further design risk management as required in accordance with Regulation 9 These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9.
 All dimensions in metres unless stated otherwise.
 This drawing is based on Make drawing '239-ACME-PLOT-PROPOSED-1-2000-GF-PLANNING\_with Make' received 07/10/2021 GENERAL NOTES:

1. This drawing is to be read in conjunction with all other relevant Engineering and Architect's details.

2. The design details presented must be reviewed in conjunction with the wider site information and site must be requested if not already provided. This includes, but not limited to, ground conditions tree protection and topography.

3. The Engineer shall be notified immediately, in writing, should any errors or discrepancies be found prior to the 4. All work is to be carried out in accordance with current British Standards, Building Regulations and NHBC Standards.

5. It is the responsibility of the Contractor to execute the works at all times in strict accordance with the requirements of the Health and Safety at Work Act Avenue Seven House - High Street Longbridge - Birmingham B31 2UQ - Tel: 0121 475 0234 Birmingham - Bristol Exeter - London - Reading pja.co.uk Inset 6 Scale 1:250 **Brookgate Ltd** Cambridge North Rigid Truck
Vehicle Tracking Inset 7 Scale 1:250 INFORMATION
PJA JOB No. SUB-CODE DRAWING NO. REVISION

05425 - C - 2206 - PI

Revision Letter: P - Prelim / A - Approval / T - Tender / C - Construction

BIM DRAWING REFERENCE

These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to

Make' received 07/10/2021.

4. The purpose of this drawing is to show the location of the proposed service road on cross sections of the

existing ground.

5. Levels information based on topographical survey data in Survey Solutions drawing 20852ea Rev A dated 19/01/2018.

constraints which may not be evident on drawing and

(geotechnical and geo-environmental), groundwater levels, buried services, remnant obstructions, ecology,

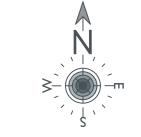
commencement or continuation of any works.

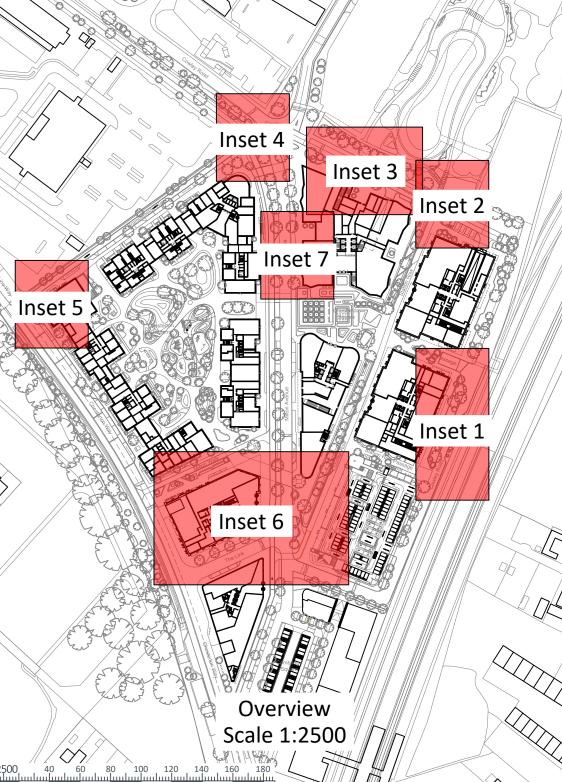
1974, and the C.D.M. Regulations 2015. The Contractor will be deemed to have allowed for full compliance, including full liaison with the CDM Co-ordinator, within

6. Any existing details which are shown on this drawing are for guidance only and are to be checked on site by the contractor. Any variations are to be recorded and

reported to the engineer immediately.

7. Before work commences contractor should consult the engineer and the SI report regarding any contamination issues. All necessary Health and Safety measures to be





PI 25.05.22 Updated to latest layout, Milton Avenue tracking added

REV DATE REVISION NOTE BY

SCALE DRAWN REVIEWED DATE

A0@1:250 OB GD 28.04.22

These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9 These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9.
 All dimensions in metres unless stated otherwise.
 This drawing is based on Make drawing '239-ACME-PLOT-PROPOSED-1-2000-GF-PLANNING\_with Make' received 07/10/2021 Make' received 07/10/2021.

4. The purpose of this drawing is to show the location of the proposed service road on cross sections of the existing ground.

