

	10
	1
	9



	5
	0
	5



25	0	26
13	0	13



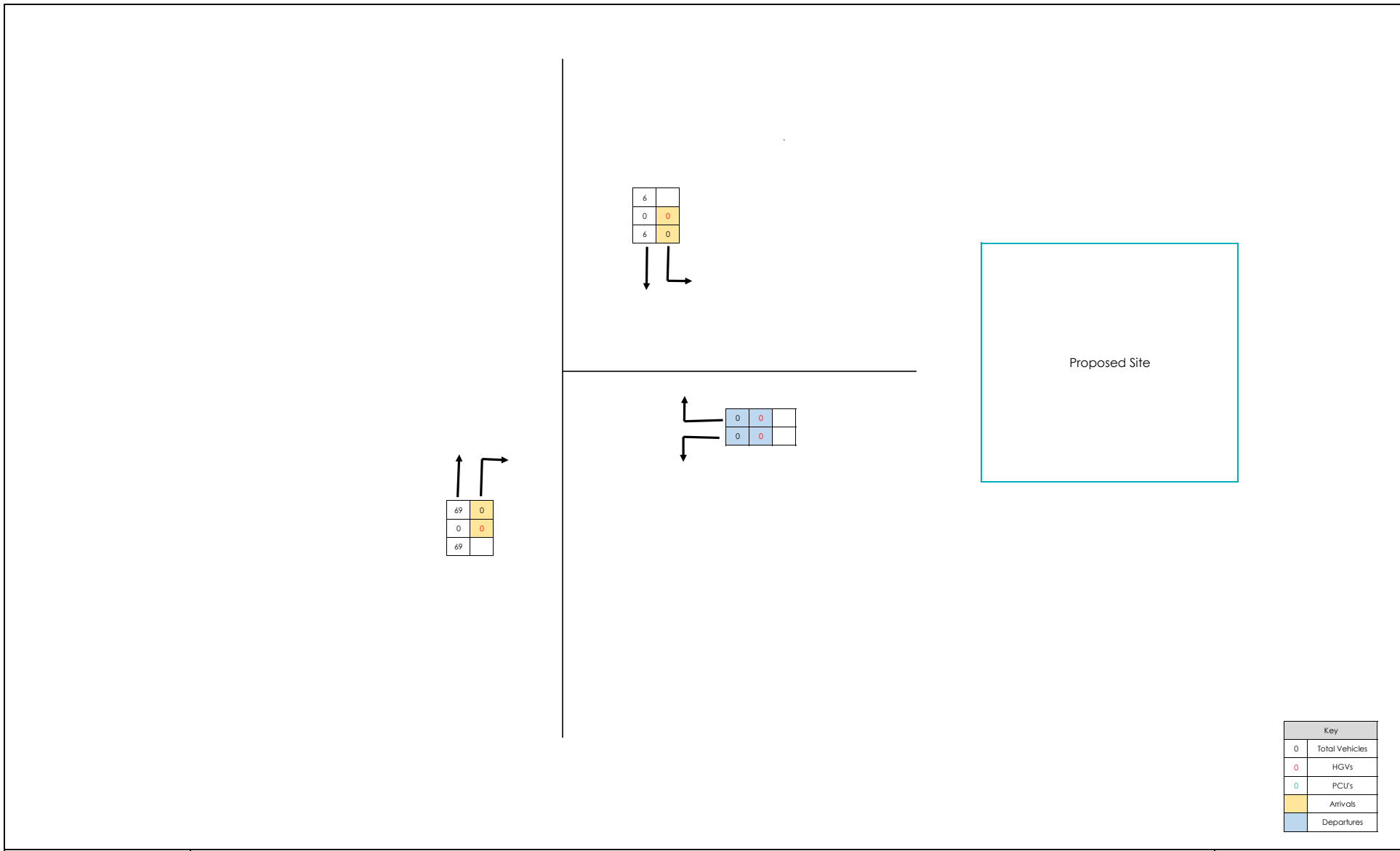
Proposed Site

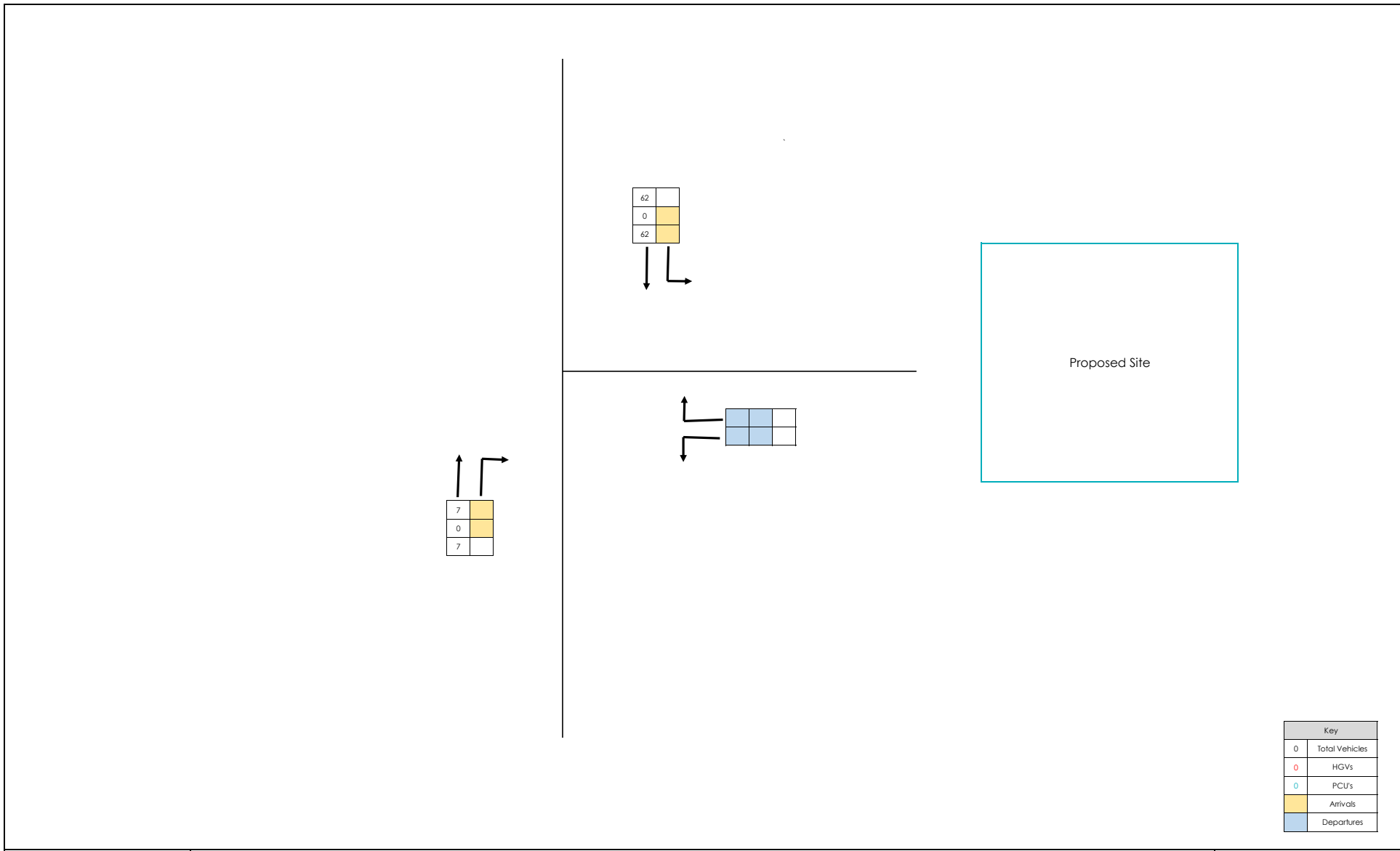
Unit Sqm. 19837

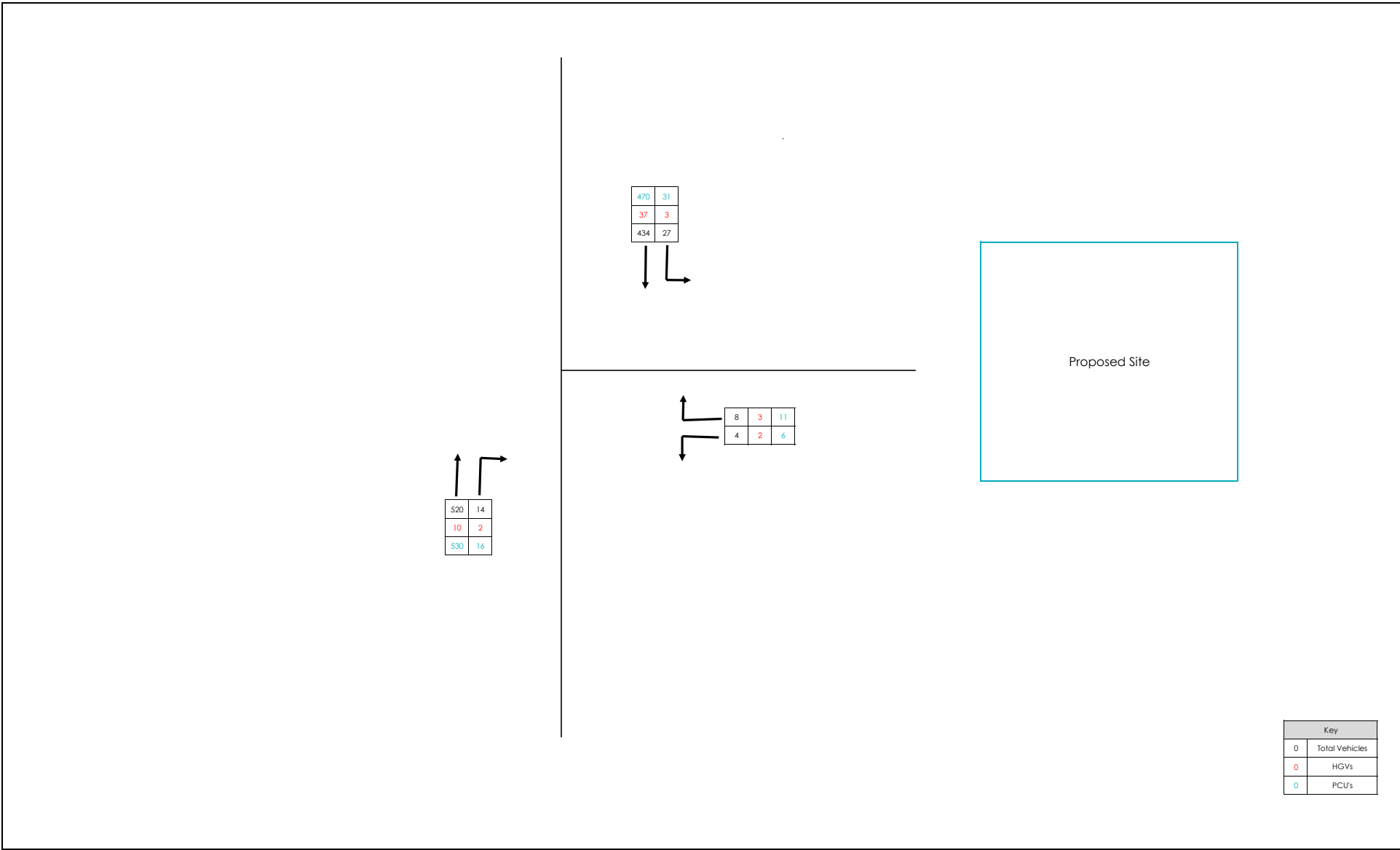
Total Vehs.			
	Arr.	Dep.	Total
Trip Rate	0.07	0.19	0.26
Trip Gen	13	38	52

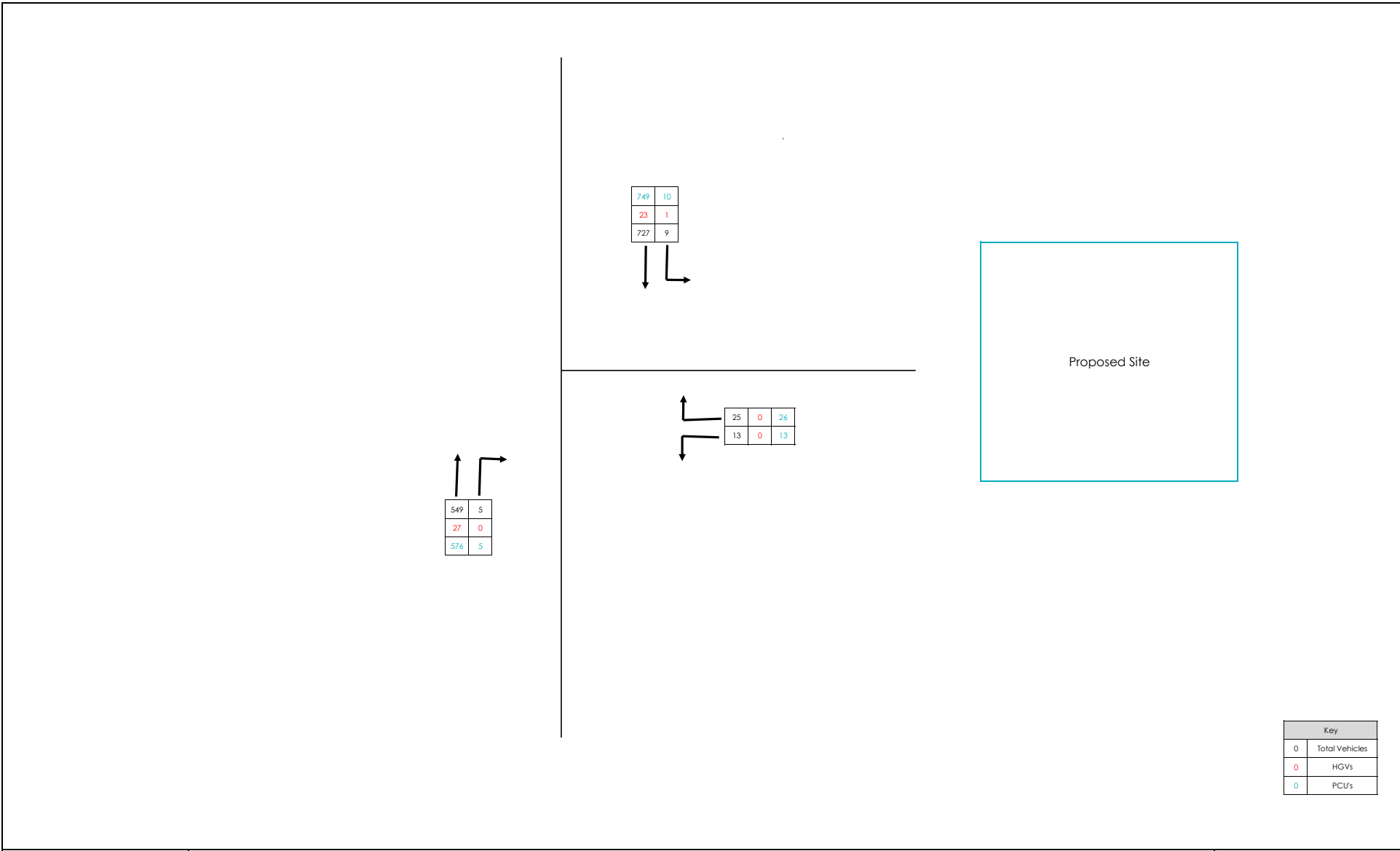
HGV			
	Arr.	Dep.	Total
Trip Rate	0.01	0.00	0.01
Trip Gen	1	0	2

Key	
0	Total Vehicles
0	HGVs
0	PCUs
	Arrivals
	Departures









Appendices

Appendix A Masterplan



AREAS KEY

UNIT 01	G/F GIA - 17,210 SQFT F/F GIA - 3,310 SQFT TOTAL GEA - 18,080 sqft CAR PARKING NRS - 19 (INC. 2 DISABLED)
UNIT 02	G/F GIA - 79,080 SQFT F/F GIA - 6,070 SQFT TOTAL GEA - 81,200 SQFT CAR PARKING NRS - 107 (INC 4 DISABLED)
UNIT 03	G/F GIA - 38,970 SQFT F/F GIA - 4,390 SQFT TOTAL GEA - 40,300 SQFT CAR PARKING NRS - 30 (INC. 2 DISABLED)
UNIT 04	G/F GIA - 20,870 SQFT F/F GIA - 3,330 SQFT TOTAL GEA - 21,830 SQFT CAR PARKING NRS - 17 (INC. 2 DISABLED)
UNIT 05	G/F GIA - 29,570 SQFT F/F GIA - 3,300 SQFT TOTAL GEA - 30,740 SQFT CAR PARKING NRS - 51 (INC 3 DISABLED)

E	06/09/2021	Added Pedestrian access into the site from bus turnaround, adjusted line scale for highways. Parking for unit 4 adjusted	BM
D	03/09/2021	Removed repeated information, updated areas table	BM
C	25/08/2021	Added new highways proposed scheme as per Mosodi drawing nr 21034-GA-101	BM
B	16/08/2021	Updated the scheme following meeting's discussion, adjusted public walkway, reduced bus turnaround, increased unit 1's parking	BM
A	28/07/2021	Scheme adjusted from feasibility to planning stage, origin drawing 2621 F400B GA Site Layout Option 1	BM
Rev.	Date	Description	Drawn

htcarchitects

York Place Studio
8 Britannia Street
Leeds
LS1 2DZ

T: (0113) 244 3457
W: www.htcarchitects.co.uk
E: info@htcarchitects.co.uk

client

Harworth Estates

project

Park Spring Road,
Houghton Main

drawing title

GA Site Layout

date

March 2021

status

Planning

scale

1:1250 @ A3

drawn

BM

checked

PH

job no.

