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-AC	135	34	657	0.205	135	0.4	0.3	7.239	A
C-AB	97	24	903	0.107	97	0.3	0.2	4.803	A
C-A	349	87			349				
A-B	3	0.77			3				
A-C	258	64			258				

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-AC	113	28	670	0.168	113	0.3	0.2	6.787	A
C-AB	73	18	871	0.084	74	0.2	0.2	4.839	A
C-A	300	75			300				
A-B	3	0.65			3				
A-C	216	54			216				

Junction 3 - 2031, 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		0.92	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	Relationship type	Relationship
D6	2031	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2*G2

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	411	100.000
B		ONE HOUR	✓	57	100.000
C		ONE HOUR	✓	443	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	5	407
	B	8	0	49
	C	391	53	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	6.94	0.1	A	52	79
C-AB	0.13	4.77	0.3	A	85	127
C-A					322	483
A-B					4	6
A-C					373	560

Main Results for each time segment

16:00 - 16:15

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-AC	43	11	626	0.069	43	0.0	0.1	6.167	A
C-AB	61	15	831	0.074	61	0.0	0.1	4.754	A
C-A	273	68			273				
A-B	3	0.86			3				
A-C	306	77			306				

16:15 - 16:30

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-AC	51	13	608	0.085	51	0.1	0.1	6.469	A
C-AB	80	20	856	0.094	80	0.1	0.2	4.730	A
C-A	318	80			318				
A-B	4	1			4				
A-C	366	91			366				

16:30 - 16:45

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-AC	63	16	582	0.108	63	0.1	0.1	6.933	A
C-AB	112	28	892	0.126	112	0.2	0.3	4.722	A
C-A	376	94			376				
A-B	5	1			5				
A-C	448	112			448				

16:45 - 17:00

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-AC	63	16	582	0.108	63	0.1	0.1	6.936	A
C-AB	112	28	892	0.126	112	0.3	0.3	4.734	A
C-A	376	94			376				
A-B	5	1			5				
A-C	448	112			448				

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-AC	51	13	608	0.085	51	0.1	0.1	6.475	A
C-AB	81	20	856	0.094	81	0.3	0.2	4.754	A
C-A	318	80			318				
A-B	4	1			4				
A-C	366	91			366				

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-AC	43	11	626	0.069	43	0.1	0.1	6.174	A
C-AB	62	15	831	0.074	62	0.2	0.1	4.772	A
C-A	272	68			272				
A-B	3	0.86			3				
A-C	306	77			306				

Junction 3 - 2041, 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		1.90	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	Relationship type	Relationship
D7	2041	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G3

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	304	100.000
B		ONE HOUR	✓	157	100.000
C		ONE HOUR	✓	519	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	4	300
	B	11	0	146
	C	456	63	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	10
	B	5	0	5
	C	10	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.27	8.17	0.4	A	144	216
C-AB	0.15	4.83	0.4	A	110	165
C-A					367	550
A-B					3	5
A-C					275	413

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-AC	118	29	667	0.177	117	0.0	0.2	6.861	A
C-AB	78	20	878	0.089	78	0.0	0.2	4.807	A
C-A	312	78			312				
A-B	3	0.68			3				
A-C	226	57			226				

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-AC	141	35	654	0.215	141	0.2	0.3	7.362	A
C-AB	104	26	912	0.114	104	0.2	0.2	4.771	A
C-A	363	91			363				
A-B	3	0.81			3				
A-C	270	67			270				

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-AC	173	43	635	0.272	172	0.3	0.4	8.154	A
C-AB	147	37	960	0.153	146	0.2	0.4	4.756	A
C-A	425	106			425				
A-B	4	0.99			4				
A-C	331	83			331				

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-AC	173	43	635	0.272	172	0.4	0.4	8.169	A
C-AB	147	37	960	0.153	147	0.4	0.4	4.768	A
C-A	424	106			424				
A-B	4	0.99			4				
A-C	331	83			331				

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-AC	141	35	654	0.215	141	0.4	0.3	7.382	A
C-AB	104	26	912	0.114	104	0.4	0.2	4.795	A
C-A	363	91			363				
A-B	3	0.81			3				
A-C	270	67			270				

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-AC	118	29	667	0.177	118	0.3	0.2	6.889	A
C-AB	79	20	878	0.090	79	0.2	0.2	4.828	A
C-A	312	78			312				
A-B	3	0.68			3				
A-C	226	57			226				

Junction 3 - 2041, 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		0.94	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	Relationship type	Relationship
D8	2041	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2*G3

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	431	100.000
B		ONE HOUR	✓	60	100.000
C		ONE HOUR	✓	464	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	5	426
	B	8	0	51
	C	409	55	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	7.07	0.1	A	55	82
C-AB	0.14	4.77	0.3	A	91	137
C-A					335	502
A-B					4	7
A-C					391	586

Main Results for each time segment

16:00 - 16:15

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-AC	45	11	622	0.072	45	0.0	0.1	6.235	A
C-AB	66	16	837	0.078	65	0.0	0.1	4.748	A
C-A	284	71			284				
A-B	4	0.90			4				
A-C	321	80			321				

16:15 - 16:30

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-AC	54	13	602	0.089	54	0.1	0.1	6.560	A
C-AB	86	22	863	0.100	86	0.1	0.2	4.728	A
C-A	331	83			331				
A-B	4	1			4				
A-C	383	96			383				

16:30 - 16:45

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-AC	66	16	575	0.114	66	0.1	0.1	7.063	A
C-AB	122	30	901	0.135	121	0.2	0.3	4.725	A
C-A	389	97			389				
A-B	5	1			5				
A-C	469	117			469				

16:45 - 17:00

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-AC	66	16	575	0.114	66	0.1	0.1	7.066	A
C-AB	122	30	901	0.135	122	0.3	0.3	4.737	A
C-A	389	97			389				
A-B	5	1			5				
A-C	469	117			469				

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-AC	54	13	602	0.089	54	0.1	0.1	6.566	A
C-AB	87	22	863	0.100	87	0.3	0.2	4.752	A
C-A	331	83			331				
A-B	4	1			4				
A-C	383	96			383				

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-AC	45	11	622	0.072	45	0.1	0.1	6.243	A
C-AB	66	16	837	0.079	66	0.2	0.1	4.768	A
C-A	284	71			284				
A-B	4	0.90			4				
A-C	321	80			321				

Junction 3 - DO SOMETHING 2026, 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		2.08	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	Relationship type	Relationship
D11	DO SOMETHING 2026	AM	ONE HOUR	08:00	09:30	15	✓	Simple	(D1*G1) + D9+D17+D21+D23

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	285	100.000
B		ONE HOUR	✓	164	100.000
C		ONE HOUR	✓	521	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	5	280
	B	17	0	147
	C	449	71	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	10
	B	3	0	4
	C	9	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.29	8.39	0.4	A	150	225
C-AB	0.17	4.84	0.4	A	122	183
C-A					355	533
A-B					5	7
A-C					257	385

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-AC	123	31	660	0.187	122	0.0	0.2	6.968	A
C-AB	88	22	878	0.100	87	0.0	0.2	4.814	A
C-A	304	76			304				
A-B	4	0.98			4				
A-C	210	53			210				

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-AC	147	37	646	0.228	147	0.2	0.3	7.507	A
C-AB	116	29	912	0.127	116	0.2	0.3	4.794	A
C-A	352	88			352				
A-B	5	1			5				
A-C	251	63			251				

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-AC	180	45	628	0.287	180	0.3	0.4	8.371	A
C-AB	163	41	959	0.170	163	0.3	0.4	4.807	A
C-A	410	103			410				
A-B	6	1			6				
A-C	308	77			308				

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-AC	180	45	626	0.287	180	0.4	0.4	8.388	A
C-AB	163	41	959	0.170	163	0.4	0.4	4.824	A
C-A	410	102			410				
A-B	6	1			6				
A-C	308	77			308				

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-AC	147	37	646	0.228	148	0.4	0.3	7.530	A
C-AB	116	29	912	0.127	117	0.4	0.3	4.823	A
C-A	352	88			352				
A-B	5	1			5				
A-C	251	63			251				

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-AC	123	31	660	0.187	123	0.3	0.2	7.001	A
C-AB	88	22	878	0.100	88	0.3	0.2	4.835	A
C-A	304	76			304				
A-B	4	0.98			4				
A-C	210	53			210				

Junction 3 - DO SOMETHING 2026, 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		1.25	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	Relationship type	Relationship
D12	DO SOMETHING 2026	PM	ONE HOUR	16:00	17:30	15	✓	Simple	(D2*G1) +D10+D18+D22+D24

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	423	100.000
B		ONE HOUR	✓	84	100.000
C		ONE HOUR	✓	456	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	413
	B	15	0	69
	C	391	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.16	7.65	0.2	A	77	116
C-AB	0.16	4.91	0.3	A	105	158
C-A					313	470
A-B					9	13
A-C					379	569

Main Results for each time segment

16:00 - 16:15

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-AC	63	16	611	0.104	63	0.0	0.1	6.564	A
C-AB	76	19	829	0.092	75	0.0	0.2	4.853	A
C-A	267	67			267				
A-B	7	2			7				
A-C	311	78			311				

16:15 - 16:30

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-AC	76	19	591	0.128	76	0.1	0.1	6.982	A
C-AB	100	25	854	0.117	99	0.2	0.2	4.858	A
C-A	310	77			310				
A-B	8	2			8				
A-C	372	93			372				

16:30 - 16:45

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-AC	93	23	563	0.165	93	0.1	0.2	7.646	A
C-AB	139	35	889	0.157	139	0.2	0.3	4.899	A
C-A	362	91			362				
A-B	10	3			10				
A-C	455	114			455				

16:45 - 17:00

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-AC	93	23	563	0.165	93	0.2	0.2	7.653	A
C-AB	139	35	890	0.157	139	0.3	0.3	4.911	A
C-A	362	91			362				
A-B	10	3			10				
A-C	455	114			455				

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-AC	76	19	591	0.128	76	0.2	0.1	6.990	A
C-AB	100	25	854	0.117	100	0.3	0.2	4.883	A
C-A	310	77			310				
A-B	8	2			8				
A-C	372	93			372				

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-AC	63	16	611	0.104	64	0.1	0.1	6.578	A
C-AB	76	19	829	0.092	76	0.2	0.2	4.874	A
C-A	267	67			267				
A-B	7	2			7				
A-C	311	78			311				

Junction 3 - DO SOMETHING 2031, 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		2.28	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	Relationship type	Relationship
D13	DO SOMETHING 2031	AM	ONE HOUR	08:00	09:30	15	✓	Simple	(D1*G2)+D9+D17 +D19+D21+D23

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	318	100.000
B		ONE HOUR	✓	179	100.000
C		ONE HOUR	✓	613	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	5	313
	B	17	0	161
	C	522	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	9
	B	3	0	4
	C	8	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.32	8.96	0.5	A	164	246
C-AB	0.23	4.97	0.6	A	172	259
C-A					390	585
A-B					5	7
A-C					287	431

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-AC	135	34	652	0.206	133	0.0	0.3	7.212	A
C-AB	120	30	908	0.133	119	0.0	0.3	4.808	A
C-A	341	85			341				
A-B	4	1			4				
A-C	236	59			236				

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-AC	161	40	637	0.252	160	0.3	0.3	7.861	A
C-AB	162	41	948	0.171	162	0.3	0.4	4.835	A
C-A	389	97			389				
A-B	5	1			5				
A-C	281	70			281				

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-AC	197	49	615	0.320	196	0.3	0.5	8.939	A
C-AB	234	59	1005	0.233	234	0.4	0.6	4.947	A
C-A	441	110			441				
A-B	6	1			6				
A-C	345	86			345				

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-AC	197	49	615	0.320	197	0.5	0.5	8.962	A
C-AB	235	59	1006	0.233	235	0.6	0.6	4.967	A
C-A	440	110			440				
A-B	6	1			6				
A-C	345	86			345				

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-AC	161	40	637	0.252	161	0.5	0.4	7.891	A
C-AB	162	41	949	0.171	163	0.6	0.4	4.870	A
C-A	389	97			389				
A-B	5	1			5				
A-C	281	70			281				

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-AC	135	34	652	0.206	135	0.4	0.3	7.254	A
C-AB	121	30	908	0.133	121	0.4	0.3	4.839	A
C-A	341	85			341				
A-B	4	1			4				
A-C	236	59			236				

Junction 3 - DO SOMETHING 2031, 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		1.40	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	Relationship type	Relationship
D14	DO SOMETHING 2031	PM	ONE HOUR	16:00	17:30	15	✓	Simple	(D2*G2) +D10+D18+D20+D23+D24

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	483	100.000
B		ONE HOUR	✓	101	100.000
C		ONE HOUR	✓	511	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	10	474
	B	16	0	85
	C	437	75	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	4
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.20	8.20	0.3	A	93	139
C-AB	0.19	5.01	0.4	A	130	195
C-A					339	509
A-B					9	13
A-C					435	652

Main Results for each time segment

16:00 - 16:15

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-AC	76	19	604	0.126	76	0.0	0.1	6.802	A
C-AB	92	23	842	0.109	91	0.0	0.2	4.874	A
C-A	293	73			293				
A-B	7	2			7				
A-C	357	89			357				

16:15 - 16:30

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-AC	91	23	582	0.156	91	0.1	0.2	7.328	A
C-AB	123	31	870	0.141	122	0.2	0.3	4.905	A
C-A	337	84			337				
A-B	9	2			9				
A-C	426	107			426				

16:30 - 16:45

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-AC	111	28	550	0.202	111	0.2	0.3	8.192	A
C-AB	175	44	911	0.192	174	0.3	0.4	4.994	A
C-A	388	97			388				
A-B	11	3			11				
A-C	522	130			522				

16:45 - 17:00

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-AC	111	28	550	0.202	111	0.3	0.3	8.202	A
C-AB	175	44	912	0.192	175	0.4	0.4	5.009	A
C-A	388	97			388				
A-B	11	3			11				
A-C	522	130			522				

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-AC	91	23	582	0.156	91	0.3	0.2	7.343	A
C-AB	123	31	871	0.141	124	0.4	0.3	4.933	A
C-A	337	84			337				
A-B	9	2			9				
A-C	426	107			426				

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-AC	76	19	604	0.126	76	0.2	0.1	6.821	A
C-AB	93	23	843	0.110	93	0.3	0.2	4.898	A
C-A	293	73			293				
A-B	7	2			7				
A-C	357	89			357				

Junction 3 - DO SOMETHING 2041, 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		2.35	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	Relationship type	Relationship
D15	DO SOMETHING 2041	AM	ONE HOUR	08:00	09:30	15	✓	Simple	(D1*G3) + D9+D17 + D19+D21+D23

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	332	100.000
B		ONE HOUR	✓	186	100.000
C		ONE HOUR	✓	636	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	326
	B	18	0	168
	C	543	93	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	9
	B	3	0	4
	C	8	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.33	9.23	0.5	A	170	256
C-AB	0.25	5.00	0.6	A	183	275
C-A					400	600
A-B					5	8
A-C					299	449

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-AC	140	35	649	0.215	139	0.0	0.3	7.326	A
C-AB	127	32	916	0.139	126	0.0	0.3	4.806	A
C-A	352	88			352				
A-B	4	1			4				
A-C	246	61			246				

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-AC	167	42	633	0.264	167	0.3	0.4	8.028	A
C-AB	172	43	958	0.179	171	0.3	0.4	4.843	A
C-A	400	100			400				
A-B	5	1			5				
A-C	293	73			293				

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-AC	204	51	611	0.335	204	0.4	0.5	9.205	A
C-AB	251	63	1017	0.246	250	0.4	0.6	4.979	A
C-A	450	112			450				
A-B	6	2			6				
A-C	359	90			359				

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-AC	204	51	611	0.335	204	0.5	0.5	9.233	A
C-AB	251	63	1018	0.247	251	0.6	0.6	5.001	A
C-A	449	112			449				
A-B	6	2			6				
A-C	359	90			359				