5. Levels information based on topographical survey data in Survey Solutions drawing 20852ea Rev A dated 19/01/2018. GENERAL NOTES:

1. This drawing is to be read in conjunction with all other relevant Engineering and Architect's details.

2. The design details presented must be reviewed in conjunction with the wider site information and site constraints which may not be evident on drawing and must be requested if not already provided. This includes, but not limited to, ground conditions (geotechnical and geo-environmental), groundwater levels, buried services, remnant obstructions, ecology, tree protection and topography.

3. The Engineer shall be notified immediately, in writing, should any errors or discrepancies be found prior to the commencement or continuation of any works.

4. All work is to be carried out in accordance with current British Standards, Building Regulations and NHBC Standards.

5. It is the responsibility of the Contractor to execute the works at all times in strict accordance with the requirements of the Health and Safety at Work Act 1974, and the C.D.M. Regulations 2015. The Contractor will be deemed to have allowed for full compliance, including full liaison with the CDM Co-ordinator, within 6. Any existing details which are shown on this drawing are for guidance only and are to be checked on site by the contractor. Any variations are to be recorded and reported to the engineer immediately.

7. Before work commences contractor should consult the engineer and the SI report regarding any contamination issues. All necessary Health and Safety measures to be Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to lock time
Kerb to Kerb Turning Radius Avenue PI 25.05.22 Updated to latest layout, Milton Avenue tracking added

REV DATE REVISION NOTE BY Milton Birmingham - Bristol Exeter - London - Reading pja.co.uk Inset 6 Scale 1:250 Brookgate Ltd Cambridge North Refuse Vehicle Tracking Inset 7 = Scale 1:250 DRAWING ISSUE STATUS

INFORMATION

PJA JOB No. SUB-CODE DRAWING NO. REVISION

05425 - C - 2207 - PI

Revision Letter: P - Prelim / A - Approval / T - Tender / C - Construction

BIM DRAWING REFERENCE SCALE DRAWN REVIEWED DATE

A0@1:250 OB GD 28.04.22



# Appendix E Cambridge North Spreadsheet Model



# **Parking Allocation**

Cambridge North AAP parking budget Spaces 873

# **Existing/Committed Parking**

Spaces Notes

OCS basement provision 53
OCS disabled parking provision 20 Currently provided in surface car park, to be accommodated within Mobility Hub capacity

Existing rail provision 428

Future rail provision 194 Updated 25/04/22 for consistency with ACME designs
Total rail related provision: 622

## Commercial Development Breakdown

Commercial Floorspace Split

Source: ACME Area Schedule 20/05/22

Office Space	13,952	21%		
Lab space	51,717	79%		
Total:	65,669	100%		

## **Commercial Parking Space Allocation**

Office parking	64	15%
Lab parking	354	85%
Total:	418	100%

# **Proposed Development**

 Spaces
 Notes

 Mobility Hub capacity
 725
 Designs from 25/04/22. Includes 20 standard bays for hotel

## **Commercial Development**

One Milton Avenue basement (S4)
One Station Row basement (S6)
Three Station Row basement (S7)
Two Milton Avenue basement (S8)
One Chesterton Square basement (S9)

141
One Chesterton Square basement (S9)

One Chesterton Square basement (S9)

Total basement parking provision

Within Mobility hub

83

Within Mobility hub

83 (Mobility Hub capacity - rail related provision - hotel provision)

Commercial on-street disabled provision

13 Agreed with ACME, DBA and Brookgate 27/04/22

Total parking provision for commercial uses 417 (Mobility Hub capacity - rail related provision - hotel provision + on-street disabled provision + basement provision)

Residual parking budget quantum 456 (Parking Budget - commercial development)

## **Residential Development**

On-street disabled spaces

Basement provision

Total residential:

22 Brookgate spreadsheet dated 22/02/22

Brookgate spreadsheet dated 22/02/22

Residual parking budget quantum



## Offices

Table 26: Implied parking accumulation assuming AM peak employment trip budget not breached

Time	Arrival %	Departure %	Trip arrivals	Trip departures	Accumulation
07:00-08:00	18%	2%	1258	167	1091
08:00-09:00	37%	4%	2616	266	3440
09:00-10:00	13%	4%	912	268	4084
10:00-11:00	4%	3%	294	195	4183
11:00-12:00	4%	4%	266	264	4185
12:00-13:00	5%	8%	359	554	3990
13:00-14:00	6%	5%	435	364	4062
14:00-15:00	4%	5%	307	325	4045
15:00-16:00	3%	8%	195	565	3674
16:00-17:00	3%	13%	197	912	2960
17:00-18:00	2%	27%	149	1843	1267
18:00-19:00	1%	18%	67	1215	119
Total	100%	100%	7056	6937	-

Source: Mott MacDonald and TRICS Note: Assumed no overnight parking. Early departures are assumed to represent drop-offs.