2621 dwg no. P401 rev. E

Appendix B Accident Data



Validated Data

Crash Date: Friday, October 21, 2016 **Time of Crash:** 2:15:00 AM **Crash Reference:** 2016140122926

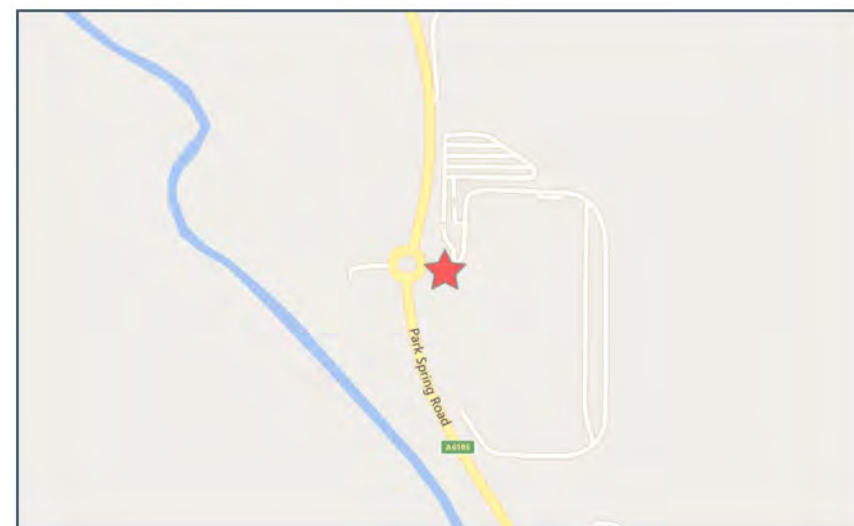
Highest Injury Severity: Slight
Highway Authority: Barnsley
Local Authority: Barnsley Metropolitan Borough
Weather Description: Unknown
Road Surface Description: Dry
Speed Limit: 30
Light Conditions: Darkness: street lights present and lit
Carriageway Hazards: None
Junction Detail: Not at or within 20 metres of junction
Junction Pedestrian Crossing: No physical crossing facility within 50 metres
Road Type: Single carriageway
Junction Control: Not Applicable

Road Number: U0

Number of Casualties: 1

Number of Vehicles: 2

OS Grid Reference: 441810 406352



For more information about the data please visit: www.crashmap.co.uk/home/Faq

To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services



crashmap.co.uk

Validated Data

Crash Date: Tuesday, December 05, 2017 **Time of Crash:** 11:24:00 PM **Crash Reference:** 2017140252166

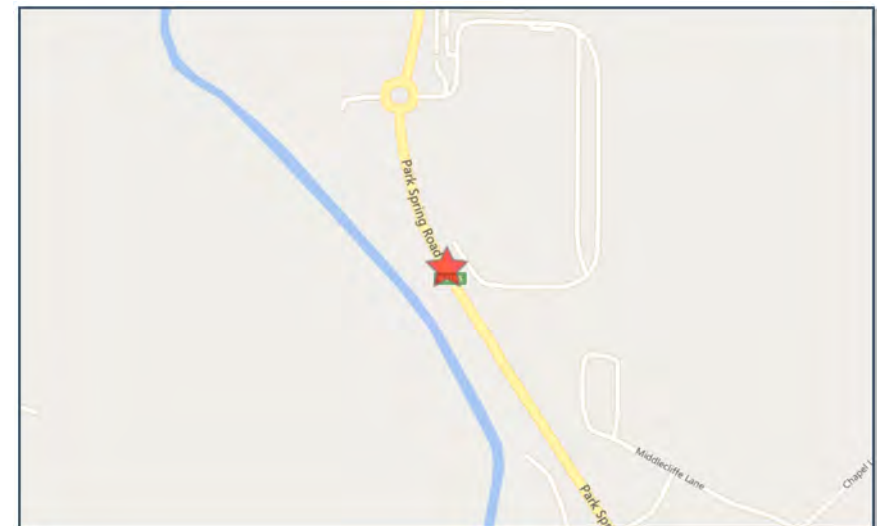
Highest Injury Severity: Slight
Highway Authority: Barnsley
Local Authority: Barnsley Metropolitan Borough
Weather Description: Fine without high winds
Road Surface Description: Dry
Speed Limit: 60
Light Conditions: Darkness: no street lighting
Carriageway Hazards: None
Junction Detail: Not at or within 20 metres of junction
Junction Pedestrian Crossing: No physical crossing facility within 50 metres
Road Type: Single carriageway
Junction Control: Not Applicable

Road Number: A6195

Number of Casualties: 1

Number of Vehicles: 2

OS Grid Reference: 441827 406085



For more information about the data please visit: www.crashmap.co.uk/home/Faq

To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services



Validated Data

Crash Date: Friday, August 31, 2018 **Time of Crash:** 5:53:00 PM **Crash Reference:** 2018140340726

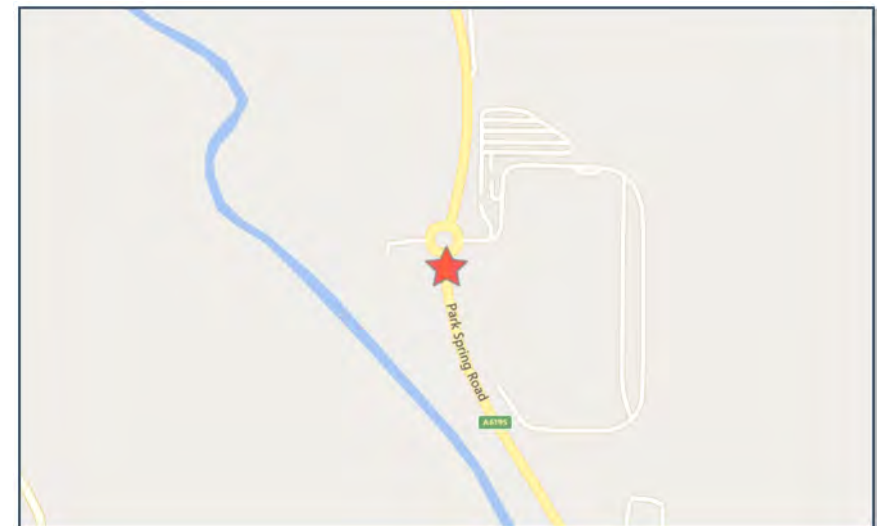
Highest Injury Severity: Slight
Highway Authority: Barnsley
Local Authority: Barnsley Metropolitan Borough
Weather Description: Fine without high winds
Road Surface Description: Dry
Speed Limit: 50
Light Conditions: Daylight: regardless of presence of streetlights
Carriageway Hazards: None
Junction Detail: Crossroads
Junction Pedestrian Crossing: No physical crossing facility within 50 metres
Road Type: Single carriageway
Junction Control: Give way or uncontrolled

Road Number: A6195

Number of Casualties: 1

Number of Vehicles: 1

OS Grid Reference: 441755 406308



For more information about the data please visit: www.crashmap.co.uk/home/Faq

To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services



crashmap.co.uk

Validated Data

Crash Date: Sunday, March 25, 2018 **Time of Crash:** 12:00:00 PM **Crash Reference:** 2018140285185

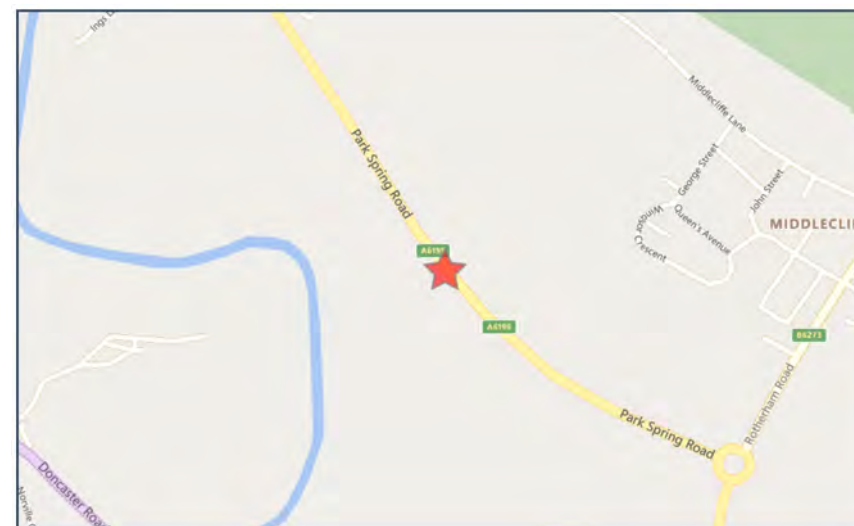
Highest Injury Severity: Serious
Highway Authority: Barnsley
Local Authority: Barnsley Metropolitan Borough
Weather Description: Fine without high winds
Road Surface Description: Dry
Speed Limit: 60
Light Conditions: Darkness: no street lighting
Carriageway Hazards: None
Junction Detail: Not at or within 20 metres of junction
Junction Pedestrian Crossing: No physical crossing facility within 50 metres
Road Type: Single carriageway
Junction Control: Not Applicable