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-AC	167	42	633	0.264	167	0.5	0.4	8.060	A
C-AB	172	43	958	0.180	173	0.6	0.4	4.878	A
C-A	399	100			399				
A-B	5	1			5				
A-C	293	73			293				

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-AC	140	35	649	0.215	140	0.4	0.3	7.369	A
C-AB	128	32	916	0.139	128	0.4	0.3	4.837	A
C-A	351	88			351				
A-B	4	1			4				
A-C	246	61			246				

Junction 3 - DO SOMETHING 2041, 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		1.46	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	Relationship type	Relationship
D16	DO SOMETHING 2041	PM	ONE HOUR	16:00	17:30	15	✓	Simple	(D2*G3) +D10+D18+D19+D22+D24

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	484	100.000
B		ONE HOUR	✓	96	100.000
C		ONE HOUR	✓	565	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	10	474
	B	16	0	79
	C	479	86	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	4
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.19	8.26	0.2	A	88	132
C-AB	0.23	5.08	0.6	A	159	239
C-A					359	539
A-B					9	13
A-C					435	652

Main Results for each time segment

16:00 - 16:15

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-AC	72	18	598	0.121	72	0.0	0.1	6.834	A
C-AB	111	28	863	0.129	110	0.0	0.2	4.861	A
C-A	314	79			314				
A-B	7	2			7				
A-C	357	89			357				

16:15 - 16:30

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-AC	86	22	574	0.150	86	0.1	0.2	7.369	A
C-AB	150	37	896	0.167	149	0.2	0.4	4.919	A
C-A	358	90			358				
A-B	9	2			9				
A-C	426	106			426				

16:30 - 16:45

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-AC	105	26	541	0.195	105	0.2	0.2	8.253	A
C-AB	216	54	943	0.229	215	0.4	0.6	5.065	A
C-A	406	102			406				
A-B	11	3			11				
A-C	522	130			522				

16:45 - 17:00

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-AC	105	26	541	0.195	105	0.2	0.2	8.264	A
C-AB	216	54	943	0.229	216	0.6	0.6	5.082	A
C-A	406	101			406				
A-B	11	3			11				
A-C	522	130			522				

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-AC	86	22	574	0.150	86	0.2	0.2	7.384	A
C-AB	150	37	896	0.167	151	0.6	0.4	4.951	A
C-A	358	89			358				
A-B	9	2			9				
A-C	426	106			426				

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-AC	72	18	598	0.121	72	0.2	0.1	6.853	A
C-AB	112	28	863	0.130	112	0.4	0.3	4.894	A
C-A	314	78			314				
A-B	7	2			7				
A-C	357	89			357				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

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Filename: Junction 3 - AM-PM.j9
Path: M:\Projects\19\19-020 - Malahide Road\Design\Traffic\Junction Analysis - Streamstown\Junction 3
Report generation date: 30/09/2022 09:14:48

Summary of junction performance

	AM		PM	
	Queue (Veh)	RFC	Queue (Veh)	RFC
JUNCTION 2 - 2022				
Stream B-AC	0.1	0.08	0.1	0.06
Stream C-AB	0.0	0.02	0.0	0.03
JUNCTION 2 - 2026				
Stream B-AC	0.1	0.08	0.1	0.06
Stream C-AB	0.0	0.02	0.0	0.03
JUNCTION 2 - 2031				
Stream B-AC	0.1	0.09	0.1	0.09
Stream C-AB	0.0	0.03	0.0	0.03
JUNCTION 2 - 2041				
Stream B-AC	0.1	0.10	0.1	0.07
Stream C-AB	0.0	0.03	0.0	0.04
JUNCTION 2 - DO SOMETHING 2026				
Stream B-AC	0.2	0.14	0.1	0.13
Stream C-AB	0.0	0.03	0.1	0.06
JUNCTION 2 - DO SOMETHING 2031				
Stream B-AC	0.2	0.15	0.2	0.13
Stream C-AB	0.0	0.04	0.1	0.06
JUNCTION 2 - DO SOMETHING 2041				
Stream B-AC	0.2	0.15	0.2	0.14
Stream C-AB	0.0	0.04	0.1	0.07

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

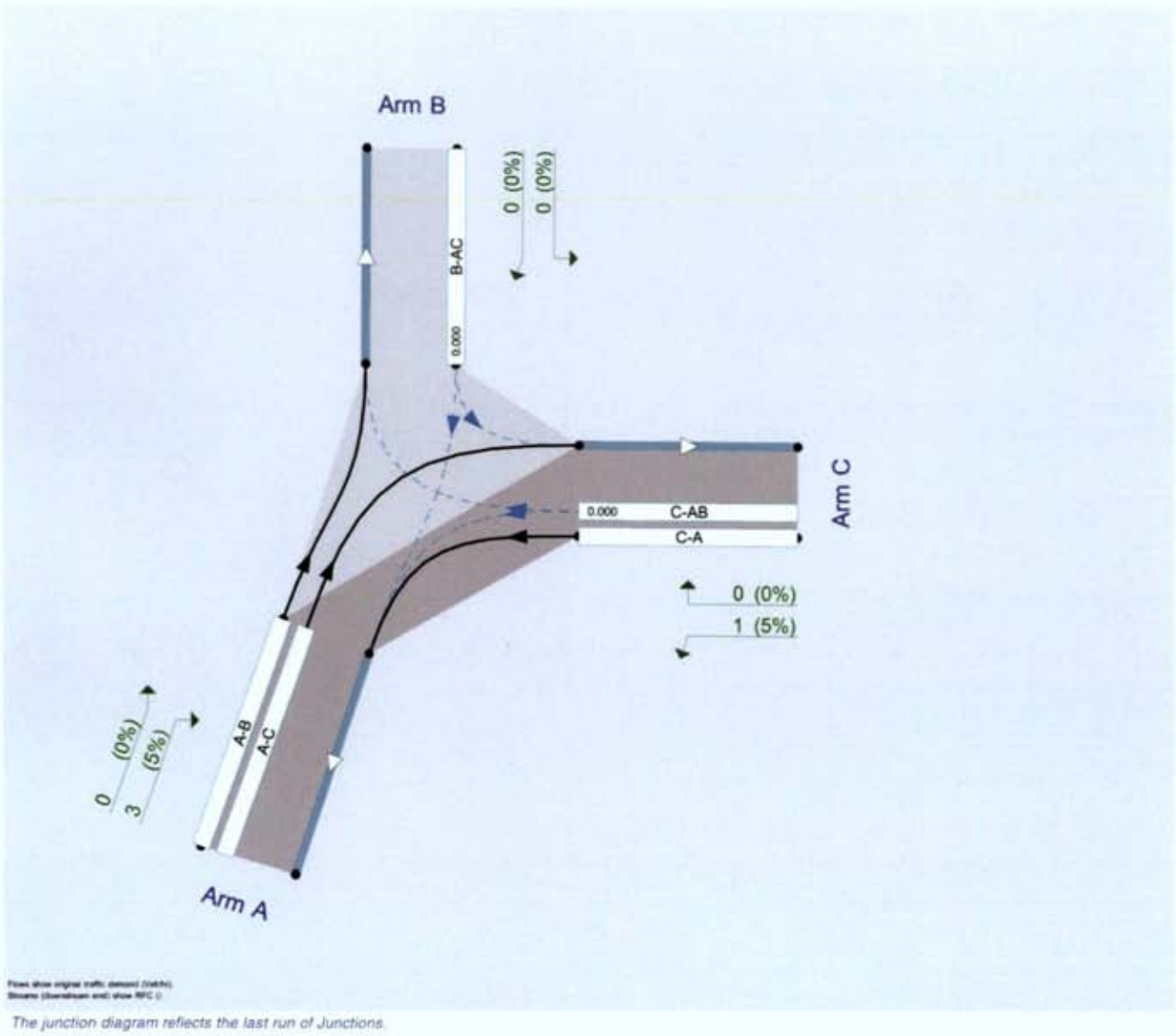
File summary

File Description

Title	
Location	
Site number	
Date	27/02/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DOMAIN\f.silva
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue 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	Relationship type	Relationship
D1	2022	AM	ONE HOUR	08:00	09:30	15	✓		
D2	2022	PM	ONE HOUR	18:00	19:30	15	✓		
D3	2026	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G1
D4	2026	PM	ONE HOUR	18:00	19:30	15	✓	Simple	D2*G1
D5	2031	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G2
D6	2031	PM	ONE HOUR	18:00	19:30	15	✓	Simple	D1*G2
D7	2041	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G3
D8	2041	PM	ONE HOUR	18:00	19:30	15	✓	Simple	D2*G3
D9	Proposed Dev. - Trips Generated	AM	ONE HOUR	08:00	09:30	15			
D10	Proposed Dev. - Trips Generated	PM	ONE HOUR	18:00	19:30	15			
D11	Broomfield Ph1	AM	ONE HOUR	08:00	09:30	15			
D12	Broomfield Ph1	PM	ONE HOUR	18:00	19:30	15			
D13	Broomfield Ph2	AM	ONE HOUR	08:00	09:30	15			
D14	Broomfield Ph2	PM	ONE HOUR	18:00	19:30	15			
D15	DO SOMETHING 2026	AM	ONE HOUR	08:00	09:30	15	✓	Simple	(D1*G1) + D9+D11
D16	DO SOMETHING 2026	PM	ONE HOUR	18:00	19:30	15	✓	Simple	(D2*G1) +D10+D12
D17	DO SOMETHING 2031	AM	ONE HOUR	08:00	09:30	15	✓	Simple	(D1*G2) + D9+D11+D13
D18	DO SOMETHING 2031	PM	ONE HOUR	18:00	19:30	15	✓	Simple	(D2*G2) +D10+D12+D14
D19	DO SOMETHING 2041	AM	ONE HOUR	08:00	09:30	15	✓	Simple	(D1*G3) + D9+D11+D13
D20	DO SOMETHING 2041	PM	ONE HOUR	18:00	19:30	15	✓	Simple	(D2*G3) +D10+D12+D14
D21	Backfield	AM	ONE HOUR	08:00	09:30	15			
D22	Backfield	PM	ONE HOUR	18:00	19:30	15			
D23	The Avenue	AM	ONE HOUR	08:00	09:30	15			
D24	The Avenue	PM	ONE HOUR	18:00	19:30	15			

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2026		1.0840
G2	2031		1.1620
G3	2041		1.2150

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	JUNCTION 2	✓	100.000	100.000

JUNCTION 2 - 2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Streamstown Lane (S)		Major
B	Carrey's Lane (N)		Minor
C	Streamstown Lane (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.50			20.0	✓	0.00

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	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.50	90	55

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	508	0.094	0.239	0.150	0.341
B-C	626	0.098	0.248	-	-
C-B	586	0.232	0.232	-	-

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 name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	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	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	105	100.000
B		ONE HOUR	✓	39	100.000
C		ONE HOUR	✓	56	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	5	100
	B	11	0	28
	C	45	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.08	7.05	0.1	A	36	54
C-AB	0.02	6.23	0.0	A	11	16
C-A					41	61
A-B					5	7
A-C					92	138

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	29	7	564	0.052	29	0.0	0.1	6.726	A
C-AB	9	2	589	0.015	9	0.0	0.0	6.203	A
C-A	33	8			33				
A-B	4	0.94			4				
A-C	75	19			75				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	9	560	0.063	35	0.1	0.1	6.862	A
C-AB	11	3	590	0.018	11	0.0	0.0	6.213	A
C-A	40	10			40				
A-B	4	1			4				
A-C	90	22			90				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	11	553	0.078	43	0.1	0.1	7.052	A
C-AB	13	3	591	0.022	13	0.0	0.0	6.229	A
C-A	48	12			48				
A-B	6	1			6				
A-C	110	28			110				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	11	553	0.078	43	0.1	0.1	7.052	A
C-AB	13	3	591	0.022	13	0.0	0.0	6.231	A
C-A	48	12			48				
A-B	6	1			6				
A-C	110	28			110				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	9	560	0.063	35	0.1	0.1	6.864	A
C-AB	11	3	590	0.018	11	0.0	0.0	6.221	A
C-A	40	10			40				
A-B	4	1			4				
A-C	90	22			90				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	29	7	564	0.052	29	0.1	0.1	6.735	A
C-AB	9	2	589	0.015	9	0.0	0.0	6.208	A
C-A	33	8			33				
A-B	4	0.94			4				
A-C	75	19			75				

JUNCTION 2 - 2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.14	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	2022	PM	ONE HOUR	18:00	19:30	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	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	56	100.000
B		ONE HOUR	✓	29	100.000
C		ONE HOUR	✓	53	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	17	39
	B	10	0	19
	C	37	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.06	6.81	0.1	A	27	40
C-AB	0.03	6.22	0.0	A	16	23
C-A					33	50
A-B					16	23
A-C					36	54

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	5	566	0.039	22	0.0	0.0	6.606	A
C-AB	13	3	594	0.021	13	0.0	0.0	6.192	A
C-A	27	7			27				
A-B	13	3			13				
A-C	29	7			29				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	7	564	0.046	26	0.0	0.0	6.692	A
C-AB	15	4	596	0.026	15	0.0	0.0	6.201	A
C-A	32	8			32				
A-B	15	4			15				
A-C	35	9			35				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	561	0.057	32	0.0	0.1	6.809	A
C-AB	19	5	598	0.032	19	0.0	0.0	6.215	A
C-A	39	10			39				
A-B	19	5			19				
A-C	43	11			43				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	561	0.057	32	0.1	0.1	6.809	A
C-AB	19	5	598	0.032	19	0.0	0.0	6.219	A
C-A	39	10			39				
A-B	19	5			19				
A-C	43	11			43				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	7	564	0.046	26	0.1	0.0	6.696	A
C-AB	15	4	596	0.026	15	0.0	0.0	6.205	A
C-A	32	8			32				
A-B	15	4			15				
A-C	35	9			35				

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	5	566	0.039	22	0.0	0.0	6.610	A
C-AB	13	3	594	0.021	13	0.0	0.0	6.194	A
C-A	27	7			27				
A-B	13	3			13				
A-C	29	7			29				

JUNCTION 2 - 2026, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.70	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	Relationship type	Relationship
D3	2026	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G1

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	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	114	100.000
B		ONE HOUR	✓	42	100.000
C		ONE HOUR	✓	61	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	5	108
	B	12	0	30
	C	49	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.08	7.14	0.1	A	39	58
C-AB	0.02	6.24	0.0	A	12	18
C-A					44	66
A-B					5	7
A-C					99	149

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	562	0.057	32	0.0	0.1	6.782	A
C-AB	10	2	589	0.016	9	0.0	0.0	6.208	A
C-A	36	9			36				
A-B	4	1			4				
A-C	82	20			82				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	38	10	557	0.068	38	0.1	0.1	6.932	A
C-AB	12	3	590	0.020	12	0.0	0.0	6.219	A
C-A	43	11			43				
A-B	5	1			5				
A-C	97	24			97				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	551	0.085	46	0.1	0.1	7.142	A
C-AB	14	4	591	0.024	14	0.0	0.0	6.236	A
C-A	52	13			52				
A-B	6	1			6				
A-C	119	30			119				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	551	0.085	47	0.1	0.1	7.142	A
C-AB	14	4	591	0.024	14	0.0	0.0	6.239	A
C-A	52	13			52				
A-B	6	1			6				
A-C	119	30			119				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	38	10	557	0.068	38	0.1	0.1	6.934	A
C-AB	12	3	590	0.020	12	0.0	0.0	6.224	A
C-A	43	11			43				
A-B	5	1			5				
A-C	97	24			97				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	562	0.057	32	0.1	0.1	6.789	A
C-AB	10	2	589	0.016	10	0.0	0.0	6.211	A
C-A	36	9			36				
A-B	4	1			4				
A-C	82	20			82				