Source: https://www.greatercambridgeplanning.org/media/1234/nec-aap-transport-evidence-base.pdf

#### Residential

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING MULTI-MODAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES			TOTALS	
Time Range	No. Davs	Ave. DWELLS	Trip Rate	No. Davs	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	15	228	0.068	15	228	0.270	15	228	0.33
08:00 - 09:00	15	228	0.125	15	228	0.366	15	228	0.49
09:00 - 10:00	15	228	0.123	15	228	0.167	15	228	0.29
10:00 - 11:00	15	228	0.110	15	228	0.135	15	228	0.24
11:00 - 12:00	15	228	0.118	15	228	0.134	15	228	0.25
12:00 - 13:00	15	228	0.127	15	228	0.129	15	228	0.25
13:00 - 14:00	15	228	0.127	15	228	0.128	15	228	0.25
14:00 - 15:00	15	228	0.122	15	228	0.150	15	228	0.27
15:00 - 16:00	15	228	0.240	15	228	0.163	15	228	0.40
16:00 - 17:00	15	228	0.231	15	228	0.136	15	228	0.36
17:00 - 18:00	15	228	0.300	15	228	0.141	15	228	0.44
18:00 - 19:00	15	228	0.277	15	228	0.136	15	228	0.41
19:00 - 20:00	-								-
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00	8								
Total Rates:		10	1.968			2.055			4.02

Appendix B.5 AAP Transport Evidence Base

# Converting to live data

Time Period	Arrivals	Departures	Arr	Dep	Acc	Acc Profile
0700-0800	18%	2%	1258	167	1091	0.26
0800-0900	37%	4%	2616	266	3441	0.82
0900-1000	13%	4%	912	268	4085	0.98
1000-1100	4%	3%	294	195	4184	1.00
1100-1200	4%	4%	266	264	4186	1.00
1200-1300	5%	8%	359	554	3991	0.95
1300-1400	6%	5%	435	364	4062	0.97
1400-1500	4%	5%	307	325	4044	0.97
1500-1600	3%	8%	195	565	3674	0.88
1600-1700	3%	13%	197	912	2959	0.71
1700-1800	2%	27%	149	1843	1265	0.30
1800-1900	1%	18%	67	1215	117	0.03
	100%	101%	7055	6938		

# Relationship of Arrivals/Departures and Accumulation

Arr/Acc	Dep/Acc
1.153071	0.153071
0.760244	0.077303
0.223256	0.065606
0.070268	0.046606
0.063545	0.063067
0.089952	0.138812
0.10709	0.089611
0.075915	0.080366
0.053076	0.153783
0.066577	0.308212
0.117787	1.456917
0.57265	10.38462

# Converting to live data

Time Perio	Arrivals	Departures
0700-0800	0.068	0.270
0800-0900	0.125	0.366
0900-1000	0.123	0.167
1000-1100	0.110	0.135
1100-1200	0.118	0.134
1200-1300	0.127	0.129
1300-1400	0.127	0.128
1400-1500	0.122	0.150
1500-1600	0.240	0.163
1600-1700	0.231	0.136
1700-1800	0.300	0.141
1800-1900	0.277	0.136
	1.968	2.055

Percentages		
Time Period	Arrivals	Departures
0700-0800	3%	13%
0800-0900	6%	18%
0900-1000	6%	8%
1000-1100	6%	7%
1100-1200	6%	7%
1200-1300	6%	6%
1300-1400	6%	6%
1400-1500	6%	7%
1500-1600	12%	8%
1600-1700	12%	7%
1700-1800	15%	7%
1800-1900	14%	7%
	100%	100%



Labs

Data from: 17/1799/FUL New Cavendish Labs on the West site

Table 7.2: Amended Hourly Person Trip Rates per 100m<sup>2</sup> and the Resulting Trips for the Proposed Development (37.696m<sup>2</sup>)