Road Number: A6195

Number of Casualties: 3

Number of Vehicles: 3

OS Grid Reference: 442510 405037



For more information about the data please visit: www.crashmap.co.uk/home/Faq

To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services

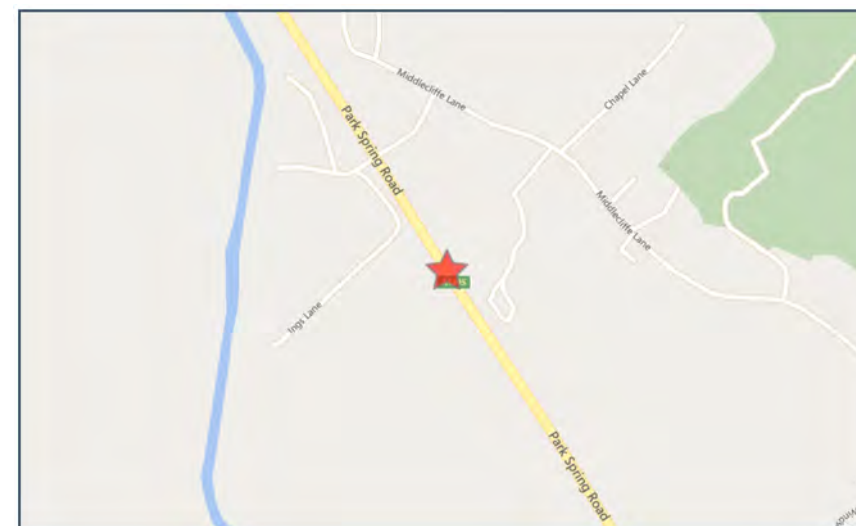


crashmap.co.uk

Validated Data

Crash Date: Sunday, September 08, 2019 **Time of Crash:** 2:38:00 PM **Crash Reference:** 2019140875540

Highest Injury Severity:	Serious	Road Number:	A6195	Number of Casualties:	5
Highway Authority:	Barnsley			Number of Vehicles:	2
Local Authority:	Barnsley Metropolitan Borough			OS Grid Reference:	442202 405503
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: www.crashmap.co.uk/home/Faq

To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services



crashmap.co.uk

Provisional Data does not include vehicle and casualty records

Crash Date: Tuesday, January 14, 2020

Time of Crash: 2:10:00 PM

Crash Reference: 2020140919543

Highest Injury Severity: Serious

Road Number: A6195

Number of Casualties: 1

Highway Authority: Barnsley

Number of Vehicles: 1

Local Authority: Barnsley Metropolitan Borough

OS Grid Reference: 441758 406286

Weather Description: Raining with high winds

Road Surface Description: Wet or Damp

Speed Limit: 60

Light Conditions: Daylight: regardless of presence of streetlights

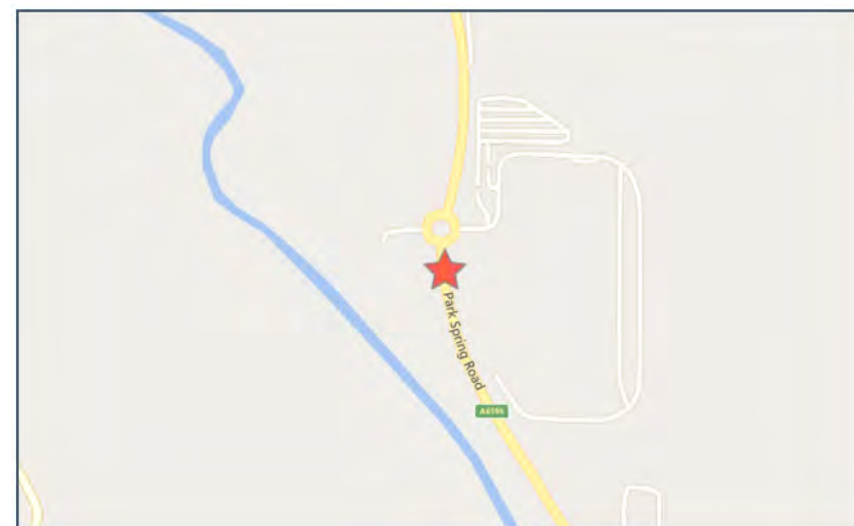
Carriageway Hazards: None

Junction Detail: Not at or within 20 metres of junction

Junction Pedestrian Crossing: No physical crossing facility within 50 metres

Road Type: Single carriageway

Junction Control: Unknown

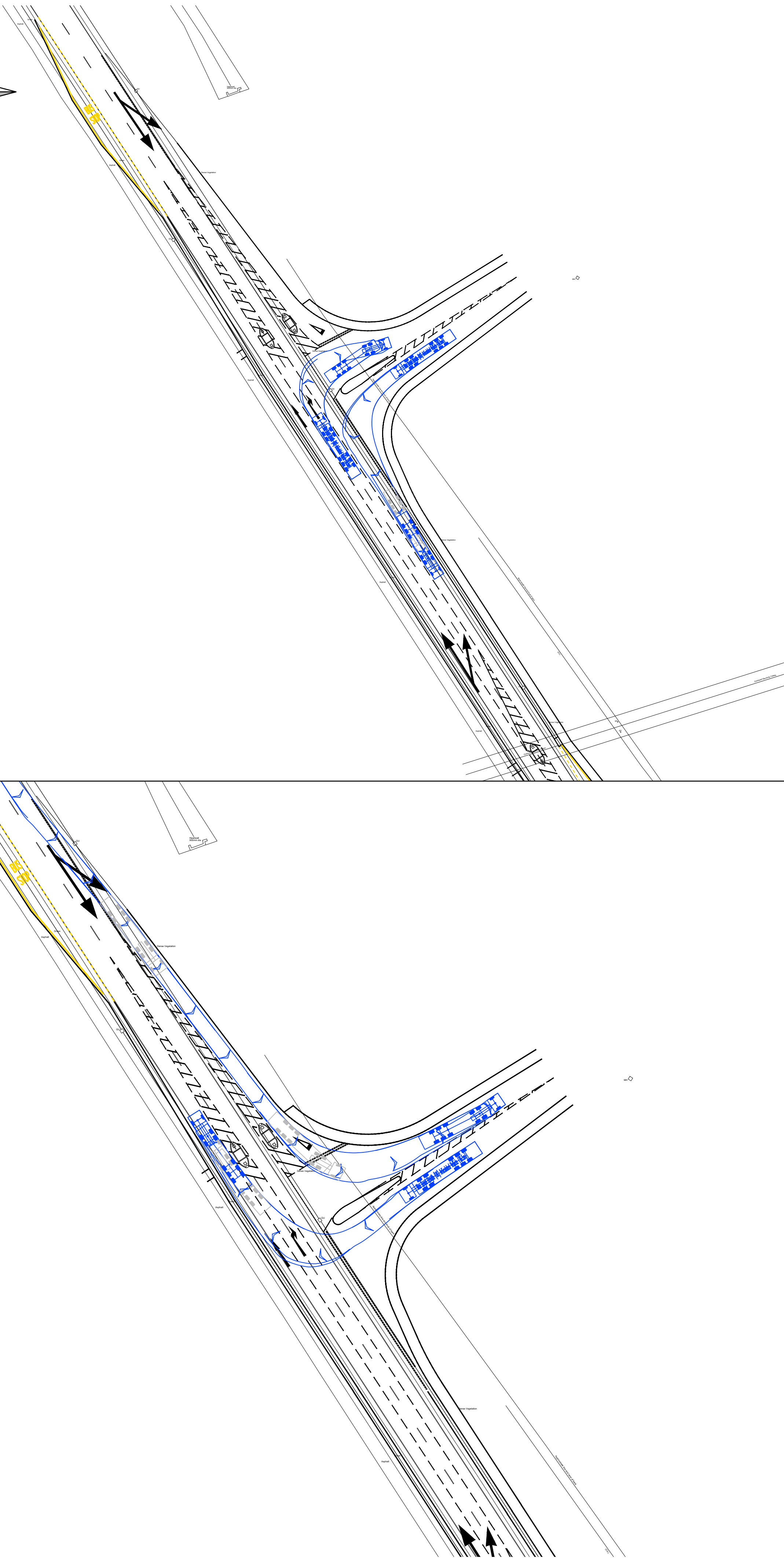
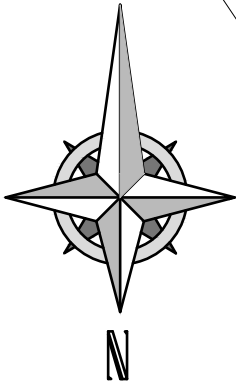


For more information about the data please visit: www.crashmap.co.uk/home/Faq

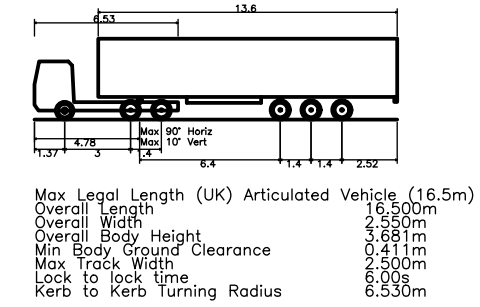
To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services

Appendix C Access Arrangement

Appendix D Swept Path Analysis



- Notes:
1. This drawing is subject to copyright and is not to be reproduced in part or whole without approval.
 2. Do not scale this drawing - check all dimensions on site.
 3. Preliminary layout subject to detailed design including full cdm compliance, statutory undertakers search/ diversion requirements, road safety audit highway drainage provision, capacity assessment, land availability and local authority approval.
 4. This drawing is largely based on Drawing No. 20026.GA.02 Rev B prepared by Optima Highways and Transportation on behalf of Harworth. The CAD base has been provided by Optima Highways and has been updated to include additional crossing facilities to aid movements to the northbound bus stop on Park Spring Road.