JUNCTION 2 - 2026, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.16	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	Relationship type	Relationship
D4	2026	PM	ONE HOUR	18:00	19:30	15	✓	Simple	D2*G1

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	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	61	100.000
B		ONE HOUR	✓	31	100.000
C		ONE HOUR	✓	57	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	18	42
	B	11	0	21
	C	40	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.06	6.86	0.1	A	29	43
C-AB	0.03	6.22	0.0	A	17	25
C-A					36	54
A-B					17	25
A-C					39	58

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	24	6	565	0.042	23	0.0	0.0	6.642	A
C-AB	14	3	595	0.023	14	0.0	0.0	6.196	A
C-A	29	7			29				
A-B	14	3			14				
A-C	32	8			32				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7	563	0.050	28	0.0	0.1	6.735	A
C-AB	17	4	596	0.028	17	0.0	0.0	6.206	A
C-A	35	9			35				
A-B	17	4			17				
A-C	38	10			38				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	9	559	0.062	35	0.1	0.1	6.865	A
C-AB	21	5	599	0.034	21	0.0	0.0	6.221	A
C-A	43	11			43				
A-B	20	5			20				
A-C	47	12			47				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	9	559	0.062	35	0.1	0.1	6.865	A
C-AB	21	5	599	0.034	21	0.0	0.0	6.224	A
C-A	43	11			43				
A-B	20	5			20				
A-C	47	12			47				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7	563	0.050	28	0.1	0.1	6.739	A
C-AB	17	4	596	0.028	17	0.0	0.0	6.213	A
C-A	35	9			35				
A-B	17	4			17				
A-C	38	10			38				

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	24	6	565	0.042	24	0.1	0.0	6.646	A
C-AB	14	3	595	0.023	14	0.0	0.0	6.201	A
C-A	29	7			29				
A-B	14	3			14				
A-C	32	8			32				

JUNCTION 2 - 2031, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.72	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	Relationship type	Relationship
D5	2031	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G2

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	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	122	100.000
B		ONE HOUR	✓	45	100.000
C		ONE HOUR	✓	65	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	6	116
	B	13	0	33
	C	52	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	7.23	0.1	A	42	62
C-AB	0.03	6.25	0.0	A	13	19
C-A					47	70
A-B					5	8
A-C					107	160

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	9	560	0.061	34	0.0	0.1	6.835	A
C-AB	10	3	590	0.017	10	0.0	0.0	6.213	A
C-A	39	10			39				
A-B	4	1			4				
A-C	87	22			87				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	10	555	0.073	41	0.1	0.1	6.998	A
C-AB	12	3	591	0.021	12	0.0	0.0	6.224	A
C-A	46	12			46				
A-B	5	1			5				
A-C	104	26			104				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	12	548	0.091	50	0.1	0.1	7.228	A
C-AB	16	4	592	0.026	16	0.0	0.0	6.243	A
C-A	56	14			56				
A-B	6	2			6				
A-C	128	32			128				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	12	548	0.091	50	0.1	0.1	7.228	A
C-AB	16	4	592	0.026	16	0.0	0.0	6.248	A
C-A	56	14			56				
A-B	6	2			6				
A-C	128	32			128				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	10	555	0.073	41	0.1	0.1	7.000	A
C-AB	12	3	591	0.021	13	0.0	0.0	6.230	A
C-A	46	12			46				
A-B	5	1			5				
A-C	104	26			104				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	9	560	0.061	34	0.1	0.1	6.842	A
C-AB	10	3	590	0.018	10	0.0	0.0	6.216	A
C-A	39	10			39				
A-B	4	1			4				
A-C	87	22			87				

JUNCTION 2 - 2031, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.72	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	Relationship type	Relationship
D6	2031	PM	ONE HOUR	18:00	19:30	15	✓	Simple	D1*G2

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	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	122	100.000
B		ONE HOUR	✓	45	100.000
C		ONE HOUR	✓	65	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	6	116
	B	13	0	33
	C	52	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	7.23	0.1	A	42	62
C-AB	0.03	6.25	0.0	A	13	19
C-A					47	70
A-B					5	8
A-C					107	160

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	9	560	0.061	34	0.0	0.1	6.835	A
C-AB	10	3	590	0.017	10	0.0	0.0	6.213	A
C-A	39	10			39				
A-B	4	1			4				
A-C	87	22			87				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	10	555	0.073	41	0.1	0.1	6.998	A
C-AB	12	3	591	0.021	12	0.0	0.0	6.224	A
C-A	46	12			46				
A-B	5	1			5				
A-C	104	26			104				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	12	548	0.091	50	0.1	0.1	7.228	A
C-AB	16	4	592	0.026	16	0.0	0.0	6.243	A
C-A	56	14			56				
A-B	6	2			6				
A-C	128	32			128				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	12	548	0.091	50	0.1	0.1	7.228	A
C-AB	16	4	592	0.026	16	0.0	0.0	6.248	A
C-A	56	14			56				
A-B	6	2			6				
A-C	128	32			128				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	10	555	0.073	41	0.1	0.1	7.000	A
C-AB	12	3	591	0.021	13	0.0	0.0	6.230	A
C-A	46	12			46				
A-B	5	1			5				
A-C	104	26			104				

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	9	560	0.061	34	0.1	0.1	6.842	A
C-AB	10	3	590	0.018	10	0.0	0.0	6.216	A
C-A	39	10			39				
A-B	4	1			4				
A-C	87	22			87				

JUNCTION 2 - 2041, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.74	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	Relationship type	Relationship
D7	2041	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G3

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	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	128	100.000
B		ONE HOUR	✓	47	100.000
C		ONE HOUR	✓	68	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	6	122
	B	13	0	34
	C	55	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.10	7.29	0.1	A	43	65
C-AB	0.03	6.25	0.0	A	13	20
C-A					49	73
A-B					6	8
A-C					111	167

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	36	9	559	0.064	35	0.0	0.1	6.871	A
C-AB	11	3	590	0.018	11	0.0	0.0	6.216	A
C-A	40	10			40				
A-B	5	1			5				
A-C	91	23			91				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	11	554	0.077	43	0.1	0.1	7.043	A
C-AB	13	3	591	0.022	13	0.0	0.0	6.228	A
C-A	48	12			48				
A-B	5	1			5				
A-C	109	27			109				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	13	546	0.096	52	0.1	0.1	7.287	A
C-AB	16	4	592	0.028	16	0.0	0.0	6.248	A
C-A	59	15			59				
A-B	7	2			7				
A-C	134	33			134				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	13	546	0.096	52	0.1	0.1	7.288	A
C-AB	16	4	592	0.028	16	0.0	0.0	6.251	A
C-A	59	15			59				
A-B	7	2			7				
A-C	134	33			134				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	11	554	0.077	43	0.1	0.1	7.046	A
C-AB	13	3	591	0.022	13	0.0	0.0	6.234	A
C-A	48	12			48				
A-B	5	1			5				
A-C	109	27			109				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	36	9	559	0.064	36	0.1	0.1	6.881	A
C-AB	11	3	590	0.018	11	0.0	0.0	6.221	A
C-A	40	10			40				
A-B	5	1			5				
A-C	91	23			91				

JUNCTION 2 - 2041, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.18	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	Relationship type	Relationship
D8	2041	PM	ONE HOUR	18:00	19:30	15	✓	Simple	D2*G3

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	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	68	100.000
B		ONE HOUR	✓	35	100.000
C		ONE HOUR	✓	64	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	21	47
	B	12	0	23
	C	45	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.07	6.95	0.1	A	32	48
C-AB	0.04	6.24	0.0	A	19	29
C-A					40	60
A-B					19	28
A-C					43	65

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	27	7	564	0.047	26	0.0	0.0	6.698	A
C-AB	16	4	596	0.026	15	0.0	0.0	6.203	A
C-A	33	8			33				
A-B	16	4			16				
A-C	36	9			36				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	561	0.057	32	0.0	0.1	6.804	A
C-AB	19	5	598	0.031	19	0.0	0.0	6.214	A
C-A	39	10			39				
A-B	19	5			19				
A-C	43	11			43				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	10	556	0.070	39	0.1	0.1	6.953	A
C-AB	23	6	601	0.039	23	0.0	0.0	6.232	A
C-A	48	12			48				
A-B	23	6			23				
A-C	52	13			52				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	10	556	0.070	39	0.1	0.1	6.953	A
C-AB	23	6	601	0.039	23	0.0	0.0	6.237	A
C-A	48	12			48				
A-B	23	6			23				
A-C	52	13			52				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	561	0.057	32	0.1	0.1	6.806	A
C-AB	19	5	598	0.031	19	0.0	0.0	6.220	A
C-A	39	10			39				
A-B	19	5			19				
A-C	43	11			43				

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	27	7	564	0.047	27	0.1	0.0	6.705	A
C-AB	16	4	596	0.026	16	0.0	0.0	6.206	A
C-A	33	8			33				
A-B	16	4			16				
A-C	36	9			36				

JUNCTION 2 - DO SOMETHING 2026, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.44	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	Relationship type	Relationship
D15	DO SOMETHING 2026	AM	ONE HOUR	08:00	09:30	15	✓	Simple	(D1*G1) + D9+D11

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	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	118	100.000
B		ONE HOUR	✓	70	100.000
C		ONE HOUR	✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	7	110
	B	20	0	50
	C	53	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.14	7.64	0.2	A	64	97
C-AB	0.03	6.27	0.0	A	16	24
C-A					47	71
A-B					7	10
A-C					101	152

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	53	13	561	0.094	52	0.0	0.1	7.076	A
C-AB	13	3	591	0.022	13	0.0	0.0	6.229	A
C-A	39	10			39				
A-B	6	1			6				
A-C	83	21			83				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	556	0.114	63	0.1	0.1	7.305	A
C-AB	16	4	592	0.026	16	0.0	0.0	6.245	A
C-A	46	12			46				
A-B	7	2			7				
A-C	99	25			99				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	549	0.141	77	0.1	0.2	7.635	A
C-AB	19	5	593	0.033	19	0.0	0.0	6.269	A
C-A	56	14			56				
A-B	8	2			8				
A-C	122	30			122				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	549	0.141	77	0.2	0.2	7.638	A
C-AB	19	5	593	0.033	19	0.0	0.0	6.272	A
C-A	56	14			56				
A-B	8	2			8				
A-C	122	30			122				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	556	0.114	63	0.2	0.1	7.315	A
C-AB	16	4	592	0.026	16	0.0	0.0	6.253	A
C-A	46	12			46				
A-B	7	2			7				
A-C	99	25			99				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	53	13	561	0.094	53	0.1	0.1	7.093	A
C-AB	13	3	591	0.022	13	0.0	0.0	6.235	A
C-A	39	10			39				
A-B	6	1			6				
A-C	83	21			83				

JUNCTION 2 - DO SOMETHING 2026, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.23	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	Relationship type	Relationship
D16	DO SOMETHING 2026	PM	ONE HOUR	18:00	19:30	15	✓	Simple	(D2*G1) +D10+D12

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	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	71	100.000
B		ONE HOUR	✓	64	100.000
C		ONE HOUR	✓	72	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	24	46
	B	21	0	44
	C	42	30	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.13	7.39	0.1	A	59	89
C-AB	0.06	6.41	0.1	A	30	45
C-A					37	55
A-B					22	34
A-C					42	64

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	12	565	0.086	48	0.0	0.1	6.954	A
C-AB	24	6	594	0.041	24	0.0	0.0	6.315	A
C-A	30	8			30				
A-B	18	5			18				
A-C	35	9			35				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	14	562	0.103	58	0.1	0.1	7.137	A
C-AB	29	7	596	0.049	29	0.0	0.1	6.353	A
C-A	36	9			36				
A-B	22	5			22				
A-C	42	10			42				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	18	558	0.127	71	0.1	0.1	7.390	A
C-AB	36	9	598	0.061	36	0.1	0.1	6.406	A
C-A	44	11			44				
A-B	27	7			27				
A-C	51	13			51				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	18	558	0.127	71	0.1	0.1	7.393	A
C-AB	36	9	598	0.061	36	0.1	0.1	6.411	A
C-A	44	11			44				
A-B	27	7			27				
A-C	51	13			51				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	14	562	0.103	58	0.1	0.1	7.143	A
C-AB	29	7	596	0.049	29	0.1	0.1	6.359	A
C-A	36	9			36				
A-B	22	5			22				
A-C	42	10			42				

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	12	565	0.086	49	0.1	0.1	6.965	A
C-AB	24	6	594	0.041	24	0.1	0.0	6.323	A
C-A	30	8			30				
A-B	18	5			18				
A-C	35	9			35				

JUNCTION 2 - DO SOMETHING 2031, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.28	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	Relationship type	Relationship
D17	DO SOMETHING 2031	AM	ONE HOUR	08:00	09:30	15	✓	Simple	(D1*G2) + D9+D11+D13

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	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	131	100.000
B		ONE HOUR	✓	73	100.000
C		ONE HOUR	✓	88	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	123
	B	21	0	53
	C	71	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.15	7.78	0.2	A	67	101
C-AB	0.04	6.18	0.0	A	17	26
C-A					63	95
A-B					7	11
A-C					113	170

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	55	14	557	0.099	55	0.0	0.1	7.157	A
C-AB	14	3	598	0.023	14	0.0	0.0	6.165	A
C-A	52	13			52				
A-B	6	1			6				
A-C	93	23			93				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	66	16	552	0.120	66	0.1	0.1	7.409	A
C-AB	17	4	600	0.028	17	0.0	0.0	6.168	A
C-A	62	16			62				
A-B	7	2			7				
A-C	111	28			111				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	20	544	0.149	81	0.1	0.2	7.774	A
C-AB	21	5	604	0.035	21	0.0	0.0	6.175	A
C-A	76	19			76				
A-B	9	2			9				
A-C	136	34			136				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	20	544	0.149	81	0.2	0.2	7.778	A
C-AB	21	5	604	0.035	21	0.0	0.0	6.179	A
C-A	76	19			76				
A-B	9	2			9				
A-C	136	34			136				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	66	16	552	0.120	66	0.2	0.1	7.417	A
C-AB	17	4	600	0.028	17	0.0	0.0	6.176	A
C-A	62	16			62				
A-B	7	2			7				
A-C	111	28			111				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	55	14	557	0.099	55	0.1	0.1	7.171	A
C-AB	14	3	598	0.023	14	0.0	0.0	6.172	A
C-A	52	13			52				
A-B	6	1			6				
A-C	93	23			93				

JUNCTION 2 - DO SOMETHING 2031, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.97	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	Relationship type	Relationship
D18	DO SOMETHING 2031	PM	ONE HOUR	18:00	19:30	15	✓	Simple	(D2*G2) +D10+D12+D14

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	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	88	100.000
B		ONE HOUR	✓	67	100.000
C		ONE HOUR	✓	83	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	26	62
	B	22	0	45
	C	51	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.13	7.52	0.2	A	61	92
C-AB	0.06	6.41	0.1	A	32	47
C-A					44	66
A-B					24	35
A-C					57	86

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	562	0.089	50	0.0	0.1	7.031	A
C-AB	25	6	595	0.043	25	0.0	0.0	6.314	A
C-A	37	9			37				
A-B	19	5			19				
A-C	47	12			47				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	558	0.108	60	0.1	0.1	7.234	A
C-AB	31	8	597	0.052	31	0.0	0.1	6.352	A
C-A	43	11			43				
A-B	23	6			23				
A-C	56	14			56				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	552	0.133	73	0.1	0.2	7.517	A
C-AB	38	10	600	0.064	38	0.1	0.1	6.406	A
C-A	53	13			53				
A-B	28	7			28				
A-C	69	17			69				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	552	0.133	73	0.2	0.2	7.520	A
C-AB	38	10	600	0.064	38	0.1	0.1	6.412	A
C-A	53	13			53				
A-B	28	7			28				
A-C	69	17			69				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	558	0.108	60	0.2	0.1	7.237	A
C-AB	31	8	597	0.052	31	0.1	0.1	6.359	A
C-A	43	11			43				
A-B	23	6			23				
A-C	56	14			56				