Time	Amended	l Total Person	Trip Rates	Total Person	Trips for Propose	d Development
IIme	Arrivals	Departures	Two-Way	Arrivals	Departures	Two-Way
07:00-08:00	0.360	0.123	0.483	136	46	182
08:00-09:00	0.904	0.097	1.000	341	37	377
09:00-10:00	1.151	0.150	1.300	434	56	490
10:00-11:00	0.580	0.158	0.738	219	60	278
11:00-12:00	0.493	0.244	0.737	186	92	276
12:00-13:00	0.475	0.835	1.310	179	315	494
13:00-14:00	0.869	0.580	1.449	328	219	546
14:00-15:00	0.898	0.315	1.213	339	119	457
15:00-16:00	0.220	0.658	0.878	83	248	331
16:00-17:00	0.263	0.994	1.247	99	371	470
17:00-18:00	0.132	1.036	1.168	50	391	440
18:00-19:00	0.159	0.826	0.984	60	311	371
07:00-19:00	6.503	6.006	12.509	2,451	2,264	4,715

## **Labs Sensitivity Test Data**

S\_0404\_16\_FL-Transport\_Assessment
The Bradfield Centre Planning Application 2016

Data below from a survey of the Peterhouse Technology Park, taken from Table 4.2 of the TA, and Appendix BGH 29

Estimated Car Park Occupancy at 07:00: 20

Time Period	Arrivals		Depa	rtures	Accum.		
0700-0800	21	12%	2	1%	38	34%	
0800-0900	44	25%	10	6%	72	64%	
0900-1000	37	21%	4	2%	105	94%	
1000-1100	11	6%	5	3%	111	99%	
1100-1200	8	5%	7	4%	112	100%	
1200-1300	12	7%	20	11%	104	93%	
1300-1400	18	10%	12	7%	110	98%	
1400-1500	10	6%	11	6%	110	98%	
1500-1600	6	3%	13	8%	102	91%	
1600-1700	4	2%	30	17%	76	68%	
1700-1800	4	2%	39	22%	41	37%	
1800-1900	2	1%	22	12%	22	20%	
Totals	177	100%	175	99%			

# Converting to live data Table 7.2: Amended Hourly Pe

## Relationship of Arrivals/Departures and Accumulation

Table 7.2: Amended Hourly Person Trip Rates per 100m2 and the Resulting Trips for the Proposed Development (37,696m2)

	Amende	ed Total Person T	rip Rates	Total Person Trips for Proposed Development		ment						
Time Period	Arrivals	Departures	Two-way	Arriv	als	Depa	rtures	Two-way	Accumulat	ion	Arr/Acc	Dep/Acc
0700-0800	0.360	0.123	0.483	136	6%	46	2%	162	90	8%	1.5111111	0.5111111
0800-0900	0.904	0.097	1.000	341	14%	37	2%	377	394	33%	0.8654822	0.0939086
0900-1000	1.151	0.150	1.300	434	18%	56	2%	490	772	64%	0.5621762	0.0725389
1000-1100	0.580	0.158	0.738	219	9%	60	3%	278	931	78%	0.2352309	0.0644468
1100-1200	0.493	0.244	0.737	166	7%	92	4%	278	1005	84%	0.1651741	0.0915423
1200-1300	0.475	0.635	1.310	179	7%	315	14%	494	869	73%	0.2059839	0.3624856
1300-1400	0.869	0.580	1.449	328	13%	219	10%	546	978	82%	0.3353783	0.2239264
1400-1500	0.898	0.315	1.213	339	14%	119	5%	457	1198	100%	0.2829716	0.0993322
1500-1600	0.220	0.658	0.878	83	3%	248	11%	331	1033	86%	0.0803485	0.2400774
1600-1700	0.263	0.984	1.247	99	4%	371	16%	470	761	64%	0.130092	0.4875164
1700-1800	0.132	1.036	1.168	50	2%	391	17%	440	420	35%	0.1190476	0.9309524
1800-1900	0.159	0.826	0.984	60	2%	311	14%	371	169	14%	0.3550296	1.8402367
	6.503	6,006	12.509	2451	100%	2264	100%	4715				

2434 2265 4694

Relationship of Arrivals/Departures and Accumulation

Arr/Acc	Dep/Acc
0.552632	0.052632
0.611111	0.138889
0.352381	0.038095
0.099099	0.045045
0.071429	0.0625
0.115385	0.192308
0.163636	0.109091
0.090909	0.1
0.058824	0.127451
0.052632	0.394737
0.097561	0.95122
0.090909	1



