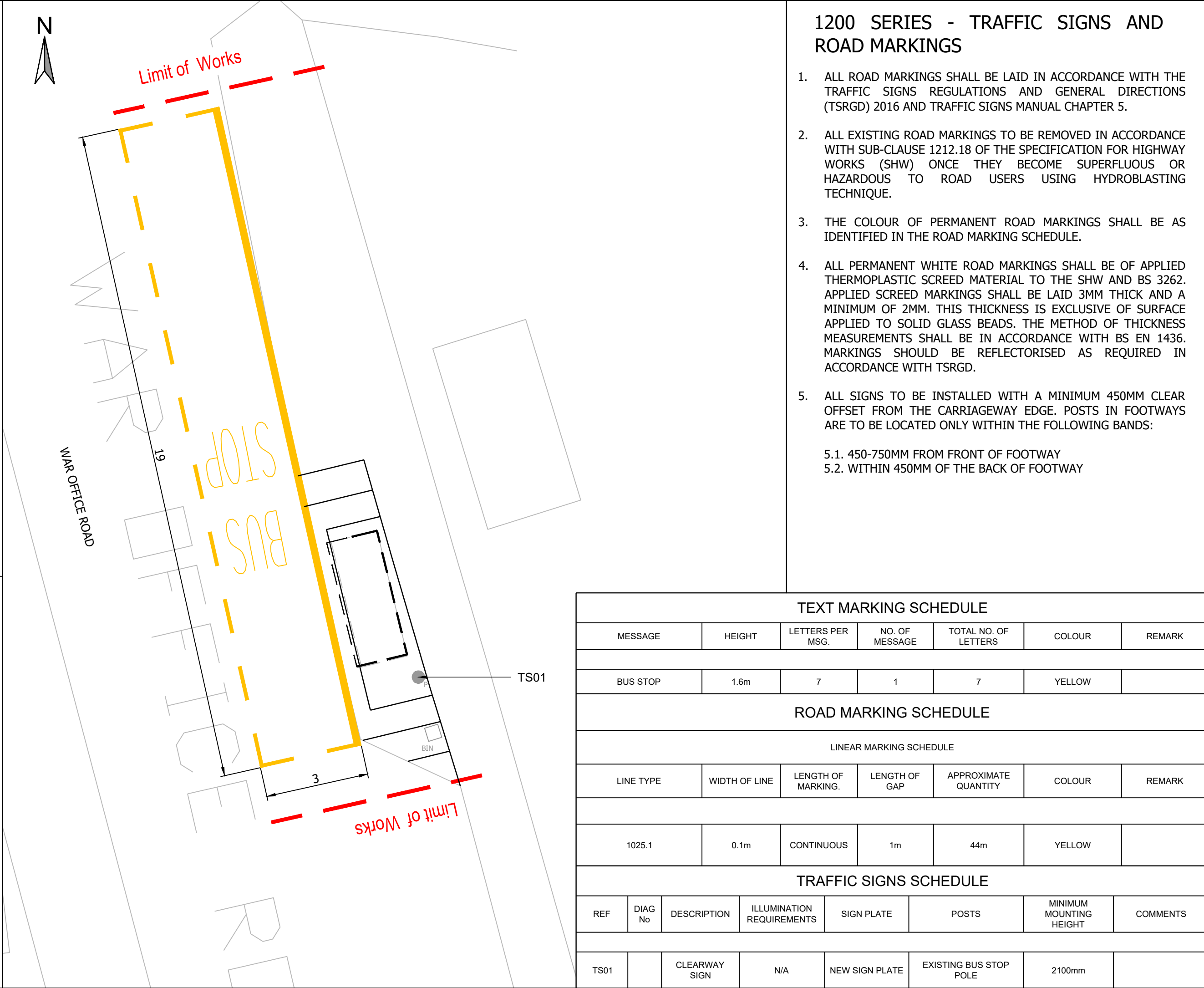
KEY:

- AREA OF FOOTWAY CONSTRUCTION TO BE PLANED OFF AND REPROFILED/RECONSTRUCTED TO MATCH NEW PROPOSED LEVELS
- EXTENT OF KERB/EDGING TO BE BROKEN OUT AND REMOVED TO CONTRACTORS TIP



700 SERIES - FOOTWAY AND KERBS CONSTRUCTION

- ALL NEW PAVEMENT/ FOOTWAY CONSTRUCTION SHALL BE LAID ENSURING GOOD POSITIVE DRAINAGE IS ACHIEVABLE
- KEY:**
- FOOTWAY REINSTATEMENT TO MATCH EXISTING MATERIALS (F1)
 - BUS STOP BOARDING AREA FOOTWAY (F2)
 - BUS STOP WAITING AREA (F3)
 - RAMP CONSTRUCTION TO MATCH ADJACENT MATERIALS (F4)
 - 305x150 BULLNOSE KERB 160mm UPSTAND.
 - 305x150 BULLNOSE KERB. THIS KERB WILL NEED TO BE CUT TO FORM NEAT JOINTS.
 - 305x150 PRECAST CONCRETE BULLNOSE TRANSITION KERB TO EXISTING KERB.
 - 50mm x 200mm PRECAST CONCRETE EDGING, LAID FLUSH WITH ADJACENT SURFACES.



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 - 5.2. WITHIN 450MM OF THE BACK OF FOOTWAY

TEXT MARKING SCHEDULE

MESSAGE	HEIGHT	LETTERS PER MSG.	NO. OF MESSAGE	TOTAL NO. OF LETTERS	COLOUR	REMARK
BUS STOP	1.6m	7	1	7	YELLOW	

ROAD MARKING SCHEDULE

LINER MARKING SCHEDULE

LINE TYPE	WIDTH OF LINE	LENGTH OF MARKING.	LENGTH OF GAP	APPROXIMATE QUANTITY	COLOUR	REMARK
1025.1	0.1m	CONTINUOUS	1m	44m	YELLOW	

TRAFFIC SIGNS SCHEDULE

REF	DIAG No	DESCRIPTION	ILLUMINATION REQUIREMENTS	SIGN PLATE	POSTS	MINIMUM MOUNTING HEIGHT	COMMENTS
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KEY:

- APPROXIMATE EXTENT OF PROPOSED WORKS
- EXISTING BUS STOP POLE
- EXISTING BUS STOP SHELTER, WORKS ASSOCIATED WITH SHELTER LEVELS ADJUSTMENTS WILL BE ARRANGED BY TGM PRIOR TO MAIN WORKS STARTING ON SITE

PRELIMINARY ISSUE

P01	PRELIMINARY FIRST ISSUE	30.01.2025	LJB	LB	LB
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Client
Wain Homes

Project Name
**Proposed Residential Development:
Land off Greenvale**

Sheet Title
Bus Stop Upgrade: 99 War Office Road

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B068938	LJB	Jan '25	LB	Jan '25	LB	Jan '25	1:200	S0
Client Project Number	Originator	Function	Spatial	Form	Role	Number	Revision	
B068938	- TTE	- 00	- XX	- DR	- H	- 005	P01	