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	561	0.089	50	0.1	0.1	7.045	A
C-AB	25	6	595	0.043	25	0.1	0.1	6.320	A
C-A	37	9			37				
A-B	19	5			19				
A-C	47	12			47				

JUNCTION 2 - DO SOMETHING 2041, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.28	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	Relationship type	Relationship
D19	DO SOMETHING 2041	AM	ONE HOUR	08:00	09:30	15	✓	Simple	(D1*G3) + D9+D11+D13

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	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	137	100.000
B		ONE HOUR	✓	75	100.000
C		ONE HOUR	✓	91	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	8	129
	B	21	0	54
	C	74	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.15	7.85	0.2	A	69	104
C-AB	0.04	6.18	0.0	A	18	27
C-A					66	98
A-B					7	11
A-C					118	177

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	14	556	0.102	56	0.0	0.1	7.197	A
C-AB	14	4	598	0.024	14	0.0	0.0	6.168	A
C-A	54	14			54				
A-B	6	2			6				
A-C	97	24			97				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	68	17	550	0.123	68	0.1	0.1	7.460	A
C-AB	18	4	600	0.029	18	0.0	0.0	6.172	A
C-A	64	16			64				
A-B	7	2			7				
A-C	116	29			116				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	83	21	542	0.153	83	0.1	0.2	7.843	A
C-AB	22	6	604	0.037	22	0.0	0.0	6.180	A
C-A	78	20			78				
A-B	9	2			9				
A-C	141	35			141				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	83	21	542	0.153	83	0.2	0.2	7.847	A
C-AB	22	6	604	0.037	22	0.0	0.0	6.184	A
C-A	78	20			78				
A-B	9	2			9				
A-C	141	35			141				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	68	17	550	0.123	68	0.2	0.1	7.471	A
C-AB	18	4	600	0.029	18	0.0	0.0	6.183	A
C-A	64	16			64				
A-B	7	2			7				
A-C	116	29			116				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	14	556	0.102	57	0.1	0.1	7.212	A
C-AB	14	4	598	0.024	14	0.0	0.0	6.175	A
C-A	54	14			54				
A-B	6	2			6				
A-C	97	24			97				

JUNCTION 2 - DO SOMETHING 2041, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.97	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	Relationship type	Relationship
D20	DO SOMETHING 2041	PM	ONE HOUR	18:00	19:30	15	✓	Simple	(D2*G3) +D10+D12+D14

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	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	91	100.000
B		ONE HOUR	✓	68	100.000
C		ONE HOUR	✓	85	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	27	64
	B	22	0	46
	C	53	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.14	7.56	0.2	A	63	94
C-AB	0.07	6.42	0.1	A	32	49
C-A					46	69
A-B					24	37
A-C					59	89

Main Results for each time segment

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	561	0.092	51	0.0	0.1	7.061	A
C-AB	26	7	596	0.044	26	0.0	0.1	6.317	A
C-A	38	10			38				
A-B	20	5			20				
A-C	48	12			48				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	557	0.110	61	0.1	0.1	7.266	A
C-AB	32	8	598	0.053	32	0.1	0.1	6.356	A
C-A	45	11			45				
A-B	24	6			24				
A-C	58	14			58				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	551	0.136	75	0.1	0.2	7.561	A
C-AB	40	10	601	0.066	40	0.1	0.1	6.412	A
C-A	54	14			54				
A-B	29	7			29				
A-C	71	18			71				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	551	0.136	75	0.2	0.2	7.564	A
C-AB	40	10	601	0.066	40	0.1	0.1	6.418	A
C-A	54	14			54				
A-B	29	7			29				
A-C	71	18			71				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	557	0.110	61	0.2	0.1	7.271	A
C-AB	32	8	598	0.053	32	0.1	0.1	6.366	A
C-A	45	11			45				
A-B	24	6			24				
A-C	58	14			58				

19:15 - 19:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	561	0.092	51	0.1	0.1	7.071	A
C-AB	26	7	596	0.044	26	0.1	0.1	6.324	A
C-A	38	10			38				
A-B	20	5			20				
A-C	48	12			48				

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Junction 4.j9
Path: M:\Projects\19\19-020 - Malahide Road\Design\Traffic\Auburn Masterplan - 2022\Junction Analysis\Junction 4
Report generation date: 06/10/2022 10:58:28

Summary of junction performance

	AM		PM	
	Queue (PCU)	RFC	Queue (PCU)	RFC
Junction 4 - 2022				
Stream B-C	0.0	0.02	0.0	0.01
Stream B-A	0.2	0.17	0.2	0.15
Stream C-AB	0.0	0.02	0.0	0.01
Junction 4 - 2026				
Stream B-C	0.0	0.02	0.0	0.02
Stream B-A	0.3	0.19	0.2	0.16
Stream C-AB	0.0	0.03	0.0	0.01
Junction 4 - 2031				
Stream B-C	0.0	0.02	0.0	0.02
Stream B-A	0.3	0.22	0.2	0.18
Stream C-AB	0.0	0.03	0.0	0.01
Junction 4 - 2041				
Stream B-C	0.0	0.02	0.0	0.02
Stream B-A	0.3	0.24	0.3	0.19
Stream C-AB	0.0	0.03	0.0	0.01
Junction 4 - DO SOMETHING 2026				
Stream B-C	0.0	0.03	0.0	0.03
Stream B-A	0.5	0.30	0.3	0.20
Stream C-AB	0.0	0.03	0.0	0.02
Junction 4 - DO SOMETHING 2031				
Stream B-C	0.0	0.03	0.0	0.03
Stream B-A	0.5	0.34	0.3	0.22
Stream C-AB	0.0	0.03	0.0	0.02
Junction 4 - DO SOMETHING 2041				
Stream B-C	0.0	0.03	0.0	0.03
Stream B-A	0.6	0.36	0.3	0.24
Stream C-AB	0.1	0.04	0.0	0.02

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

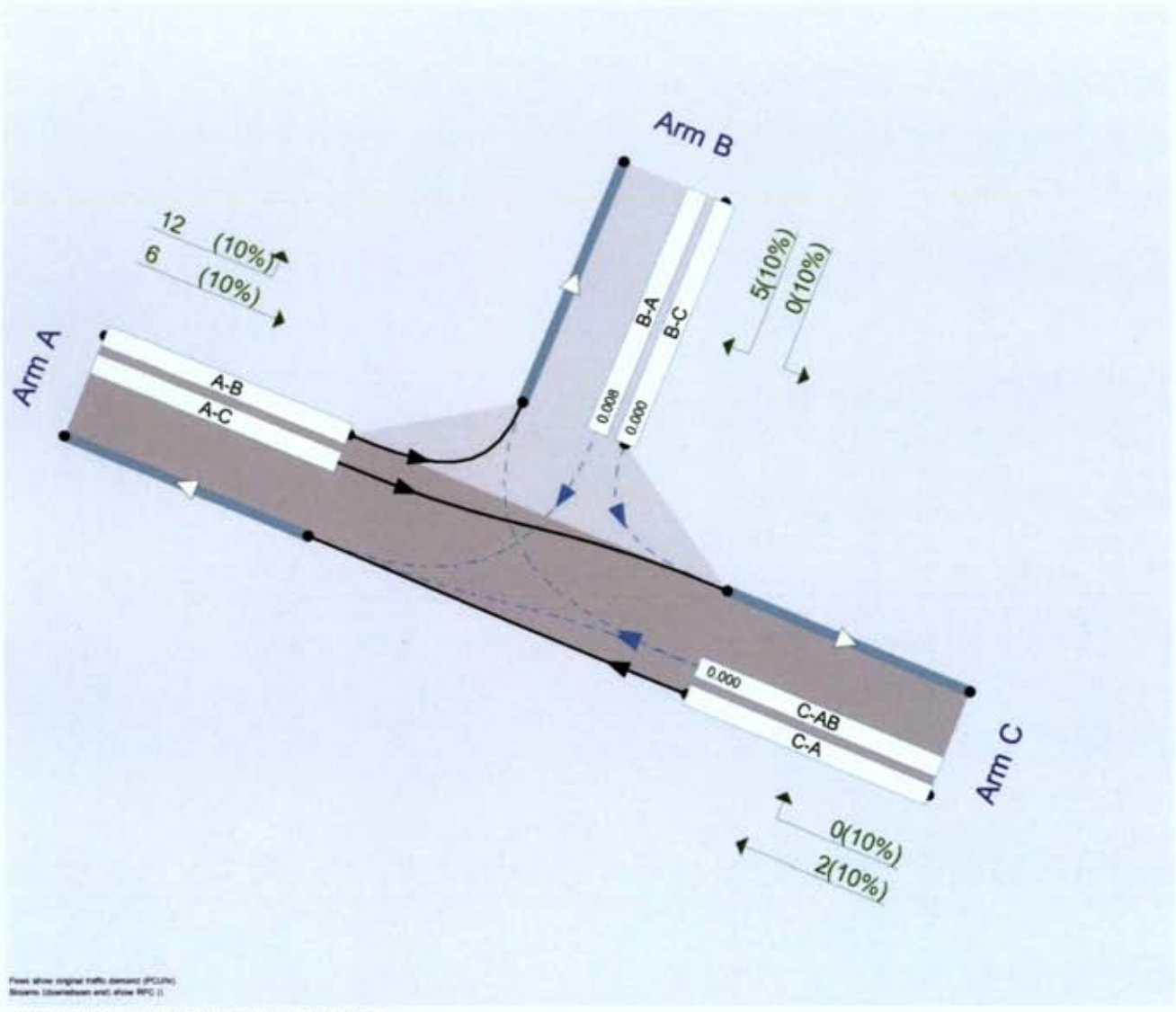
File summary

File Description

Title	
Location	
Site number	
Date	01/12/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DOMAIN\l.byrne
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue 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	Relationship type	Relationship
D1	2022	AM	ONE HOUR	08:00	09:30	15	✓		
D2	2022	PM	ONE HOUR	16:00	17:30	15	✓		
D3	2026	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G1
D4	2026	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2*G1
D5	2031	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G2
D6	2031	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2*G2
D7	2041	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G3
D8	2041	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2*G3
D9	Proposed Dev. - Trips Generated	AM	ONE HOUR	08:00	09:30	15			
D10	Proposed Dev. - Trips Generated	PM	ONE HOUR	16:00	17:30	15			
D11	Broomfield Ph1	AM	ONE HOUR	08:00	09:30	15			
D12	Broomfield Ph1	PM	ONE HOUR	16:00	17:30	15			
D13	Broomfield Ph2	AM	ONE HOUR	08:00	09:30	15			
D14	Broomfield Ph2	PM	ONE HOUR	16:00	17:30	15			
D15	DO SOMETHING 2026	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G1+D9+D11+D13+D21+D23
D16	DO SOMETHING 2026	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2*G1+D10+D12+D14+D22+D24
D17	DO SOMETHING 2031	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G2+D9+D11+D13+D21+D23
D18	DO SOMETHING 2031	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2*G2+D10+D12+D14+D22+D24
D19	DO SOMETHING 2041	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G3+D9+D11+D13+D21+D23
D20	DO SOMETHING 2041	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2*G3+D10+D12+D14+D22+D24
D21	Backfield	AM	ONE HOUR	08:00	09:30	15			
D22	Backfield	PM	ONE HOUR	16:00	17:30	15			
D23	Avenue	AM	ONE HOUR	08:00	09:30	15			
D24	Avenue	PM	ONE HOUR	16:00	17:30	15			

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2026		1.0660
G2	2031		1.1430
G3	2041		1.1960

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Junction 4	✓	100.000	100.000

Junction 4 - 2022, 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		0.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.30			148.2	✓	0.00

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	One lane plus flare	10.00	6.48	6.48	6.48	6.48		1.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	574	0.103	0.261	0.164	0.372
B-C	573	0.087	0.219	-	-
C-B	660	0.252	0.252	-	-

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 name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	558	100.000
B		ONE HOUR	✓	61	100.000
C		ONE HOUR	✓	434	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	97	461
	B	55	0	6
	C	426	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	10	10
	B	10	0	10
	C	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.02	9.35	0.0	A	6	8
B-A	0.17	13.68	0.2	B	50	76
C-AB	0.02	5.17	0.0	A	15	22
C-A					384	575
A-B					89	134
A-C					423	635

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	478	0.009	4	0.0	0.0	8.363	A
B-A	41	10	421	0.098	41	0.0	0.1	10.414	B
C-AB	10	3	776	0.013	10	0.0	0.0	5.172	A
C-A	316	79			316				
A-B	73	18			73				
A-C	347	87			347				

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	458	0.012	5	0.0	0.0	8.741	A
B-A	49	12	391	0.126	49	0.1	0.2	11.582	B
C-AB	14	3	803	0.017	14	0.0	0.0	5.018	A
C-A	376	94			376				
A-B	87	22			87				
A-C	414	104			414				

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	430	0.015	7	0.0	0.0	9.348	A
B-A	61	15	350	0.173	60	0.2	0.2	13.656	B
C-AB	20	5	842	0.024	20	0.0	0.0	4.814	A
C-A	458	114			458				
A-B	107	27			107				
A-C	508	127			508				

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	430	0.015	7	0.0	0.0	9.351	A
B-A	61	15	350	0.173	61	0.2	0.2	13.679	B
C-AB	20	5	842	0.024	20	0.0	0.0	4.816	A
C-A	458	114			458				
A-B	107	27			107				
A-C	508	127			508				

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	458	0.012	5	0.0	0.0	8.747	A
B-A	49	12	391	0.126	50	0.2	0.2	11.612	B
C-AB	14	3	803	0.017	14	0.0	0.0	5.019	A
C-A	376	94			376				
A-B	87	22			87				
A-C	414	104			414				

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	478	0.009	5	0.0	0.0	8.369	A
B-A	41	10	421	0.098	42	0.2	0.1	10.448	B
C-AB	10	3	776	0.013	10	0.0	0.0	5.174	A
C-A	316	79			316				
A-B	73	18			73				
A-C	347	87			347				

Junction 4 - 2022, 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		0.80	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	2022	PM	ONE HOUR	16:00	17:30	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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	392	100.000
B		ONE HOUR	✓	58	100.000
C		ONE HOUR	✓	410	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	48	344
	B	52	0	6
	C	407	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	10	10
	B	10	0	10
	C	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.01	8.62	0.0	A	6	8
B-A	0.15	11.74	0.2	B	48	72
C-AB	0.01	5.02	0.0	A	5	8
C-A					371	557
A-B					44	66
A-C					316	473

Main Results for each time segment

16:00 - 16:15

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	502	0.009	4	0.0	0.0	7.966	A
B-A	39	10	451	0.087	39	0.0	0.1	9.590	A
C-AB	4	0.92	792	0.005	4	0.0	0.0	5.022	A
C-A	305	76			305				
A-B	36	9			36				
A-C	259	65			259				

16:15 - 16:30

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	487	0.011	5	0.0	0.0	8.224	A
B-A	47	12	427	0.109	47	0.1	0.1	10.393	B
C-AB	5	1	821	0.006	5	0.0	0.0	4.853	A
C-A	364	91			364				
A-B	43	11			43				
A-C	309	77			309				

16:30 - 16:45

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	466	0.014	7	0.0	0.0	8.619	A
B-A	57	14	395	0.145	57	0.1	0.2	11.721	B
C-AB	7	2	862	0.008	7	0.0	0.0	4.631	A
C-A	445	111			445				
A-B	53	13			53				
A-C	379	95			379				

16:45 - 17:00

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	466	0.014	7	0.0	0.0	8.621	A
B-A	57	14	395	0.145	57	0.2	0.2	11.735	B
C-AB	7	2	862	0.008	7	0.0	0.0	4.633	A
C-A	445	111			445				
A-B	53	13			53				
A-C	379	95			379				