# Offices

 Office Parking Spaces:
 64

 Car park occupancy prior to 0700:
 2.5%
 62

 Peak car park occupancy:
 85%
 53

peak occupancy=>

Time Period	Arri	vals	Depa	rtures	Acc	um.
0700-0800	16	18%	2	2%	14	26%
0800-0900	33	37%	3	4%	43	82%
0900-1000	12	13%	3	4%	52	98%
1000-1100	4	4%	2	3%	53	100%
1100-1200	3	4%	3	4%	53	100%
1200-1300	5	5%	7	8%	50	95%
1300-1400	5	6%	5	5%	51	97%
1400-1500	4	4%	4	5%	51	97%
1500-1600	2	3%	7	8%	46	88%
1600-1700	2	3%	12	13%	37	71%
1700-1800	2	2%	23	27%	16	30%
1800-1900	1	1%	15	18%	1	3%
Total:	89	100%	88	100%		



# Labs

 Lab Parking Spaces:
 353

 Car park occupancy prior to 0700:
 2.5%
 344

 Peak car park occupancy:
 85%
 293

	Time Period	Arri	vals	Depa	rtures	Acc	um.
	0700-0800	33	6%	11	2%	22	8%
	0800-0900	83	14%	9	2%	96	33%
	0900-1000	106	18%	14	2%	189	64%
	1000-1100	54	9%	15	3%	227	78%
	1100-1200	41	7%	22	4%	246	84%
	1200-1300	44	7%	77	14%	212	73%
	1300-1400	80	18%	54	10%	239	82%
peak occupancy=>	1400-1500	83	14%	29	5%	293	100%
	1500-1600	20	3%	61	11%	252	86%
	1600-1700	24	4%	91	16%	186	64%
	1700-1800	12	2%	96	17%	103	35%
	1800-1900	15	2%	76	14%	41	14%
	Total:	595	100%	553	100%		

100

peak occupancy=>

**Lab Sensitivity Test** 

Time Period	Arri	vals	Depa	rtures	Acc	um.
0700-0800	55	12%	5	1%	99	34%
0800-0900	115	25%	26	6%	188	64%
0900-1000	97	21%	10	2%	274	94%
1000-1100	29	<b>6</b> %	13	3%	290	99%
1100-1200	21	5%	18	4%	293	100%
1200-1300	31	7%	52	11%	272	93%
1300-1400	47	10%	31	7%	287	98%
1400-1500	26	<b>6</b> %	29	6%	287	98%
1500-1600	16	3%	34	7%	267	91%
1600-1700	10	2%	78	17%	199	68%
1700-1800	10	2%	102	22%	107	37%
1800-1900	5	1%	57	13%	57	20%
	463	100%	457	100%		

#### Notes

- Based upon data from planning application for The Bradfield Centre (S/0404/16/FL)
- Total No. trips varies from main assessment as it is calculated from the relationship between  $\alpha$  arr/dep and accumulation.



# Residential

Residential Parking Spaces:

Time Period	Arri	vals	Depart	tures	Acc	um.
0700-0800	1	3%	6	13%	18	80%
0800-0900	3	6%	8	18%	12	56%
0900-1000	3	6%	4	8%	11	51%
1000-1100	2	6%	3	7%	11	49%
1100-1200	3	6%	3	7%	10	47%
1200-1300	3	6%	3	6%	10	47%
1300-1400	3	6%	3	6%	10	47%
1400-1500	3	6%	3	7%	10	44%
1500-1600	5	12%	4	8%	11	52%
1600-1700	5	12%	3	7%	13	61%
1700-1800	7	15%	3	7%	17	77%
1800-1900	6	14%	3	7%	20	91%
Totals	43	100%	45	100%		

22



# **Development Vehicle Trip Generation Summary**

	Of	fice Vehicle Tr	ips	Lab Vehicle Trips		Total Commercial Vehicle Trips			
Time Period	Arrivals	Departures	Accum.	Arrivals	Departures	Accum.	Arrivals	Departures	Accum.
0700-0800	16	2	14	33	11	22	49	13	36
0800-0900	33	3	43	83	9	96	116	12	140
0900-1000	12	3	52	106	14	189	118	17	240
1000-1100	4	2	53	54	15	227	57	17	280
1100-1200	3	3	53	41	22	246	44	26	298
1200-1300	5	7	50	44	77	212	48	84	263
1300-1400	5	5	51	80	54	239	86	58	290
1400-1500	4	4	51	83	29	293	87	33	344
1500-1600	2	7	46	20	61	252	23	68	299
1600-1700	2	12	37	24	91	186	27	102	223
1700-1800	2	23	16	12	96	103	14	119	119
1800-1900	1	15	1	15	76	41	16	91	43
Totals	89	88		595	553		684	641	<u>.</u>