Rev.	24.08.21	INITIAL ISSUE	SJP
Date:	Status/Amendments:		By:

mosodi
mobility solutions through design and innovation

Manchester Leeds
0161 413 5168 0113 323 0854

Client:
Harworth

Project:
Houghton Main, Barnsley

Drawing Title:
Proposed Site Access Arrangements
Swept Path Analysis

Drawn By: SJP	Checked By: SJP	Approved By: RAM
Scale: 1:1000	Paper Size: A2	Date Created: 14.09.2021
Drawing Number: 21034.ATR.01	Drawing Revision: -	

Appendix E Rockingham Extract – TRICS

5.5 B2 Trip Generations

5.5.1 The trip generations over the entire Site (Phase 2 and 3) have been calculated using the B2 trip rate identified in the Fore report and agreed with Highways England and Barnsley in pre-application discussions. The trip rates for total vehicles have been taken from the 2019 Fore Report (Table 6) and are shown in Table 5.1. The HGV trip rate for the B2 use has also been identified from the TRICS information in the Fore report and these are shown in Table 5.2.

Table 5.1 Vehicular Trip Rates (Total Vehicles)

	B2 Total Vehicular Trip Rates (per 100m2) GFA		
	Arrivals	Departures	Total
AM Peak	0.211	0.059	0.270
PM Peak	0.067	0.194	0.261

Table 5.2 HGV Trip Rates

	B2 Total HGV Trip Generations (per 100m2) GFA		
	Arrivals	Departures	Total
AM Peak	0.025	0.026	0.051
PM Peak	0.006	0.002	0.008

5.5.2 By multiplying the trip rates set out in Tables 5.1 and 5.2 by 1021.93 (total floor space of 102,193sqm divided by 100 as the trip rates are per 100sqm) results in the proposed Total Development Traffic as set out in Table 5.3 and 5.4.

Table 5.3 Total Vehicular Trip Generations

	B2 Total Vehicular Trip Generations (per 100m2) GFA		
	Arrivals	Departures	Total
AM Peak	216	60	276
PM Peak	68	198	267

Table 5.4 HGV Trip Generations

	B2 Total HGV Trip Generations (per 100m2) GFA		
	Arrivals	Departures	Total
AM Peak	26	27	52
PM Peak	6	2	8

Appendix F Distribution

currently residing in : 2011 super output area - lower layer	Trips to work - Barnsley 006C		Park Spring Road (N)	Park Spring Road (S)
Barnsley 001A	6	0.51%	0.51%	
Barnsley 001B	9	0.76%	0.76%	
Barnsley 001C	6	0.51%	0.51%	
Barnsley 001D	5	0.42%	0.42%	
Barnsley 002A	10	0.85%	0.85%	
Barnsley 002B	5	0.42%	0.42%	
Barnsley 002C	9	0.76%	0.76%	
Barnsley 002D	8	0.68%	0.68%	
Barnsley 003A	18	1.53%	1.53%	
Barnsley 003B	19	1.61%	1.61%	
Barnsley 003C	13	1.10%	1.10%	
Barnsley 003D	13	1.10%	1.10%	
Barnsley 004A	1	0.08%	0.08%	
Barnsley 004B	2	0.17%	0.17%	
Barnsley 004C	7	0.59%	0.59%	
Barnsley 004D	3	0.25%	0.25%	
Barnsley 004E	7	0.59%	0.59%	
Barnsley 005A	3	0.25%	0.25%	
Barnsley 005B	2	0.17%	0.17%	
Barnsley 005C	4	0.34%	0.34%	
Barnsley 005D	3	0.25%	0.25%	
Barnsley 005E	2	0.17%	0.17%	
Barnsley 006A	68	5.77%	5.77%	
Barnsley 006B	33	2.80%	2.80%	
Barnsley 006C	92	7.80%	7.80%	
Barnsley 006D	60	5.09%	5.09%	
Barnsley 007A	5	0.42%	0.42%	
Barnsley 007B	4	0.34%	0.34%	
Barnsley 007C	7	0.59%	0.59%	
Barnsley 007D	4	0.34%	0.34%	
Barnsley 007E	4	0.34%	0.34%	
Barnsley 007F	1	0.08%	0.08%	
Barnsley 008A	10	0.85%	0.85%	
Barnsley 008B	20	1.70%	1.70%	
Barnsley 008C	25	2.12%	2.12%	
Barnsley 008D	15	1.27%	1.27%	
Barnsley 009A	10	0.85%	0.85%	
Barnsley 009B	12	1.02%	1.02%	
Barnsley 009C	4	0.34%	0.34%	
Barnsley 009D	4	0.34%	0.34%	
Barnsley 009E	5	0.42%	0.42%	
Barnsley 010C	3	0.25%	0.13%	0.13%
Barnsley 010D	4	0.34%	0.17%	0.17%
Barnsley 010E	1	0.08%	0.04%	0.04%
Barnsley 010G	11	0.93%	0.47%	0.47%
Barnsley 010H	4	0.34%	0.17%	0.17%
Barnsley 011A	16	1.36%	1.36%	
Barnsley 011B	4	0.34%	0.34%	
Barnsley 011C	4	0.34%	0.34%	
Barnsley 011D	5	0.42%	0.42%	
Barnsley 012B	4	0.34%	0.34%	
Barnsley 012C	2	0.17%	0.17%	
Barnsley 012D	3	0.25%	0.25%	
Barnsley 012E	1	0.08%	0.08%	
Barnsley 012F	1	0.08%	0.08%	
Barnsley 013A	3	0.25%	0.13%	0.13%
Barnsley 013B	3	0.25%	0.13%	0.13%
Barnsley 013C	3	0.25%	0.13%	0.13%
Barnsley 013D	2	0.17%	0.08%	0.08%
Barnsley 013E	1	0.08%	0.04%	0.04%
Barnsley 013F	5	0.42%	0.21%	0.21%
Barnsley 013G	5	0.42%	0.21%	0.21%
Barnsley 014A	1	0.08%	0.08%	
Barnsley 014B	3	0.25%		0.25%
Barnsley 014C	3	0.25%		0.25%
Barnsley 014D	3	0.25%		0.25%
Barnsley 014E	2	0.17%		0.17%
Barnsley 014F	5	0.42%		0.42%
Barnsley 015A	8	0.68%		0.68%
Barnsley 015B	3	0.25%		0.25%
Barnsley 015C	3	0.25%		0.25%
Barnsley 015D	15	1.27%		1.27%
Barnsley 016A	3	0.25%	0.25%	
Barnsley 016B	3	0.25%	0.25%	
Barnsley 016C	3	0.25%	0.25%	
Barnsley 017A	2	0.17%		0.17%
Barnsley 017B	2	0.17%		0.17%
Barnsley 017C	2	0.17%		0.17%
Barnsley 017D	3	0.25%		0.25%
Barnsley 018A	6	0.51%		0.51%
Barnsley 018B	7	0.59%		0.59%
Barnsley 018C	5	0.42%		0.42%
Barnsley 018D	4	0.34%		0.34%
Barnsley 019A	2	0.17%		0.17%
Barnsley 019B	2	0.17%		0.17%
Barnsley 019D	5	0.42%		0.42%
Barnsley 020A	4	0.34%		0.34%
Barnsley 020B	2	0.17%		0.17%
Barnsley 020C	1	0.08%		0.08%
Barnsley 020D	4	0.34%	0.17%	0.17%
Barnsley 020E	3	0.25%		0.25%
Barnsley 020F	6	0.51%		0.51%
Barnsley 020G	6	0.51%		0.51%
Barnsley 021A	2	0.17%		0.17%
Barnsley 021B	3	0.25%		0.25%
Barnsley 021C	4	0.34%		0.34%
Barnsley 021D	2	0.17%		0.17%
Barnsley 021E	2	0.17%		0.17%
Barnsley 021F	2	0.17%		0.17%
Barnsley 022A	4	0.34%		0.34%
Barnsley 022B	4	0.34%		0.34%
Barnsley 022C	2	0.17%		0.17%
Barnsley 022D	3	0.25%		0.25%
Barnsley 023A	5	0.42%		0.42%
Barnsley 023B	4	0.34%		0.34%