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	5	1	487	0.011	5	0.0	0.0	8.227	A
B-A	47	12	427	0.109	47	0.2	0.1	10.412	B
C-AB	5	1	821	0.006	5	0.0	0.0	4.853	A
C-A	364	91			364				
A-B	43	11			43				
A-C	309	77			309				

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	5	1	501	0.009	5	0.0	0.0	7.969	A
B-A	39	10	451	0.087	39	0.1	0.1	9.616	A
C-AB	4	0.92	792	0.005	4	0.0	0.0	5.022	A
C-A	305	76			305				
A-B	36	9			36				
A-C	259	65			259				

Junction 4 - 2026, 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		0.90	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	Relationship type	Relationship
D3	2026	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G1

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	595	100.000
B		ONE HOUR	✓	65	100.000
C		ONE HOUR	✓	463	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	103	491
	B	59	0	6
	C	454	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	10	10
	B	10	0	10
	C	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.02	9.60	0.0	A	6	9
B-A	0.19	14.63	0.3	B	54	81
C-AB	0.03	5.12	0.0	A	16	25
C-A					408	612
A-B					95	142
A-C					451	676

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	471	0.010	5	0.0	0.0	8.485	A
B-A	44	11	411	0.107	44	0.0	0.1	10.774	B
C-AB	11	3	785	0.014	11	0.0	0.0	5.119	A
C-A	337	84			337				
A-B	78	19			78				
A-C	370	92			370				

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	6	1	450	0.013	6	0.0	0.0	8.907	A
B-A	53	13	379	0.139	53	0.1	0.2	12.123	B
C-AB	15	4	814	0.019	15	0.0	0.0	4.957	A
C-A	400	100			400				
A-B	93	23			93				
A-C	442	110			442				

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	420	0.017	7	0.0	0.0	9.599	A
B-A	65	16	335	0.193	64	0.2	0.3	14.591	B
C-AB	23	6	857	0.026	23	0.0	0.0	4.744	A
C-A	487	122			487				
A-B	114	28			114				
A-C	541	135			541				

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	419	0.017	7	0.0	0.0	9.603	A
B-A	65	16	335	0.193	65	0.3	0.3	14.626	B
C-AB	23	6	857	0.026	23	0.0	0.0	4.746	A
C-A	487	122			487				
A-B	114	28			114				
A-C	541	135			541				

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	6	1	450	0.013	6	0.0	0.0	8.914	A
B-A	53	13	379	0.139	53	0.3	0.2	12.161	B
C-AB	15	4	814	0.019	15	0.0	0.0	4.960	A
C-A	400	100			400				
A-B	93	23			93				
A-C	442	110			442				

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	471	0.010	5	0.0	0.0	8.492	A
B-A	44	11	411	0.107	44	0.2	0.1	10.817	B
C-AB	11	3	785	0.015	11	0.0	0.0	5.121	A
C-A	337	84			337				
A-B	78	19			78				
A-C	370	92			370				

Junction 4 - 2026, 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		0.84	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	Relationship type	Relationship
D4	2026	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2*G1

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	418	100.000
B		ONE HOUR	✓	62	100.000
C		ONE HOUR	✓	437	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	51	367
	B	55	0	6
	C	434	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	10	10
	B	10	0	10
	C	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.02	8.78	0.0	A	6	9
B-A	0.16	12.30	0.2	B	51	76
C-AB	0.01	4.97	0.0	A	6	9
C-A					395	593
A-B					47	70
A-C					336	505

Main Results for each time segment

16:00 - 16:15

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	497	0.010	5	0.0	0.0	8.050	A
B-A	42	10	443	0.094	41	0.0	0.1	9.842	A
C-AB	4	1	802	0.005	4	0.0	0.0	4.963	A
C-A	325	81			325				
A-B	39	10			39				
A-C	276	69			276				

16:15 - 16:30

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	6	1	481	0.012	6	0.0	0.0	8.334	A
B-A	50	12	418	0.119	50	0.1	0.1	10.753	B
C-AB	5	1	833	0.007	5	0.0	0.0	4.786	A
C-A	387	97			387				
A-B	46	11			46				
A-C	330	82			330				

16:30 - 16:45

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	458	0.015	7	0.0	0.0	8.776	A
B-A	61	15	383	0.159	61	0.1	0.2	12.287	B
C-AB	8	2	877	0.009	8	0.0	0.0	4.554	A
C-A	473	118			473				
A-B	56	14			56				
A-C	404	101			404				

16:45 - 17:00

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	458	0.015	7	0.0	0.0	8.778	A
B-A	61	15	383	0.159	61	0.2	0.2	12.304	B
C-AB	8	2	877	0.009	8	0.0	0.0	4.554	A
C-A	473	118			473				
A-B	56	14			56				
A-C	404	101			404				

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	6	1	481	0.012	6	0.0	0.0	8.339	A
B-A	50	12	418	0.119	50	0.2	0.2	10.772	B
C-AB	5	1	833	0.007	5	0.0	0.0	4.788	A
C-A	387	97			387				
A-B	46	11			46				
A-C	330	82			330				

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	5	1	496	0.010	5	0.0	0.0	8.054	A
B-A	42	10	443	0.094	42	0.2	0.1	9.871	A
C-AB	4	1	802	0.005	4	0.0	0.0	4.966	A
C-A	325	81			325				
A-B	39	10			39				
A-C	276	69			276				

Junction 4 - 2031, 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		0.97	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	Relationship type	Relationship
D5	2031	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G2

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	638	100.000
B		ONE HOUR	✓	70	100.000
C		ONE HOUR	✓	496	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	111	527
	B	63	0	7
	C	487	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	10	10
	B	10	0	10
	C	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.02	9.93	0.0	A	6	9
B-A	0.22	15.91	0.3	C	58	87
C-AB	0.03	5.06	0.0	A	19	28
C-A					436	655
A-B					102	153
A-C					484	725

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	464	0.011	5	0.0	0.0	8.633	A
B-A	47	12	399	0.119	47	0.0	0.1	11.228	B
C-AB	13	3	796	0.016	13	0.0	0.0	5.058	A
C-A	361	90			361				
A-B	83	21			83				
A-C	397	99			397				

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	6	2	441	0.014	6	0.0	0.0	9.113	A
B-A	57	14	365	0.155	56	0.1	0.2	12.820	B
C-AB	17	4	828	0.021	17	0.0	0.0	4.887	A
C-A	428	107			428				
A-B	100	25			100				
A-C	474	118			474				

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	8	2	407	0.019	8	0.0	0.0	9.923	A
B-A	69	17	318	0.218	69	0.2	0.3	15.861	C
C-AB	26	7	875	0.030	26	0.0	0.0	4.664	A
C-A	520	130			520				
A-B	122	31			122				
A-C	580	145			580				

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	8	2	406	0.019	8	0.0	0.0	9.928	A
B-A	69	17	318	0.218	69	0.3	0.3	15.909	C
C-AB	26	7	875	0.030	26	0.0	0.0	4.664	A
C-A	520	130			520				
A-B	122	31			122				
A-C	580	145			580				

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	6	2	440	0.014	6	0.0	0.0	9.121	A
B-A	57	14	365	0.155	57	0.3	0.2	12.871	B
C-AB	18	4	828	0.021	18	0.0	0.0	4.890	A
C-A	428	107			428				
A-B	100	25			100				
A-C	474	118			474				

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	463	0.011	5	0.0	0.0	8.641	A
B-A	47	12	399	0.119	48	0.2	0.2	11.280	B
C-AB	13	3	796	0.016	13	0.0	0.0	5.059	A
C-A	361	90			361				
A-B	83	21			83				
A-C	397	99			397				

Junction 4 - 2031, 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		0.89	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	Relationship type	Relationship
D6	2031	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2*G2

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	448	100.000
B		ONE HOUR	✓	66	100.000
C		ONE HOUR	✓	469	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	55	393
	B	59	0	7
	C	465	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	10	10
	B	10	0	10
	C	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.02	8.97	0.0	A	6	9
B-A	0.18	13.04	0.2	B	55	82
C-AB	0.01	4.90	0.0	A	6	10
C-A					424	635
A-B					50	76
A-C					361	541

Main Results for each time segment

16:00 - 16:15

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	491	0.011	5	0.0	0.0	8.152	A
B-A	45	11	434	0.103	44	0.0	0.1	10.155	B
C-AB	5	1	813	0.006	5	0.0	0.0	4.897	A
C-A	348	87			348				
A-B	41	10			41				
A-C	296	74			296				

16:15 - 16:30

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	6	2	474	0.013	6	0.0	0.0	8.469	A
B-A	53	13	407	0.131	53	0.1	0.2	11.203	B
C-AB	6	2	847	0.007	6	0.0	0.0	4.710	A
C-A	415	104			415				
A-B	49	12			49				
A-C	353	88			353				

16:30 - 16:45

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	8	2	449	0.017	8	0.0	0.0	8.972	A
B-A	65	16	369	0.177	65	0.2	0.2	13.017	B
C-AB	9	2	895	0.010	9	0.0	0.0	4.467	A
C-A	507	127			507				
A-B	60	15			60				
A-C	433	108			433				

16:45 - 17:00

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	8	2	449	0.017	8	0.0	0.0	8.975	A
B-A	65	16	369	0.177	65	0.2	0.2	13.041	B
C-AB	9	2	895	0.010	9	0.0	0.0	4.467	A
C-A	507	127			507				
A-B	60	15			60				
A-C	433	108			433				

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	6	2	474	0.013	6	0.0	0.0	8.474	A
B-A	53	13	407	0.131	54	0.2	0.2	11.229	B
C-AB	6	2	847	0.007	6	0.0	0.0	4.712	A
C-A	415	104			415				
A-B	49	12			49				
A-C	353	88			353				

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	5	1	491	0.011	5	0.0	0.0	8.158	A
B-A	45	11	434	0.103	45	0.2	0.1	10.188	B
C-AB	5	1	813	0.006	5	0.0	0.0	4.899	A
C-A	348	87			348				
A-B	41	10			41				
A-C	296	74			296				

Junction 4 - 2041, 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		1.03	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	Relationship type	Relationship
D7	2041	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G3

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	667	100.000
B		ONE HOUR	✓	73	100.000
C		ONE HOUR	✓	519	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	116	551
	B	66	0	7
	C	509	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	10	10
	B	10	0	10
	C	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.02	10.18	0.0	B	7	10
B-A	0.24	16.94	0.3	C	60	91
C-AB	0.03	5.02	0.0	A	21	31
C-A					456	684
A-B					106	160
A-C					506	759

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	458	0.012	5	0.0	0.0	8.740	A
B-A	50	12	391	0.127	49	0.0	0.2	11.562	B
C-AB	14	3	803	0.017	14	0.0	0.0	5.017	A
C-A	377	94			377				
A-B	87	22			87				
A-C	415	104			415				

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	6	2	434	0.015	6	0.0	0.0	9.263	A
B-A	59	15	355	0.166	59	0.2	0.2	13.349	B
C-AB	19	5	837	0.023	19	0.0	0.0	4.840	A
C-A	448	112			448				
A-B	104	26			104				
A-C	496	124			496				

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	8	2	397	0.020	8	0.0	0.0	10.168	B
B-A	72	18	306	0.237	72	0.2	0.3	16.870	C
C-AB	29	7	888	0.032	29	0.0	0.0	4.610	A
C-A	543	136			543				
A-B	128	32			128				
A-C	607	152			607				

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	8	2	397	0.020	8	0.0	0.0	10.175	B
B-A	72	18	306	0.237	72	0.3	0.3	16.935	C
C-AB	29	7	888	0.032	29	0.0	0.0	4.610	A
C-A	543	136			543				
A-B	128	32			128				
A-C	607	152			607				

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	6	2	434	0.015	6	0.0	0.0	9.271	A
B-A	59	15	355	0.166	60	0.3	0.2	13.415	B
C-AB	19	5	837	0.023	19	0.0	0.0	4.843	A
C-A	448	112			448				
A-B	104	26			104				
A-C	496	124			496				

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	458	0.012	5	0.0	0.0	8.750	A
B-A	50	12	391	0.127	50	0.2	0.2	11.623	B
C-AB	14	3	803	0.017	14	0.0	0.0	5.017	A
C-A	377	94			377				
A-B	87	22			87				
A-C	415	104			415				

Junction 4 - 2041, 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		0.92	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	Relationship type	Relationship
D8	2041	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2*G3

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	469	100.000
B		ONE HOUR	✓	69	100.000
C		ONE HOUR	✓	490	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	57	411
	B	62	0	7
	C	487	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	10	10
	B	10	0	10
	C	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.02	9.12	0.0	A	7	10
B-A	0.19	13.60	0.3	B	57	86
C-AB	0.01	4.85	0.0	A	7	11
C-A					443	664
A-B					53	79
A-C					378	566

Main Results for each time segment

16:00 - 16:15

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	487	0.011	5	0.0	0.0	8.222	A
B-A	47	12	427	0.110	46	0.0	0.1	10.379	B
C-AB	5	1	821	0.006	5	0.0	0.0	4.851	A
C-A	364	91			364				
A-B	43	11			43				
A-C	310	77			310				

16:15 - 16:30

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	6	2	469	0.014	6	0.0	0.0	8.565	A
B-A	56	14	399	0.140	56	0.1	0.2	11.534	B
C-AB	7	2	857	0.008	7	0.0	0.0	4.658	A
C-A	434	109			434				
A-B	52	13			52				
A-C	370	92			370				

16:30 - 16:45

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	8	2	442	0.018	8	0.0	0.0	9.116	A
B-A	68	17	360	0.190	68	0.2	0.3	13.572	B
C-AB	10	2	908	0.011	10	0.0	0.0	4.408	A
C-A	530	133			530				
A-B	63	16			63				
A-C	453	113			453				

16:45 - 17:00

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	8	2	442	0.018	8	0.0	0.0	9.119	A
B-A	68	17	360	0.190	68	0.3	0.3	13.601	B
C-AB	10	2	908	0.011	10	0.0	0.0	4.408	A
C-A	530	133			530				
A-B	63	16			63				
A-C	453	113			453				

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	6	2	469	0.014	6	0.0	0.0	8.570	A
B-A	56	14	399	0.140	56	0.3	0.2	11.568	B
C-AB	7	2	857	0.008	7	0.0	0.0	4.660	A
C-A	434	109			434				
A-B	52	13			52				
A-C	370	92			370				

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	5	1	487	0.011	5	0.0	0.0	8.230	A
B-A	47	12	427	0.110	47	0.2	0.1	10.420	B
C-AB	5	1	821	0.006	5	0.0	0.0	4.851	A
C-A	364	91			364				
A-B	43	11			43				
A-C	310	77			310				

Junction 4 - DO SOMETHING 2026, 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		1.51	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	Relationship type	Relationship
D15	DO SOMETHING 2026	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G1+D9+D11+D13+D21+D23

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	605	100.000
B		ONE HOUR	✓	102	100.000
C		ONE HOUR	✓	476	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	111	493
	B	92	0	10
	C	466	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	10	10
	B	10	0	10
	C	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	10.29	0.0	B	10	14
B-A	0.30	17.19	0.5	C	84	126
C-AB	0.03	5.10	0.0	A	19	28
C-A					418	626
A-B					102	153
A-C					453	679

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	8	2	461	0.017	8	0.0	0.0	8.729	A
B-A	69	17	408	0.169	68	0.0	0.2	11.625	B
C-AB	13	3	790	0.016	13	0.0	0.0	5.098	A
C-A	345	86			345				
A-B	84	21			84				
A-C	371	93			371				

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	9	2	436	0.021	9	0.0	0.0	9.279	A
B-A	82	21	376	0.219	82	0.2	0.3	13.472	B
C-AB	18	4	820	0.021	18	0.0	0.0	4.934	A
C-A	410	103			410				
A-B	100	25			100				
A-C	444	111			444				