Residential Vehicle Trips						
Arrivals	Departures	Accum.				
1	6	18				
3	8	12				
3	4	11				
2	3	11				
3	3	10				
3	3	10				
3	3	10				
3	3	10				
5	4	11				
5	3	13				
7	3	17				
6	3	20				
43	45					

Total Development Vehicle Trips					
Arrivals	Departures	Accum.			
51	19	53			
119	20	152			
120	21	252			
60	20	291			
47	29	309			
51	87	273			
88	61	301			
89	36	353			
28	71	310			
32	105	237			
21	122	136			
22	94	63			
727	686				

	nent Vehicle	Remaining Budget		
Trip	Budget	After Ap	plication	
Arrivals	Departures	Arr Diff	Dep Diff	
214	142	95	122	
92	182	71	60	

## Assumptions

417 employment car parking spaces

22 residential car parking spaces

Commercial spaces split proportionally between offices and labs as per building parking allocation

Trips are profiled according to the land use parking accumulation

Assumes 85% car parking occupancy of allocated spaces at commercial land use peak

Assumes 2.5% of commercial spaces occupied prior to 0700

Assumes 100% utilisation of residential car parking spaces

# **Development Vehicle Trip Generation Summary - Commercial Sensitivity Test**

	Of	fice Vehicle Tr	ips	Lab Vehicle Trips (Sensitity Scenario)		Total Commercial Vehicle Trips			
Time Period	Arrivals	Departures	Accum.	Arrivals	Departures	Accum.	Arrivals	Departures	Accum.
0700-0800	16	2	14	55	5	99	71	7	63
0800-0900	33	3	43	115	26	188	148	29	182
0900-1000	12	3	52	97	10	274	108	14	276
1000-1100	4	2	53	29	13	290	32	16	293
1100-1200	3	3	53	21	18	293	24	22	296
1200-1300	5	7	50	31	52	272	36	59	273
1300-1400	5	5	51	47	31	287	53	36	289
1400-1500	4	4	51	26	29	287	30	33	286
1500-1600	2	7	46	16	34	267	18	41	263
1600-1700	2	12	37	10	78	199	13	90	186
1700-1800	2	23	16	10	102	107	12	125	73
1800-1900	1	15	1	5	57	57	6	73	7
Totals	89	88		463	457		552	545	<u> </u>

Residential Vehicle Trips						
Arrivals	Departures	Accum.				
1	6	18				
3	8	12				
3	4	11				
2	3	11				
3	3	10				
3	3	10				
3	3	10				
3	3	10				
5	4	11				
5	3	13				
7	3	17				
6	3	20				
43	45					

Total Dev	Total Development Vehicle Trips						
Arrivals	Departures	Accum.					
72	13	81					
151	38	194					
111	18	288					
35	19	304					
27	25	306					
39	62	283					
55	39	299					
33	36	296					
23	45	275					
18	93	200					
19	128	90					
12	76	27					
595	590						

Developn	nent Vehicle	Remaining Budget		
Trip	Budget	After Ap	plication	
Arrivals	Departures	Arr Diff	Dep Diff	
214	142	63	104	
92	182	73	54	

**Assumptions** 

As above



#### Commercial Development

## Source: Smart Journeys Data for CB1, October 2019

	5-day Ave
Car Driver	11.3%
Car Passenger	0.3%
Taxi	0.3%
Train	22.9%
Bus	4.1%
P&R	1.4%
Walk/Run	13.0%
Cycle	46.8%
Total:	100%

## Resultant Trips for Cambridge North

	A	М	P	М
	Arr	Dep	Arr	Dep
Car Driver	116	12	14	119
Car Passenger	4	0	0	4
Taxi	4	0	0	4
Train	236	25	29	241
Bus	42	5	5	43
P&R	14	2	2	14
Walk/Run	134	14	16	137
Cycle	483	51	59	493
Total:	1033	110	125	1055

## **Residential Development**

Source: North East Cambridge AAP Transport Evidence Base Appendix B.5 C3 Mixed Private/Affordable Housing Trip Rates per Dwelling