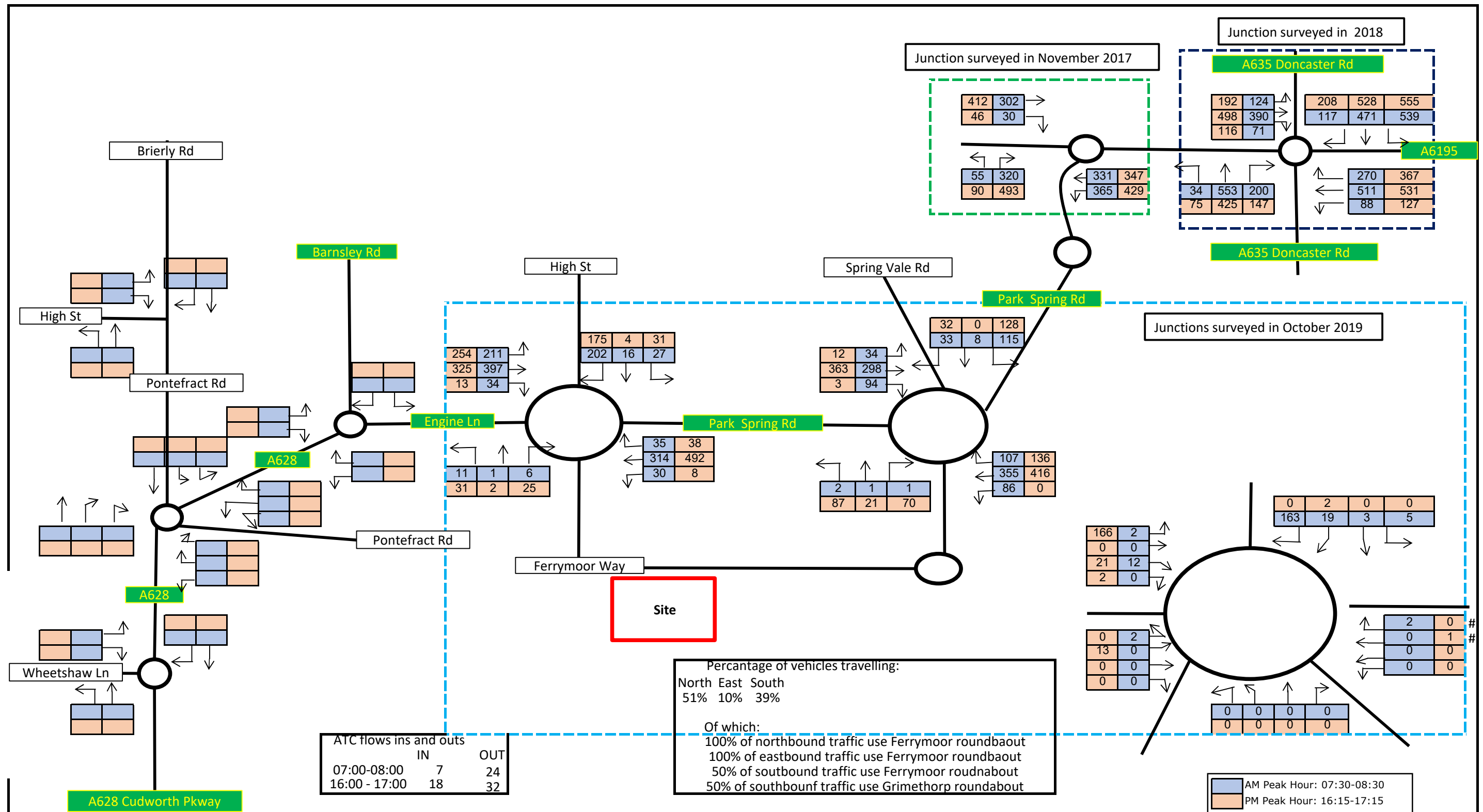
Barnsley 023C	3	0.25%	0.25%
Barnsley 023D	4	0.34%	0.34%
Barnsley 024A	2	0.17%	0.17%
Barnsley 024C	1	0.08%	0.08%
Barnsley 024D	2	0.17%	0.17%
Barnsley 024E	2	0.17%	0.17%
Barnsley 024F	2	0.17%	0.17%
Barnsley 025A	2	0.17%	0.17%
Barnsley 025B	2	0.17%	0.17%
Barnsley 025C	4	0.34%	0.34%
Barnsley 025D	2	0.17%	0.17%
Barnsley 025E	2	0.17%	0.17%
Barnsley 026A	7	0.59%	0.59%
Barnsley 026B	5	0.42%	0.42%
Barnsley 026C	4	0.34%	0.34%
Barnsley 026E	3	0.25%	0.25%
Barnsley 026G	2	0.17%	0.17%
Barnsley 027A	1	0.08%	0.08%
Barnsley 027B	2	0.17%	0.17%
Barnsley 027D	1	0.08%	0.08%
Barnsley 028A	2	0.17%	0.17%
Barnsley 028B	2	0.17%	0.17%
Barnsley 028C	1	0.08%	0.08%
Barnsley 028D	3	0.25%	0.25%
Barnsley 028E	4	0.34%	0.34%
Barnsley 029A	3	0.25%	0.25%
Barnsley 029B	9	0.76%	0.76%
Barnsley 029C	4	0.34%	0.34%
Barnsley 029D	6	0.51%	0.51%
Barnsley 029E	2	0.17%	0.17%
Barnsley 030A	3	0.25%	0.25%
Barnsley 030B	1	0.08%	0.08%
Barnsley 030C	5	0.42%	0.42%
Barnsley 030D	1	0.08%	0.08%
Barnsley 030E	5	0.42%	0.42%
Bassetlaw 009A	1	0.08%	0.08%
Bassetlaw 012A	1	0.08%	0.08%
Bassetlaw 016D	1	0.08%	0.08%
Bolton 030B	1	0.08%	0.08%
Bolton 031B	2	0.17%	0.17%
Burnley 011D	1	0.08%	0.08%
Burnley 014G	1	0.08%	0.08%
Calderdale 010B	2	0.17%	0.17%
Calderdale 017F	1	0.08%	0.08%
Calderdale 018D	1	0.08%	0.08%
Calderdale 018E	1	0.08%	0.08%
Calderdale 027E	1	0.08%	0.08%
Doncaster 002A	1	0.08%	0.08%
Doncaster 002B	1	0.08%	0.08%
Doncaster 002E	1	0.08%	0.08%
Doncaster 006E	1	0.08%	0.08%
Doncaster 007D	1	0.08%	0.08%
Doncaster 008B	1	0.08%	0.08%
Doncaster 009A	1	0.08%	0.08%
Doncaster 009B	1	0.08%	0.08%
Doncaster 009F	1	0.08%	0.08%
Doncaster 010C	2	0.17%	0.17%
Doncaster 012B	1	0.08%	0.08%
Doncaster 018D	1	0.08%	0.08%
Doncaster 020C	2	0.17%	0.17%
Doncaster 021E	2	0.17%	0.17%
Doncaster 022E	1	0.08%	0.08%
Doncaster 022F	1	0.08%	0.08%
Doncaster 023C	1	0.08%	0.08%
Doncaster 024A	1	0.08%	0.08%
Doncaster 029C	1	0.08%	0.08%
Doncaster 030A	1	0.08%	0.08%
Doncaster 031B	1	0.08%	0.08%
Doncaster 031E	2	0.17%	0.17%
Doncaster 031F	1	0.08%	0.08%
Doncaster 032A	2	0.17%	0.17%
Doncaster 033B	1	0.08%	0.08%
Doncaster 033D	1	0.08%	0.08%
Doncaster 035E	1	0.08%	0.08%
Doncaster 037D	1	0.08%	0.08%
Doncaster 038B	2	0.17%	0.17%
East Riding of Yorks	1	0.08%	0.08%
East Riding of Yorks	1	0.08%	0.08%
Harrogate 003A	1	0.08%	0.08%
Harrogate 013B	1	0.08%	0.08%
Harrogate 014A	1	0.08%	0.08%
Herefordshire 011B	1	0.08%	0.08%
Herefordshire 016A	1	0.08%	0.08%
Herefordshire 016C	1	0.08%	0.08%
Hyndburn 002D	1	0.08%	0.08%
Hyndburn 006F	1	0.08%	0.08%
Hyndburn 006G	1	0.08%	0.08%
Kirklees 005A	1	0.08%	0.08%
Kirklees 013D	1	0.08%	0.08%
Kirklees 018C	1	0.08%	0.08%
Kirklees 024D	1	0.08%	0.08%
Kirklees 026D	1	0.08%	0.08%
Kirklees 032A	1	0.08%	0.08%
Kirklees 037B	1	0.08%	0.08%
Kirklees 037C	1	0.08%	0.08%
Kirklees 053F	1	0.08%	0.08%
Kirklees 054C	3	0.25%	0.25%
Kirklees 054D	1	0.08%	0.08%
Kirklees 055E	1	0.08%	0.08%
Kirklees 056B	1	0.08%	0.08%
Kirklees 057C	1	0.08%	0.08%
Kirklees 057D	1	0.08%	0.08%
Leeds 006A	1	0.08%	0.08%
Leeds 012C	1	0.08%	0.08%
Leeds 027B	1	0.08%	0.08%
Leeds 034C	1	0.08%	0.08%
Leeds 048A	2	0.17%	0.08%
Leeds 067H	1	0.08%	0.08%
Leeds 073A	1	0.08%	0.08%