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	11	3	397	0.029	11	0.0	0.0	10.279	B
B-A	101	25	331	0.305	100	0.3	0.5	17.101	C
C-AB	26	6	865	0.030	26	0.0	0.0	4.719	A
C-A	498	124			498				
A-B	123	31			123				
A-C	543	136			543				

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	11	3	396	0.029	11	0.0	0.0	10.291	B
B-A	101	25	331	0.305	101	0.5	0.5	17.192	C
C-AB	26	6	865	0.030	26	0.0	0.0	4.722	A
C-A	498	124			498				
A-B	123	31			123				
A-C	543	136			543				

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	9	2	436	0.021	9	0.0	0.0	9.291	A
B-A	82	21	376	0.219	83	0.5	0.3	13.564	B
C-AB	18	4	820	0.021	18	0.0	0.0	4.937	A
C-A	410	103			410				
A-B	100	25			100				
A-C	444	111			444				

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	8	2	461	0.017	8	0.0	0.0	8.741	A
B-A	69	17	408	0.169	69	0.3	0.2	11.710	B
C-AB	13	3	790	0.016	13	0.0	0.0	5.100	A
C-A	345	86			345				
A-B	84	21			84				
A-C	371	93			371				

Junction 4 - DO SOMETHING 2026, 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		1.11	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	Relationship type	Relationship
D16	DO SOMETHING 2026	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2*G1+D10+D12+D14+D22+D24

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	451	100.000
B		ONE HOUR	✓	81	100.000
C		ONE HOUR	✓	444	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	76	375
	B	69	0	11
	C	438	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	10	10
	B	10	0	10
	C	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	9.12	0.0	A	10	16
B-A	0.20	13.23	0.3	B	64	96
C-AB	0.02	5.01	0.0	A	11	17
C-A					396	594
A-B					70	105
A-C					344	516

Main Results for each time segment

16:00 - 16:15

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	9	2	490	0.018	9	0.0	0.0	8.220	A
B-A	52	13	438	0.119	52	0.0	0.1	10.227	B
C-AB	8	2	799	0.010	8	0.0	0.0	5.007	A
C-A	326	82			326				
A-B	57	14			57				
A-C	282	71			282				

16:15 - 16:30

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	3	473	0.022	10	0.0	0.0	8.565	A
B-A	62	16	412	0.151	62	0.1	0.2	11.315	B
C-AB	11	3	829	0.013	11	0.0	0.0	4.836	A
C-A	389	97			389				
A-B	68	17			68				
A-C	337	84			337				

16:30 - 16:45

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	13	3	447	0.028	13	0.0	0.0	9.119	A
B-A	76	19	376	0.203	76	0.2	0.3	13.203	B
C-AB	15	4	874	0.017	15	0.0	0.0	4.613	A
C-A	474	118			474				
A-B	84	21			84				
A-C	413	103			413				

16:45 - 17:00

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	13	3	447	0.028	13	0.0	0.0	9.123	A
B-A	76	19	376	0.203	76	0.3	0.3	13.232	B
C-AB	15	4	874	0.017	15	0.0	0.0	4.615	A
C-A	474	118			474				
A-B	84	21			84				
A-C	413	103			413				

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	3	472	0.022	10	0.0	0.0	8.572	A
B-A	62	16	412	0.151	63	0.3	0.2	11.349	B
C-AB	11	3	829	0.013	11	0.0	0.0	4.837	A
C-A	389	97			389				
A-B	68	17			68				
A-C	337	84			337				

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	9	2	490	0.018	9	0.0	0.0	8.227	A
B-A	52	13	438	0.119	52	0.2	0.2	10.270	B
C-AB	8	2	799	0.010	8	0.0	0.0	5.009	A
C-A	326	82			326				
A-B	57	14			57				
A-C	282	71			282				

Junction 4 - DO SOMETHING 2031, 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		1.63	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	Relationship type	Relationship
D17	DO SOMETHING 2031	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G2+D9+D11+D13+D21+D23

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	648	100.000
B		ONE HOUR	✓	107	100.000
C		ONE HOUR	✓	509	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	119	529
	B	96	0	11
	C	499	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	10	10
	B	10	0	10
	C	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	10.75	0.0	B	10	15
B-A	0.34	18.99	0.5	C	88	132
C-AB	0.03	5.04	0.0	A	21	32
C-A					446	669
A-B					109	164
A-C					485	728

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	8	2	453	0.018	8	0.0	0.0	8.896	A
B-A	72	18	396	0.182	71	0.0	0.2	12.155	B
C-AB	14	4	800	0.018	14	0.0	0.0	5.037	A
C-A	369	92			369				
A-B	89	22			89				
A-C	398	100			398				

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	10	2	425	0.023	10	0.0	0.0	9.526	A
B-A	86	22	362	0.238	86	0.2	0.3	14.338	B
C-AB	20	5	834	0.024	20	0.0	0.0	4.865	A
C-A	438	109			438				
A-B	107	27			107				
A-C	475	119			475				

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	12	3	381	0.031	12	0.0	0.0	10.730	B
B-A	106	26	314	0.336	105	0.3	0.5	18.856	C
C-AB	30	7	883	0.034	30	0.0	0.0	4.641	A
C-A	531	133			531				
A-B	131	33			131				
A-C	582	146			582				

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	12	3	380	0.031	12	0.0	0.0	10.750	B
B-A	106	26	314	0.336	106	0.5	0.5	18.994	C
C-AB	30	7	883	0.034	30	0.0	0.0	4.641	A
C-A	531	133			531				
A-B	131	33			131				
A-C	582	146			582				

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	10	2	425	0.023	10	0.0	0.0	9.545	A
B-A	86	22	362	0.238	87	0.5	0.4	14.463	B
C-AB	20	5	834	0.024	20	0.0	0.0	4.868	A
C-A	438	109			438				
A-B	107	27			107				
A-C	475	119			475				

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	8	2	453	0.018	8	0.0	0.0	8.911	A
B-A	72	18	396	0.182	73	0.4	0.2	12.257	B
C-AB	14	4	800	0.018	14	0.0	0.0	5.040	A
C-A	369	92			369				
A-B	89	22			89				
A-C	398	100			398				

Junction 4 - DO SOMETHING 2031, 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		1.16	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	Relationship type	Relationship
D18	DO SOMETHING 2031	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2*G2+D10+D12+D14+D22+D24

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	481	100.000
B		ONE HOUR	✓	85	100.000
C		ONE HOUR	✓	476	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	80	401
	B	73	0	12
	C	469	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	10	10
	B	10	0	10
	C	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	9.35	0.0	A	11	16
B-A	0.22	14.09	0.3	B	67	101
C-AB	0.02	4.94	0.0	A	12	19
C-A					424	636
A-B					73	110
A-C					368	552

Main Results for each time segment

16:00 - 16:15

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	9	2	484	0.018	9	0.0	0.0	8.328	A
B-A	55	14	429	0.129	55	0.0	0.2	10.563	B
C-AB	9	2	810	0.011	9	0.0	0.0	4.940	A
C-A	349	87			349				
A-B	60	15			60				
A-C	302	76			302				

16:15 - 16:30

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	11	3	465	0.023	11	0.0	0.0	8.713	A
B-A	66	17	401	0.165	66	0.2	0.2	11.814	B
C-AB	12	3	843	0.014	12	0.0	0.0	4.759	A
C-A	416	104			416				
A-B	72	18			72				
A-C	361	90			361				

16:30 - 16:45

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	13	3	437	0.030	13	0.0	0.0	9.345	A
B-A	81	20	362	0.223	80	0.2	0.3	14.049	B
C-AB	17	4	892	0.019	17	0.0	0.0	4.525	A
C-A	507	127			507				
A-B	88	22			88				
A-C	442	110			442				

16:45 - 17:00

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	13	3	437	0.030	13	0.0	0.0	9.349	A
B-A	81	20	362	0.223	81	0.3	0.3	14.088	B
C-AB	17	4	892	0.019	17	0.0	0.0	4.527	A
C-A	507	127			507				
A-B	88	22			88				
A-C	442	110			442				

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	11	3	465	0.023	11	0.0	0.0	8.719	A
B-A	66	17	401	0.165	66	0.3	0.2	11.855	B
C-AB	12	3	843	0.014	12	0.0	0.0	4.760	A
C-A	416	104			416				
A-B	72	18			72				
A-C	361	90			361				

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	9	2	484	0.018	9	0.0	0.0	8.338	A
B-A	55	14	429	0.129	56	0.2	0.2	10.614	B
C-AB	9	2	810	0.011	9	0.0	0.0	4.942	A
C-A	349	87			349				
A-B	60	15			60				
A-C	302	76			302				

Junction 4 - DO SOMETHING 2041, 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		1.72	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	Relationship type	Relationship
D19	DO SOMETHING 2041	AM	ONE HOUR	08:00	09:30	15	✓	Simple	D1*G3+D9+D11+D13+D21+D23

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	677	100.000
B		ONE HOUR	✓	110	100.000
C		ONE HOUR	✓	532	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	124	553
	B	99	0	11
	C	521	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	10	10
	B	10	0	10
	C	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	11.12	0.0	B	10	15
B-A	0.36	20.47	0.6	C	91	136
C-AB	0.04	5.00	0.1	A	23	35
C-A					465	698
A-B					114	171
A-C					508	762

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	8	2	447	0.019	8	0.0	0.0	9.018	A
B-A	74	19	388	0.192	73	0.0	0.3	12.547	B
C-AB	15	4	808	0.019	15	0.0	0.0	4.996	A
C-A	385	96			385				
A-B	93	23			93				
A-C	417	104			417				

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	10	3	418	0.024	10	0.0	0.0	9.710	A
B-A	89	22	352	0.252	88	0.3	0.4	14.999	B
C-AB	21	5	843	0.025	21	0.0	0.0	4.818	A
C-A	457	114			457				
A-B	111	28			111				
A-C	497	124			497				

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	12	3	369	0.033	12	0.0	0.0	11.090	B
B-A	109	27	302	0.360	108	0.4	0.6	20.287	C
C-AB	33	8	895	0.036	32	0.0	0.1	4.588	A
C-A	553	138			553				
A-B	137	34			137				
A-C	609	152			609				

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	12	3	368	0.033	12	0.0	0.0	11.117	B
B-A	109	27	302	0.360	109	0.6	0.6	20.466	C
C-AB	33	8	895	0.036	33	0.1	0.1	4.589	A
C-A	553	138			553				
A-B	137	34			137				
A-C	609	152			609				

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	10	3	417	0.024	10	0.0	0.0	9.733	A
B-A	89	22	352	0.252	90	0.6	0.4	15.158	C
C-AB	21	5	843	0.025	22	0.1	0.0	4.819	A
C-A	457	114			457				
A-B	111	28			111				
A-C	497	124			497				

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	8	2	447	0.019	8	0.0	0.0	9.035	A
B-A	74	19	388	0.192	75	0.4	0.3	12.667	B
C-AB	16	4	808	0.019	16	0.0	0.0	4.999	A
C-A	385	96			385				
A-B	93	23			93				
A-C	417	104			417				

Junction 4 - DO SOMETHING 2041, 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		1.20	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	Relationship type	Relationship
D20	DO SOMETHING 2041	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D2*G3+D10+D12+D14+D22+D24

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	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	502	100.000
B		ONE HOUR	✓	88	100.000
C		ONE HOUR	✓	497	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	82	419
	B	76	0	12
	C	491	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	10	10
	B	10	0	10
	C	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	9.52	0.0	A	11	17
B-A	0.24	14.74	0.3	B	70	105
C-AB	0.02	4.89	0.0	A	13	20
C-A					443	665
A-B					76	113
A-C					385	577

Main Results for each time segment

16:00 - 16:15

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	9	2	480	0.019	9	0.0	0.0	8.405	A
B-A	57	14	422	0.136	57	0.0	0.2	10.809	B
C-AB	9	2	818	0.011	9	0.0	0.0	4.894	A
C-A	365	91			365				
A-B	62	16			62				
A-C	316	79			316				

16:15 - 16:30

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	11	3	460	0.024	11	0.0	0.0	8.819	A
B-A	68	17	393	0.174	68	0.2	0.2	12.184	B
C-AB	12	3	853	0.014	12	0.0	0.0	4.707	A
C-A	435	109			435				
A-B	74	19			74				
A-C	377	94			377				

16:30 - 16:45

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	13	3	430	0.031	13	0.0	0.0	9.512	A
B-A	84	21	352	0.238	83	0.2	0.3	14.699	B
C-AB	18	5	905	0.020	18	0.0	0.0	4.466	A
C-A	530	132			530				
A-B	91	23			91				
A-C	462	115			462				

16:45 - 17:00

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	13	3	429	0.031	13	0.0	0.0	9.518	A
B-A	84	21	352	0.238	84	0.3	0.3	14.742	B
C-AB	18	5	905	0.020	18	0.0	0.0	4.466	A
C-A	530	132			530				
A-B	91	23			91				
A-C	462	115			462				

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	11	3	460	0.024	11	0.0	0.0	8.826	A
B-A	68	17	393	0.174	69	0.3	0.2	12.233	B
C-AB	12	3	853	0.014	12	0.0	0.0	4.708	A
C-A	435	109			435				
A-B	74	19			74				
A-C	377	94			377				

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	9	2	480	0.019	9	0.0	0.0	8.414	A
B-A	57	14	422	0.136	58	0.2	0.2	10.864	B
C-AB	9	2	818	0.011	9	0.0	0.0	4.894	A
C-A	365	91			365				
A-B	62	16			62				
A-C	316	79			316				

APPENDIX 14.1 SUMMARY OF RELEVANT LEGISLATION

National Monuments Legislation 1930-2004

All archaeological sites have the full protection of the national monuments legislation (Principal Act 1930; Amendments 1954, 1987, 1994 and 2004). In the 1987 Amendment of Section 2 of the Principal Act (1930), the definition of a national monument is specified as:

any artificial or partly artificial building, structure or erection or group of such buildings, structures or erections:

- any artificial cave, stone or natural product, whether forming part of the ground, that has been artificially carved, sculptured or worked upon or which (where it does not form part of the place where it is) appears to have been purposely put or arranged in position, any, or any part of any, prehistoric or ancient (i) tomb, grave or burial deposit, or (ii) ritual, industrial or habitation site, and
- any place comprising the remains or traces of any such building, structure or erection, any cave, stone or natural product or any such tomb, grave, burial deposit or ritual, industrial or habitation site...

Under Section 14 of the Principal Act (1930):

It shall be unlawful...
to demolish or remove wholly or in part or to disfigure, deface, alter, or in any manner injure or interfere with any such national monument without or otherwise than in accordance with the consent hereinafter mentioned (a licence issued by the Office of Public Works National Monuments Branch), or
to excavate, dig, plough or otherwise disturb the ground within, around, or in the proximity to any such national monument without or otherwise than in accordance...

Under Amendment to Section 23 of the Principal Act (1930),
A person who finds an archaeological object shall, within four days after the finding, make a report of it to a member of the Garda Síochána...or the Director of the National Museum...

The latter is of relevance to any finds made during a watching brief.
In the 1994 Amendment of Section 12 of the Principal Act (1930), all of the sites and 'places' recorded by the Sites and Monuments Record of the Office of Public Works are provided with a new status in law. This new status provides a level of protection to the listed sites that is equivalent to that accorded to 'registered' sites [Section 8(1), National Monuments Amendment Act 1954] as follows:

- The Commissioners shall establish and maintain a record of monuments and places where they believe there are monuments, and the record shall be comprised of a list of monuments and such places and a map or maps showing each monument and such place in respect of each county in the State.

- The Commissioners shall cause to be exhibited in a prescribed manner in each county the list and map or maps of the county drawn up and publish in a prescribed manner information about when and where the lists and maps may be consulted.