TRICS 7.5.3 121	.018 B18.48	Database right of	TRICS Consortium Limited,	2018. All rights reserved	Tuesday 30/10/18 Page 8
Mott MacDonald	Stamford Str	reet Altrincham			Licence No: 704103

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING MULTI-MODAL TOTAL PEOPLE Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	11.0	ARRIVALS		DEPARTURES TOTALS					
Time Range	No. Davs	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				2					
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00		6		8					
06:00 - 07:00									
07:00 - 08:00	15	228	0.104	15	228	0.458	15	228	0.562
08:00 - 09:00	15	228	0.185	15	228	0.791	15	228	0.976
09:00 - 10:00	15	228	0.200	15	228	0.269	15	228	0.469
10:00 - 11:00	15	228	0.162	15	228	0.205	15	228	0.367
11:00 - 12:00	15	228	0.181	15	228	0.217	15	228	0.398
12:00 - 13:00	15	228	0.210	15	228	0.200	15	228	0.410
13:00 - 14:00	15	228	0.203	15	228	0.198	15	228	0.401
14:00 - 15:00	15	228	0.199	15	228	0.236	15	228	0.435
15:00 - 16:00	15	228	0.552	15	228	0.267	15	228	0.819
16:00 - 17:00	15	228	0.435	15	228	0.232	15	228	0.667
17:00 - 18:00	15	228	0.507	15	228	0.231	15	228	0.738
18:00 - 19:00	15	228	0.414	15	228	0.215	15	228	0.629
19:00 - 20:00						0.225			0.02.3
20:00 - 21:00									
21:00 - 22:00				- 8					
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3,352	300		3,519			6.871

Method of Travel to Work	E01017987 : Cambridge 008A	Non-car driver trips	%	
All categories: Method of travel to work	1,437	658	100%	
Work mainly at or from home	114			
Underground, metro, light rail, tram	3			
Train	122	122	19%	
Bus, minibus or coach	44	44	7%	
Taxi	1	1	0%	
Motorcycle, scooter or moped	2	2	0%	
Driving a car or van	153		0%	
Passenger in a car or van	12	12	2%	
Bicycle	252	252	38%	
On foot	224	224	34%	
Other method of travel to work	1	1	0%	
Not in employment	509			

# Total Cambridge North Development Multi-Modal Trip Generation

	А	М
	Arr	Dep
Car Driver	119	20
Car Passenger	5	6
Taxi	4	1
Train	250	86
Bus	47	26
P&R	14	2
Walk/Run	160	126
Cycle	512	177
Total:	1112	446

PM				
Arr	Dep			
21	122			
4	5			
1	4			
67	259			
19	50			
2	14			
87	169			
139	530			
341	1153			

Average Mode Share				
Car Driver	9%			
Car Passenger	1%			
Taxi	0.3%			
Train	22%			
Bus	5%			
P&R	1%			
Walk/Run	18%			
Cycle	44%			
Total:	100%			

#### TRICS Multi-modal Total People Trips

## Converting to live data

Trip Rates					
Time Period	Arr	Dep			
0700-0800	0.104	0.458			
0800-0900	0.185	0.791			
0900-1000	0.200	0.269			
1000-1100	0.162	0.205			
1100-1200	0.181	0.217			
1200-1300	0.210	0.200			
1300-1400	0.203	0.198			
1400-1500	0.199	0.236			
1500-1600	0.552	0.267			
1600-1700	0.435	0.232			
1700-1800	0.507	0.231			
1800-1900	0.414	0.215			
Total:	3.352	3.519			

Trip Ger	neration
Arr	Dep
44	195
79	336
85	114
69	87
77	92
89	85
86	84
85	100
235	113
185	99
215	98
176	91
1425	1496

Dwellings: 425

# Resultant Trips for Cambridge North

	AM			PM		Mode Share	
	Arr	Dep	Ī	Arr	Dep	iviode Share	
Car Driver	3	8		7	3	3%	
Car Passenger	1	6		4	2	2%	
Taxi	0	0		0	0	0%	
Train	14	61		39	18	18%	
Bus	5	22		14	6	6%	
Walk/Run	26	112		71	32	33%	
Cycle	29	126		80	36	37%	
Total:	79	336		215	98	100%	

Note: Car driver trips extracted from assessment. Remaining trips split according to 2011 Census data for CB1



# **Appendix F** Traffic Flow Diagrams