Leeds 077C	1	0.08%	0.08%	
Leeds 082C	1	0.08%		0.08%
Leeds 082F	2	0.17%		0.17%
Leeds 085C	2	0.17%		0.17%
Leeds 086A	1	0.08%		0.08%
Leeds 086B	1	0.08%		0.08%
Leeds 088B	1	0.08%	0.08%	
Leeds 096C	1	0.08%	0.08%	
Leeds 102G	1	0.08%		0.08%
Leeds 103B	1	0.08%	0.08%	
Leeds 106B	1	0.08%	0.08%	
Leeds 106C	1	0.08%	0.08%	
Leeds 108D	1	0.08%	0.08%	
Lincoln 002D	1	0.08%		0.08%
Lincoln 004B	1	0.08%		0.08%
North East Derbyshir	1	0.08%		0.08%
North East Derbyshir	1	0.08%		0.08%
North Kesteven 001F	1	0.08%		0.08%
North Kesteven 009E	1	0.08%		0.08%
Oldham 028A	1	0.08%	0.08%	
Oldham 033D	1	0.08%	0.08%	
Pendle 002B	1	0.08%	0.08%	
Pendle 002D	1	0.08%	0.08%	
Pendle 003A	1	0.08%	0.08%	
Pendle 009A	1	0.08%	0.08%	
Pendle 010D	1	0.08%	0.08%	
Rotherham 001B	1	0.08%		0.08%
Rotherham 001C	3	0.25%		0.25%
Rotherham 001E	1	0.08%		0.08%
Rotherham 002C	2	0.17%		0.17%
Rotherham 002E	1	0.08%		0.08%
Rotherham 002F	1	0.08%		0.08%
Rotherham 003B	1	0.08%		0.08%
Rotherham 003C	1	0.08%		0.08%
Rotherham 003D	1	0.08%		0.08%
Rotherham 004A	1	0.08%		0.08%
Rotherham 004D	1	0.08%		0.08%
Rotherham 005D	1	0.08%		0.08%
Rotherham 005E	1	0.08%		0.08%
Rotherham 006B	2	0.17%		0.17%
Rotherham 007B	1	0.08%		0.08%
Rotherham 009B	2	0.17%		0.17%
Rotherham 012C	1	0.08%		0.08%
Rotherham 013D	1	0.08%		0.08%
Rotherham 014D	1	0.08%		0.08%
Rotherham 015A	2	0.17%		0.17%
Rotherham 015C	1	0.08%		0.08%
Rotherham 015F	1	0.08%		0.08%
Rotherham 019A	1	0.08%		0.08%
Rotherham 020F	1	0.08%		0.08%
Rotherham 023E	1	0.08%		0.08%
Rotherham 025A	1	0.08%		0.08%
Rotherham 025F	2	0.17%		0.17%
Rotherham 027B	1	0.08%		0.08%
Rotherham 028B	4	0.34%		0.34%
Rotherham 029B	1	0.08%		0.08%
Rotherham 029F	1	0.08%		0.08%
Rotherham 032E	1	0.08%		0.08%
Rotherham 033D	1	0.08%		0.08%
Selby 004B	3	0.25%	0.25%	
Selby 008E	1	0.08%	0.08%	
Sheffield 002A	1	0.08%		0.08%
Sheffield 002D	1	0.08%		0.08%
Sheffield 003F	1	0.08%		0.08%
Sheffield 004B	1	0.08%		0.08%
Sheffield 004G	1	0.08%		0.08%
Sheffield 006C	1	0.08%		0.08%
Sheffield 011E	1	0.08%		0.08%
Sheffield 013C	1	0.08%		0.08%
Sheffield 016D	1	0.08%		0.08%
Sheffield 017A	1	0.08%		0.08%
Sheffield 022F	1	0.08%		0.08%
Sheffield 024C	1	0.08%		0.08%
Sheffield 025B	1	0.08%		0.08%
Sheffield 027B	1	0.08%		0.08%
Sheffield 027C	1	0.08%		0.08%
Sheffield 029B	1	0.08%		0.08%
Sheffield 029D	1	0.08%		0.08%
Sheffield 033A	1	0.08%		0.08%
Sheffield 036C	1	0.08%		0.08%
Sheffield 044D	1	0.08%		0.08%
Sheffield 047B	1	0.08%		0.08%
Sheffield 049C	1	0.08%		0.08%
Sheffield 052B	1	0.08%		0.08%
Sheffield 054A	1	0.08%		0.08%
Sheffield 055C	1	0.08%		0.08%
Sheffield 069B	1	0.08%		0.08%
Sheffield 069D	1	0.08%		0.08%
Sheffield 075D	1	0.08%		0.08%
Sheffield 075G	1	0.08%		0.08%
Stockport 009B	1	0.08%		0.08%
Stockport 042C	1	0.08%		0.08%
Wakefield 001B	1	0.08%	0.08%	
Wakefield 003A	1	0.08%	0.08%	
Wakefield 005D	2	0.17%		0.17%
Wakefield 006A	1	0.08%	0.08%	
Wakefield 006D	2	0.17%		0.17%
Wakefield 008A	1	0.08%	0.08%	
Wakefield 009A	1	0.08%	0.08%	
Wakefield 011E	1	0.08%	0.08%	
Wakefield 013C	1	0.08%	0.08%	
Wakefield 013D	3	0.25%	0.25%	
Wakefield 015A	1	0.08%	0.08%	
Wakefield 015C	1	0.08%	0.08%	
Wakefield 015D	1	0.08%	0.08%	
Wakefield 016C	1	0.08%	0.08%	
Wakefield 020E	1	0.08%	0.08%	
Wakefield 022F	1	0.08%	0.08%	
Wakefield 024D	1	0.08%	0.08%	

Wakefield 026A	1	0.08%	0.08%	
Wakefield 026D	1	0.08%	0.08%	
Wakefield 026E	1	0.08%	0.08%	
Wakefield 028C	1	0.08%	0.08%	
Wakefield 029A	1	0.08%	0.08%	
Wakefield 030C	1	0.08%	0.08%	
Wakefield 031A	1	0.08%	0.08%	
Wakefield 032C	1	0.08%	0.08%	
Wakefield 033B	1	0.08%	0.08%	
Wakefield 033C	2	0.17%	0.17%	
Wakefield 034B	1	0.08%	0.08%	
Wakefield 034D	2	0.17%	0.17%	
Wakefield 034F	1	0.08%	0.08%	
Wakefield 035C	1	0.08%	0.08%	
Wakefield 037B	1	0.08%	0.08%	
Wakefield 038A	1	0.08%	0.08%	
Wakefield 038D	1	0.08%	0.08%	
Wakefield 039A	1	0.08%	0.08%	
Wakefield 039B	1	0.08%	0.08%	
Wakefield 039C	6	0.51%	0.51%	
Wakefield 039D	3	0.25%	0.25%	
Wakefield 040B	2	0.17%	0.17%	
Wakefield 040C	5	0.42%	0.42%	
Wakefield 040D	1	0.08%	0.08%	
Wakefield 041C	3	0.25%	0.25%	
Wakefield 042A	5	0.42%	0.42%	
Wakefield 042B	4	0.34%	0.34%	
Wakefield 042C	3	0.25%	0.25%	
Wakefield 042D	2	0.17%	0.17%	
Wakefield 042E	2	0.17%	0.17%	
Wakefield 043A	4	0.34%	0.34%	
Wakefield 043B	3	0.25%	0.25%	
Wakefield 043D	1	0.08%	0.08%	
Wakefield 044A	3	0.25%	0.25%	
Wakefield 044B	1	0.08%	0.08%	
Wakefield 045A	1	0.08%	0.08%	
Wakefield 045B	4	0.34%	0.34%	
Wakefield 045C	3	0.25%	0.25%	
Wakefield 045D	3	0.25%	0.25%	
Wealden 006A	1	0.08%		0.08%
Wealden 006B	1	0.08%		0.08%

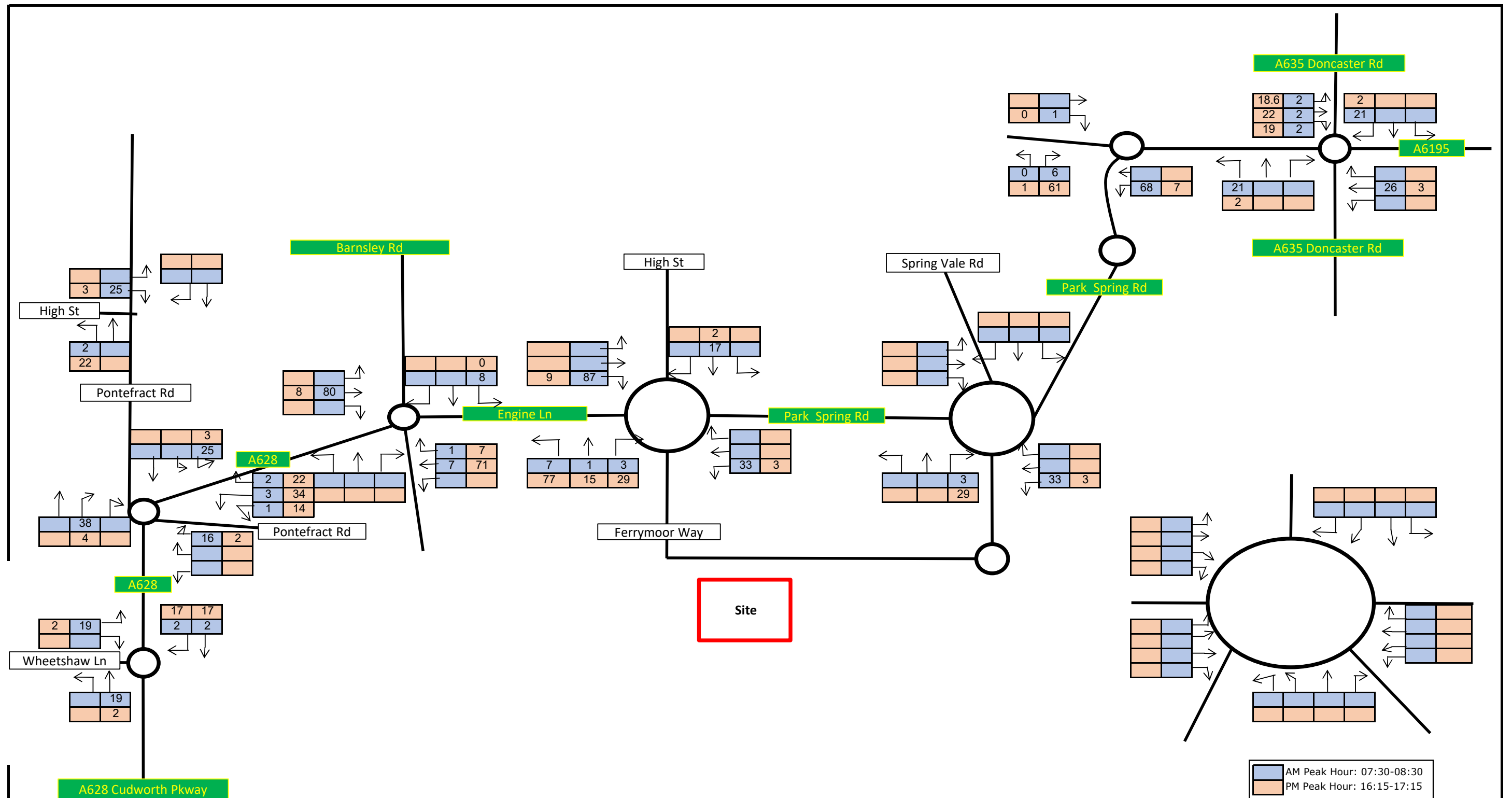
1179	1	65.61%	34.39%
------	---	--------	--------