In addition, when the owner or occupier (not being the Commissioners) of a monument or place which has been recorded, or any person proposes to carry out, or to cause or permit the carrying out of, any work at or in relation to such monument or place, he shall give notice in writing of his proposal to carry out the work to the Commissioners and shall not, except in the case of urgent necessity and with the consent of the Commissioners, commence the work for a period of two months after having given the notice.

The National Monuments Amendment Act 2004

The National Monuments Amendment Act enacted in 2004 provides clarification in relation to the division of responsibilities between the Minister of Environment, Heritage and Local Government, Finance and Arts, Sports and Tourism together with the Commissioners of Public Works. The Minister of Environment, Heritage and Local Government will issue directions relating to archaeological works and will be advised by the National Monuments Section and the National Museum of Ireland.

The Act gives discretion to the Minister of Environment, Heritage and Local Government to grant consent or issue directions in relation to road developments (Section 49 and 51) approved by An Bord Pleanála and/or in relation to the discovery of National Monuments

14A. (1) The consent of the Minister under section 14 of this Act and any further consent or licence under any other provision of the National Monuments Acts 1930 to 2004 shall not be required where the works involved are connected with an approved road development.

(2) Any works of an archaeological nature that are carried out in respect of an approved road development shall be carried out in accordance with the directions of the Minister, which directions shall be issued following consultation by the minister with the Director of the National Museum of Ireland.

Subsection 14A (4) Where a national monument has been discovered to which subsection (3) of this section relates, then

the road authority carrying out the road development shall report the discovery to the Minister subject to subsection (7) of this section, and pending any directions by the minister under paragraph (d) of this subsection, no works which would interfere with the monument shall be carried out, except works urgently required to secure its preservation carried out in accordance with such measures as may be specified by the Minister

The Minister will consult with the Director of the National Museum of Ireland for a period not longer than 14 days before issuing further directions in relation to the national monument.

The Minister will not be restricted to archaeological considerations alone, but will also consider the wider public interest.

Planning and Development Act, 2000

Structures of architectural, cultural, scientific, historical or archaeological interest can also be protected under the Planning and Development Act, 2000.

This act provides for the inclusion of protected structures into the planning authorities' development plans and sets out statutory regulations regarding works affecting such structures. Under the new legislation, no distinction is made between buildings formerly classified under development plans as List 1 and List 2. Such buildings are now all regarded as 'protected structures'.

The act defines a 'protected structure' as follows:

(a) a structure, or
(b) a specified part of a structure, which is included in a record of protected structures, and, where that record so indicates, includes any specified feature which is within the attendant grounds of the structure and which would not otherwise be included in this definition.
'Protection', in relation to a structure or part of a structure, includes conservation, preservation, and improvement compatible with maintaining the character and interest of the structure or part; Part IV of the act deals with architectural heritage, and Section 57 deals specifically with works affecting the character of protected structures or proposed protected structures.

...the carrying out of works to a protected structure, or a proposed protected structure, shall be exempted development only if those works would not materially affect the character of— (a) the structure, or
(b) any element of the structure which contributes to its special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest.

Section 58, subsection 4 states that: Any person who, without lawful authority, causes damage to a protected structure or a proposed protected structure shall be guilty of an offence.

APPENDIX 14.2 GLOSSARY OF IMPACT ASSESSMENT

Glossary of Impacts

Types of Impacts

Potential impacts on the receiving archaeological and cultural heritage environment can be described as direct physical impacts, indirect physical impacts, and impacts on setting (i.e., the surroundings in which an archaeological / cultural heritage asset can be experienced; Historic England 2017).

Direct physical impacts are those development activities that directly cause damage to the fabric of an archaeological / cultural heritage asset. Typically, these activities are related to construction works; e.g. they could include excavation of foundations, earthmoving / site preparation creation of access roads, cycle paths, and the excavation of service trenches.

Indirect physical impacts are those processes, triggered by development activity, that lead to the degradation of archaeological / cultural heritage assets.

Impacts on the setting of archaeological / cultural heritage assets describe how the presence of a development changes the surroundings of an asset in such a way that it affects (positively or negatively) the heritage significance of that asset. Visual impacts are most commonly encountered. Such impacts may be encountered at all stages in the life cycle of a development, but they are only likely to be considered significant during the prolonged operational life of the development.

Types of impact, as defined by the Draft EPA Guidelines on Information to be Contained in Environmental Impact Assessment Reports (hereafter referred to as the EPA Guidelines) (EPA 2017):

Cumulative Impact – The addition of many small impacts to create one larger, more significant, impact.
Do Nothing Impact – The environment as it would be in the future should no development of any kind be carried out.
Indeterminable Impact – When the full consequences of a change in the environment cannot be described.
Irreversible Impact – When the character, distinctiveness, diversity or reproductive capacity of an environment is permanently lost.
Residual Impact – The degree of environmental change that will occur after the proposed mitigation measures have taken impact.
'Worst case' Impact – The impacts arising from a development in the case where mitigation measures substantially fail.
Indirect or Secondary Impacts – Impacts that arise off-site or are caused by other parties that are not under the control of the developer. Impacts which are caused by the interaction of impacts, or by associated or off-site projects.

Quality of Impacts

Impacts on the archaeological and cultural heritage environment are assessed in terms of their quality, i.e., positive, negative, neutral:

- Negative Impact: A change that will detract from or permanently remove an archaeological monument / cultural heritage asset from the landscape;
- Neutral Impact: A change that does not affect archaeological and cultural heritage heritage; and
- Positive Impact: A change that improves or enhances the setting of an archaeological / cultural heritage asset.

Duration of Impacts

The duration of an impact can be as follows:

- Temporary Impact — Impact lasting for one year or less;
- Short-term Impacts — Impact lasting one to seven years;
- Medium-term Impact — Impact lasting seven to fifteen years;
- Long-term Impact — Impact lasting fifteen to sixty years; and
- Permanent Impact — Impact lasting over sixty years.

Assessment Criteria

Introduction

This assessment methodology has regard to the EPA assessment criteria (EPA 2017) and to the National Roads Authority (NRA) Guidelines for the Assessment of Archaeological Heritage Impact of National Road Schemes (hereafter referred to as the NRA Guidelines) (NRA 2005).

Archaeological and cultural heritage sites are a non-renewable resource and such assets are generally considered to be location sensitive. In this context, any change to their environment, such as construction activity and ground disturbance works, could adversely affect these sites.

Significance / Sensitivity Criteria

In accordance with EPA Guidelines (EPA 2017), the context, character, significance and sensitivity of each archaeological / cultural heritage asset requires evaluation and the significance of the impact is then determined by considering the significance / sensitivity of the asset and the predicted magnitude of the impact.

In accordance with the NRA Guidelines (NRA 2005), the significance criteria used to evaluate an archaeological site, monument or complex take into account the character and integrity of the asset and any available data regarding it. This can be ascertained by looking at the following criteria cited in the NRA Guidelines (NRA 2005): the existing status (level of protection), condition or preservation, documentation or historical significance, group value, rarity, visibility in the landscape, fragility or vulnerability, and amenity value (Table 1). While these criteria contribute to the significance of a feature they should not be treated as definitive. These criteria are indicators which contribute to a wider judgement based on the individual circumstances of these archaeological/cultural heritage assets.

Table 1: Explanation of Archaeology and Cultural Heritage Asset Assessment Criteria

Criteria	Explanation
Existing Status	The level of protection associated with an archaeological / cultural heritage asset is an important consideration.
Condition / Preservation / Integrity	The survival of an archaeological / cultural heritage asset's archaeological potential both above and below ground is an important consideration and should be assessed in relation to its present condition and surviving features. Well-preserved sites should be highlighted, this assessment can only be based on a field inspection.
Documentation / Data	The significance of a an archaeological / cultural heritage asset may be enhanced by the existence of records of previous investigations or contemporary documentation supported by written evidence or historic maps. Sites with a definite historical association or an example of a notable event or person should be highlighted.
Group Value / Character	The value of a single an archaeological / cultural heritage asset may be greatly enhanced by its association with related contemporary monuments or with monuments from different periods indicating an extended time presence in any specific area. In some cases, it may be preferable to protect the complete group, including associated and adjacent land, rather than to protect isolated monuments within that group.
Rarity / Character	The rarity of some an archaeological / cultural heritage asset types can be a central factor affecting response strategies for development, whatever the condition of the individual feature. It is important to recognise sites that have a limited distribution.
Visibility in the landscape/ Character / Integrity	Archaeological / cultural heritage assets that are highly visible in the landscape have a heightened physical presence. The inter-visibility between monuments may also be explored in this category.
Fragility / Vulnerability / Integrity	It is important to assess the level of threat to an archaeological / cultural heritage asset from erosion, natural degradation, agricultural activity, land clearance, neglect, careless treatment or development.
Amenity Value / Character	Regard should be taken of the existing and potential amenity value of a an archaeological / cultural heritage asset.

An evaluation of the significance / sensitivity of archaeological / cultural heritage assets is based on their designation and on the extent to which these assets contribute to the archaeological or cultural heritage environment, though their individual or group qualities, either directly or potentially. Table 2 presents the scale of significance / sensitivity together with criteria. It has been compiled by Courtney Deery Heritage Consultancy Ltd, based on standard authorities and guidelines. Undesignated archaeological or cultural heritage sites can be assigned a low, medium or high sensitivity value, taking into consideration the criteria cited in Table 1 (e.g., condition, character, integrity or preservation, data, group value, rarity, visibility in the landscape, fragility or vulnerability, and amenity value).

Table 2: Significance / Sensitivity Criteria

Sensitivity / Significance	Criteria
High	Sites of international significance: World Heritage Sites. National Monuments. Protected Structures (assessed by the NIAH to be of international and national importance), where these are also National Monuments. Undesignated archaeological and cultural heritage sites.
Medium	Recorded Monuments (RMP sites & SMR sites scheduled for inclusion in the next revision of the RMP) Protected Structures / NIAH sites (assessed by the NIAH to be of regional importance), where these are also Recorded Monuments. Newly identified archaeological sites, confirmed through archaeological investigation, to be added to the SMR. Undesignated archaeological and cultural heritage sites.
Low	Industrial Heritage Sites and National Inventory of Architectural Heritage (NIAH) Building sites for which there are no upstanding remains. Undisturbed greenfield areas and riverine environs, which have an inherent archaeological potential. Undesignated archaeological and cultural heritage sites.
Negligible	Assets with very little or no surviving archaeological and / or cultural heritage interest.

National Monument

The National Monuments Act (1930, Section 2) defines a 'National Monument' as *'a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto'*.

The National Monuments legislation legally protects access to and the visual amenity associated with National Monuments and requires consent from the Minister for invasive works in their vicinity.

The defences / town walls of medieval Dublin are a National Monument in accordance with national policy on town defences (Department of Environment, Heritage and Local Government 2008).

Recorded Monuments

The primary source of information for archaeology is the Record of Monuments and Places (RMP) maintained by the Department of Housing, Local Government and Heritage (DHLGH). The RMP documents known upstanding archaeological monuments, their original location (in cases of destroyed monuments) and the position of possible sites in rural areas identified as cropmarks on vertical aerial photographs dating to before 1700 AD (with some later ones also being included). It is based on a comprehensive range of published and publicly available documentary and cartographic sources.

For the purpose of the assessment, the Sites and Monument Record (SMR) data and mapping as updated by the Archaeological Survey of Ireland (www.archaeology.ie) was examined so it could be used within an interactive identification and mapping system developed for Proposed Project.

Zones of Archaeological Potential

Zones of archaeological potential (ZAP) can be defined as areas within the urban and rural landscape that possess the potential to contain archaeological remains due to the settlement history of a place and or to the presence of topographical features such as rivers, lakes and high, defendable ground. An example of this is the RMP designated Historic City of Dublin, which is designated as a zone of archaeological potential covering an extensive area (RMP DU018-020). Other examples include historic settlements recorded at Donnybrook, Bray, Finglas, Kilmainham, Chapelizod and Tallaght. For the purpose of the assessment, ZAPs with statutory protection (i.e., contained in the RMP) were considered.

Non-Designated Sites

Newly identified archaeological sites that have been confirmed through archaeological investigation (monitoring, testing, excavation, geophysical survey) are considered to be of medium importance. Such sites are undesignated as they have yet to be added to the SMR.

Potential or undesignated archaeological sites identified through aerial photography, historic mapping, stray finds are considered to be of low sensitivity, as they have yet to be ground-truthed through archaeological investigation. Similarly, undisturbed greenfield areas and riverine environs, which have an inherent but as yet unproven archaeological potential are considered to be of low sensitivity.

Where there are no upstanding remains of industrial heritage sites, the survival of below-ground sites cannot be confirmed; as such the sensitivity is considered to be low.

Magnitude of Impact

When assessing the impact magnitude, the following criteria need to be considered:

- Extent – size, scale and spatial distributions of the impact;
- Duration – period of time over which the impact will occur;
- Frequency – how often the impact will occur; and
- Context – how will the extent, duration and frequency contrast with the accepted baseline conditions (see Table 1).

Table 3: Magnitude of Impact Criteria

Impact Magnitude	Criteria
High	These impacts arise where an archaeological / cultural heritage asset is completely and irreversibly destroyed by a proposed development. A change such that the value of the asset is totally altered or destroyed, leading to a complete loss of character, integrity and data about the site.
Medium	An impact which, by its magnitude, duration or intensity alters an important / significant aspect of the environment. An impact like this would be where an archaeological / cultural heritage asset would be impacted upon leading to a significant loss of character, integrity and data about the site. Or an impact which by its magnitude results in the partial loss of a historic structure (including fabric loss or alteration) or grounds including the part removal of buildings or features or part

Impact Magnitude	Criteria
	removal of demesne land (e.g. severance, visual intrusion or degradation of setting and amenity). A permanent positive impact that enhances or restores the character and / or setting of a cultural heritage site or upstanding archaeological heritage site in a clearly noticeable manner.
Low	A low impact arises where a change to the site is proposed which though noticeable is not such that the archaeological / cultural heritage character / integrity of the site is significantly compromised, and where there is no significant loss of data about the site. A positive impact that results in partial enhancement of the character and / or setting of a cultural heritage site or upstanding archaeological heritage site in the medium to long-term.
Negligible	An impact which causes very minor changes in the character of the environment and does not directly impact an archaeological / cultural heritage asset, or affect the appreciation or significance of the asset. There would be very minor changes to the character and integrity of the asset and no loss of data about the site.

Significance of Impact

The Draft EPA Revised Guidelines on the Information to be Contained in Environmental Impact Statements (EIS) (EPA 2015) added the two additional levels of significance of impact: Very Significant and Not Significant (Table 4 and Image 1).

Table 4: Significance of Impacts (EPA 2015)

Significance of Impact	Description
Very Significant	An impact which by its character, magnitude, duration or intensity significantly alters the majority of a sensitive aspect of the environment, for example in this case a monument
Not Significant	An impact which causes noticeable changes in the character of the environment but without noticeable consequences.