Appendix G Pen Hill TS Extract – Base Flows



Appendix H

Pen Hill Estate TS Extract – Committed Development



Appendix I Modelling Outputs

Junctions 9						
PICADY 9 - Priority Intersection Module						
Version: 9.5.0.6896 © Copyright TRL Limited, 2018						
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk						
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution						

Filename: Proposed Ghost Island Access.j9

Path: L:\Houghton Main, Barnsley - 21034\ANALYSIS\CAPACITY\Priority Junctions

Report generation date: 06/09/2021 13:55:14

»2026 Design, AM

»2026 Design, PM

Summary of junction performance

	AM			PM		
	Q (PCU)	Delay (s)	RFC	Q (PCU)	Delay (s)	RFC
2026 Design						
Stream B-C	0.0	8.50	0.01	0.0	6.82	0.03
Stream B-A	0.0	9.98	0.03	0.1	10.74	0.08
Stream C-AB	0.0	6.62	0.03	0.0	6.58	0.01

Values shown are the highest values encountered over all time segments. Delay is the maximum value of Av. delay per arriving vehicle.

File summary

File Description

Title	A6195 Site Access
Location	
Site number	
Date	06/09/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SJP
Description	Drawing 21034-GA-101

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026 Design	AM	ONE HOUR	08:00	09:30	15	✓

D2	2026 Design	PM	ONE HOUR	17:00	18:30	15	✓
----	-------------	----	----------	-------	-------	----	---

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2026 Design, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Park Springs Road (N)		Major
B	Site Access		Minor
C	Park Springs Road (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Park Springs Road (S)	7.00		✓	3.25	250.0	✓	12.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane plus flare	10.00	10.00	7.30	5.65	5.36	✓	3.00	250	250

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	793	0.138	0.349	0.220	0.499
1	B-C	804	0.118	0.298	-	-
1	C-B	801	0.297	0.297	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario	Time Period	Traffic profile	Start time	Finish time	Time segment length	Run
----	----------	-------------	-----------------	------------	-------------	---------------------	-----

	name	name	type	(HH:mm)	(HH:mm)	(min)	automatically
D1	2026 Design	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Park Springs Road (N)		ONE HOUR	✓	501	100.000
B - Site Access		ONE HOUR	✓	17	100.000
C - Park Springs Road (S)		ONE HOUR	✓	546	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A - Park Springs Road (N)	B - Site Access	C - Park Springs Road (S)
	A - Park Springs Road (N)	0	31	470
	B - Site Access	11	0	6
	C - Park Springs Road (S)	530	16	0

Vehicle Mix

HV %s

	To			
From		A - Park Springs Road (N)	B - Site Access	C - Park Springs Road (S)
	A - Park Springs Road (N)	9	10	0
	B - Site Access	27	0	50
	C - Park Springs Road (S)	2	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.01	8.50	0.0	A	6	8
B-A	0.03	9.98	0.0	A	10	15
C-AB	0.03	6.62	0.0	A	15	22
C-A					486	730
A-B					28	43
A-C					431	647

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	1	693	0.007	4	0.0	0.0	7.837	A
B-A	8	2	572	0.014	8	0.0	0.0	8.104	A
C-AB	12	3	689	0.017	12	0.0	0.0	6.062	A
C-A	399	100			399				
A-B	23	6			23				
A-C	354	88			354				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	1	672	0.008	5	0.0	0.0	8.102	A
B-A	10	2	529	0.019	10	0.0	0.0	8.799	A
C-AB	14	4	667	0.022	14	0.0	0.0	6.285	A
C-A	476	119			476				
A-B	28	7			28				
A-C	423	106			423				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	2	642	0.010	7	0.0	0.0	8.502	A
B-A	12	3	470	0.026	12	0.0	0.0	9.977	A
C-AB	18	4	637	0.028	18	0.0	0.0	6.623	A
C-A	584	146			584				
A-B	34	9			34				
A-C	517	129			517				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	2	642	0.010	7	0.0	0.0	8.502	A
B-A	12	3	470	0.026	12	0.0	0.0	9.976	A
C-AB	18	4	637	0.028	18	0.0	0.0	6.623	A
C-A	584	146			584				
A-B	34	9			34				
A-C	517	129			517				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	1	672	0.008	5	0.0	0.0	8.104	A
B-A	10	2	530	0.019	10	0.0	0.0	8.799	A
C-AB	14	4	667	0.022	14	0.0	0.0	6.286	A
C-A	476	119			476				
A-B	28	7			28				
A-C	423	106			423				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	1	693	0.007	5	0.0	0.0	7.838	A
B-A	8	2	572	0.014	8	0.0	0.0	8.108	A
C-AB	12	3	689	0.017	12	0.0	0.0	6.062	A
C-A	399	100			399				
A-B	23	6			23				
A-C	354	88			354				

2026 Design, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2026 Design	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Park Springs Road (N)		ONE HOUR	✓	759	100.000
B - Site Access		ONE HOUR	✓	39	100.000
C - Park Springs Road (S)		ONE HOUR	✓	581	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A - Park Springs Road (N)	B - Site Access	C - Park Springs Road (S)
	A - Park Springs Road (N)	0	10	749
	B - Site Access	26	0	13
	C - Park Springs Road (S)	576	5	0

Vehicle Mix

HV %s

	To			
From		A - Park Springs Road (N)	B - Site Access	C - Park Springs Road (S)
	A - Park Springs Road (N)	0	10	3
	B - Site Access	0	0	0
	C - Park Springs Road (S)	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	6.82	0.0	A	12	18
B-A	0.08	10.74	0.1	B	24	36
C-AB	0.01	6.58	0.0	A	5	7
C-A					529	793
A-B					9	14
A-C					687	1031

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	2	625	0.016	10	0.0	0.0	5.854	A
B-A	20	5	501	0.039	19	0.0	0.0	7.476	A
C-AB	4	0.94	631	0.006	4	0.0	0.0	5.736	A
C-A	434	108			434				
A-B	8	2			8				
A-C	564	141			564				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	3	590	0.020	12	0.0	0.0	6.221	A
B-A	23	6	443	0.053	23	0.0	0.1	8.572	A
C-AB	4	1	598	0.008	4	0.0	0.0	6.061	A
C-A	518	129			518				
A-B	9	2			9				
A-C	673	168			673				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	4	542	0.026	14	0.0	0.0	6.819	A
B-A	29	7	364	0.079	29	0.1	0.1	10.740	B
C-AB	6	1	553	0.010	5	0.0	0.0	6.576	A
C-A	634	159			634				
A-B	11	3			11				
A-C	825	206			825				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	4	542	0.026	14	0.0	0.0	6.820	A
B-A	29	7	364	0.079	29	0.1	0.1	10.745	B
C-AB	6	1	553	0.010	6	0.0	0.0	6.576	A
C-A	634	159			634				
A-B	11	3			11				
A-C	825	206			825				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	3	590	0.020	12	0.0	0.0	6.227	A

B-A	23	6	443	0.053	23	0.1	0.1	8.578	A
C-AB	4	1	598	0.008	5	0.0	0.0	6.063	A
C-A	518	129			518				
A-B	9	2			9				
A-C	673	168			673				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	2	624	0.016	10	0.0	0.0	5.856	A
B-A	20	5	501	0.039	20	0.1	0.0	7.483	A
C-AB	4	0.94	631	0.006	4	0.0	0.0	5.738	A
C-A	434	108			434				
A-B	8	2			8				
A-C	564	141			564				