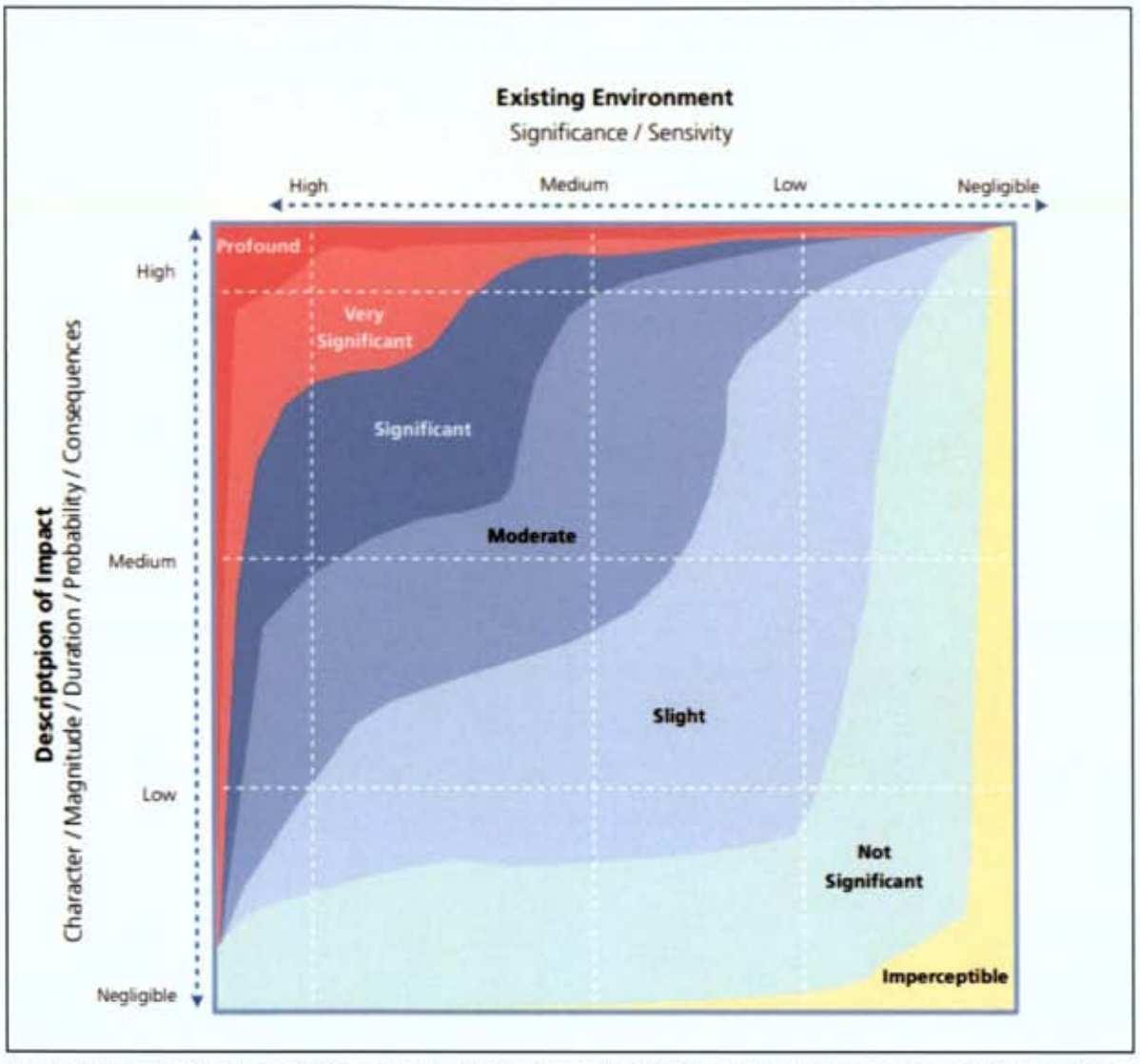


Image 1: Figure 3.5 Description of Impacts from the Draft EPA Revised Guidelines on Information to be Contained in EIS (EPA 2015)

The likely significance of impacts is determined by considering the baseline rating or sensitivity value of the asset upon which the impact has an impact and the magnitude of the impact (Image 1). The impact significance is defined as Imperceptible, Not Significant, Slight, Moderate, Significant, Very Significant, or Profound (Table 5).

Table 5: Defining Significance of Impacts

Impact	Definition
Imperceptible	An impact capable of measurement but without noticeable consequences.
Not Significant	An impact which causes noticeable changes in the character of the environment but without significant consequences.
Slight	An impact which causes minor changes in the character of the environment and does not affect an archaeological / cultural heritage asset in a moderate or significant manner.

Moderate	A moderate impact arises where a change to the site is proposed which though noticeable, does not lead to a significant loss of character, integrity and data about the archaeological / cultural heritage asset.
Significant	An impact which, by its magnitude, duration or intensity, alters an important aspect of the environment. An impact like this would be where part or all of a site would be permanently impacted upon, leading to a significant loss of character, integrity and data about the archaeological / cultural heritage asset.
Very Significant	An impact which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
Profound	Applies where mitigation would be unlikely to remove adverse impacts. Reserved for adverse, negative impacts only. These impacts arise where an archaeological / cultural heritage asset is completely and irreversibly destroyed by a proposed development.

APPENDIX 14.3 FINGAL COUNTY COUNCIL DEVELOPMENT PLAN 2017-2023 – CHAPTER 10: CULTURAL HERITAGE

Built and Cultural Heritage Policy Objective

Objective CH01 Support the implementation of the Fingal Heritage Plan in relation to the promotion and protection of Fingal's Cultural Heritage.

Archaeological Heritage Objectives

Protection of the Archaeological Resource

Objective CH02 Favour the preservation in situ or at a minimum preservation by record, of archaeological sites, monuments, features or objects in their settings. In securing such preservation the Council will have regard to the advice and recommendations of the National Monuments Service of the Department of the Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

Objective CH03 Protect all archaeological sites and monuments, underwater archaeology, and archaeological objects, which are listed in the Record of Monuments and Places and all sites and features of archaeological and historic interest discovered subsequent to the publication of the Record of Monuments and Places, and to seek their preservation in situ (or at a minimum, preservation by record) through the planning process.

Objective CH04 Encourage and promote the appropriate management and maintenance of the County's archaeological heritage, including historical burial grounds, in accordance with conservation principles and best practice guidelines.

Development and the Archaeological Resource

Objective CH05 Ensure archaeological remains are identified and fully considered at the very earliest stages of the development process, that schemes are designed to avoid impacting on the archaeological heritage.

Objective CH06 Require that proposals for linear development over one kilometre in length; proposals for development involving ground clearance of more than half a hectare; or developments in proximity to areas with a density of known archaeological monuments and history of discovery; to include an Archaeological Impact Assessment and refer such applications to the relevant Prescribed Bodies.

Objective CH07 Ensure that development within the vicinity of a Recorded Monument or Zone of Archaeological Notification does not seriously detract from the setting of the feature, and is sited and designed appropriately.

Objective CH08 Develop a policy in relation to the treatment of archaeological monuments within open space of developments. A different designation from that of open space will be applied where subsurface archaeological remains are incorporated to differentiate the area.

Objective CH09 Recognise the importance of archaeology or historic landscapes and the connectivity between sites, where it exists, in order to safeguard them from developments that would unduly sever or disrupt the relationship and/or inter-visibility between sites.

Objective CH10 Co-operate with other agencies in the assessment of the potential for climate change to impact on coastal, riverine, inter-tidal and sub-tidal sites and their environments including shipwreck sites.

Objective CH11 Encourage reference to or incorporation of significant archaeological finds into development schemes, where appropriate and sensitively designed, through layout, displays, signage, plaques, information panels and by using historic place names and the Irish language where appropriate.

Awereness and the Archaeological Resource

Objective CH12 Promote best practice for archaeological excavation by ensuring that they are undertaken according to best practice as outlined by the National Monuments Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, The National Museum and the Institute of Archaeologists of Ireland.

Objective CH13 Actively support the dissemination of the findings of archaeological investigations and excavations through the publication of excavation reports thereby promoting public awareness and appreciation of the value of archaeological resources.

Objective CH14 Identify Zones of Archaeological Notification that contain clusters of Recorded Monuments or have a significant history of the discovery of archaeological sites, features and objects in order to allow for their designation, protection of their setting and environs.

Objective CH15 Raise public awareness of the cultural heritage and improve legibility by providing appropriate signage or interpretation in areas, sites, villages, and buildings of archaeological and historic significance.

Objective CH16 Develop and implement the findings of the Community Archaeology Strategy for Fingal.

Objective CH17 Support the growth of cultural tourism in the County, including the potential for niche heritagebased tourism products by facilitating the development of heritage events, infrastructure such as heritage trails, walkways and cycleways etc. and activities such as community excavation.

Objective CH18 Manage the archaeological sites and monuments that Fingal County Council owns or is responsible for according to best practice and according to Conservation Plans where they exist

Architectural Heritage

Record of Protected Structures

Objective CH19 Review the Record of Protected Structures on an on-going basis and add structures of special interest as appropriate, including significant elements of industrial, maritime or vernacular heritage and any twentieth century structures of merit.

Objective CH20 Ensure that any development, modification, alteration, or extension affecting a Protected Structure and/or its setting is sensitively sited and designed, is compatible with the special character, and is appropriate in terms of the proposed scale, mass, height, density, layout, materials, impact on architectural or historic features, and junction with the existing Protected Structure.

Objective CH21 Seek that the form and structural integrity of the Protected Structure is retained in any redevelopment and that the relationship between the Protected Structure and any complex of adjoining buildings, designed landscape features, or designed views or vistas from or to the structure is conserved.

Objective CH22 Encourage the sympathetic and appropriate reuse, rehabilitation and retention of Protected Structures and their grounds including public access seeking that the Protected Structure is conserved to a high standard, and the special interest, character and setting of the building preserved. In certain cases the relaxation of site zoning restrictions may be considered in order to secure the preservation and conservation of the Protected Structure where the use proposed is compatible with the existing structure and this will only be permitted where the development is consistent with conservation policies and the proper planning and sustainable development of the area.

Objective CH23 Support, in accordance with CH22, the development of an integrated tourism and recreational complex on Abbeville Demesne, incorporating facilities which may include: Hotel / Conference Centre, Golf Course, Fitness Centre and at least one other extensive tourist/recreational facility. A strictly limited number of dwelling units, grouped in a courtyard type configuration, the majority of which shall be reserved for tourism use may be considered. The nature and extent of the facilities to be provided shall be determined primarily by the need to conserve and rehabilitate the house and its surroundings, which are of major architectural importance, and the special landscape character and heritage features of the demesne.

Objective CH24 Promote the use or reuse of all the Protected Structures at St. Ita's Hospital complex and demesne in Portrane as a priority for Fingal County Council. Notwithstanding the use class 'HA' Zoning matrix, appropriate uses within the Protected Structures and within the ancillary land areas within the complex including uses which also relate to and are consistent with the historic use of the overall historic complex (established prior to the foundation of the Irish State) will be actively promoted and allowed to proceed subject to appropriate consent where such activities will secure viable sustainable re use of the complex into the future and which will provide for the proper conservation and sustainable development of St. Ita's.

Objective CH25 Ensure that proposals for large scale developments and infrastructure projects consider the impacts on the architectural heritage and seek to avoid them. The extent, route, services and signage for such projects should be sited at a distance from Protected Structures, outside the boundaries of historic designed landscapes, and not interrupt specifically designed vistas. Where this

is not possible the visual impact must be minimised through appropriate mitigation measures such as high quality design and/or use of screen planting.

Objective CH26 Prevent the demolition or inappropriate alteration of Protected Structures.

Objective CH27 Demonstrate best practice in relation to the management, care and maintenance of Protected Structures by continuing the programme of commissioning Conservation Plans for the principal heritage properties in the Council's ownership and implementing the policies and actions of these Conservation Plans where they already exist.

Objective CH28 Carry out an audit and assess the condition of all Protected Structures within the Council's ownership and devise a management/maintenance plan for these structures.

Objective CH29 Ensure that measures to up-grade the energy efficiency of Protected Structures and historic buildings are sensitive to traditional construction methods and materials and do not have a detrimental physical, aesthetic or visual impact on the structure. They should follow the principles and direction given in the Department of Arts, Heritage and the Gaeltacht's publication Energy Efficiency in Traditional Buildings.

Architectural Conservation Areas

Objective CH30 Identify any potential new Architectural Conservation Areas and evaluate and modify existing Architectural Conservation Areas where necessary during the lifetime of the Plan.

Objective CH31 Produce, and review where necessary, detailed guidance for each Architectural Conservation Area in the form of Statements of Character that identify the specific special character of each area and give direction on works that would impact on this.

Objective CH32 Avoid the removal of structures and distinctive elements (such as boundary treatments, street furniture, paving and landscaping) that positively contribute to the character of an Architectural Conservation Area.

Historic Building Stock and Vernacular Heritage

Objective CH33 Promote the sympathetic maintenance, adaptation and re-use of the historic building stock and encourage the retention of the original fabric such as windows, doors, wall renders, roof coverings, shopfronts, pub fronts and other significant features of historic buildings, whether protected or not.

Objective CH34 Seek the retention of surviving historic plot sizes and street patterns in the villages and towns of Fingal and incorporate ancient boundaries or layouts, such as burgage plots and townland boundaries, into re-developments.

Objective CH35 Require that proposed infrastructural and public utility works within Fingal do not remove historic street furniture such as limestone or granite kerbs, cobblestones, cast-iron postboxes,

waterpumps, milestones and street lighting, except where an exceptional need has been clearly established.

Objective CH36 Sensitively design, locate and rationalise modern street furniture and elements such as utility boxes, cables, posts, antenna and signage.

Objective CH37 Seek the retention, appreciation and appropriate revitalisation of the historic building stock and vernacular heritage of Fingal in both the towns and rural areas of the County by deterring the replacement of good quality older buildings with modern structures and by protecting (through the use of Architectural Conservation Areas and the Record of Public Structures and in the normal course of Development Management) these buildings where they contribute to the character of an area or town and/or where they are rare examples of a structure type.

Objective CH38 Require that the size, scale, design, form, layout and materials of extensions to vernacular dwellings or conversions of historic outbuildings take direction from the historic building stock of Fingal and are in keeping and sympathetic with the existing structure.

Objective CH39 Commission a study on the thatched buildings of Fingal to examine how to ensure their continued survival.

Cultural Quarters

Objective CH40 Support the cultural development of Swords Castle Cultural Quarter.

Objective CH41 Protect where appropriate industrial heritage structures or elements of significance identified in the Fingal Industrial Heritage Survey by adding them to the Record of Protected Structures during the lifetime of the Development Plan.

Objective CH42 Utilise the information provided within the Fingal Industrial Heritage Survey when assessing development proposals for surviving industrial heritage sites.

Objective CH43 Protect and enhance the built and natural heritage of the Royal Canal and ensure that development within its vicinity is sensitively designed and does not have a detrimental effect on the character of the Canal, its built elements and its natural heritage values and that it adheres to the Waterways Irelands Heritage Plan 2016-2020.

Objective CH44 Seek the retention and appropriate repair/maintenance of the historic bridges and harbours of the County whether Protected Structures or not.

Designed Landscapes - Historic Gardens, Demesnes and Country Estates

Objective CH45 Utilise existing surveys to identify and evaluate the surviving historic designed landscapes in Fingal and promote the conservation of their essential character, both built and natural.

Objective CH46 Require that proposals for development within historic designed landscapes include an appraisal of the designed landscape (including an ecological assessment) prior to the initial design

of any development, in order for this evaluation to inform the design which must be sensitive to and respect the built heritage elements and green space values of the site.

Objective CH47 Ensure that development within Fingal along the perimeter of the Phoenix Park adheres to the Office of Public Works's (OPW), Phoenix Park Conservation Management Plan, does not have a detrimental impact on the Park, does not damage any of the built elements along its boundary, or interrupt any important vistas into or out of it.

Objective CH48 A feasibility study of St Ita's has been completed jointly by Fingal County Council and the Health Service Executive (HSE) to determine the optimal future sustainable use of this complex and to consider the development of new modern psychiatric health care and ancillary facilities (which can include the provision of a National Forensic Mental Health Service Hospital), having regard to the cultural, visual and ecological sensitivities of the site. It is an objective of Fingal County Council to secure the implementation of the objectives laid down in this feasibility study that relate to: the re-use of the existing Protected Structures and historic building stock for appropriate uses together with the ongoing maintenance and management of these structures; the ongoing maintenance and management of existing trees and woodland and the maintenance and provision for an appropriate level of public accessibility through the site.

Awareness and Architectural Heritage

Objective CH49 Promote and enhance the understanding of the archaeological and architectural heritage of Fingal through the development of cultural tourism products, talks, exhibitions and publications.

Objective CH50 Provide universal access to archaeological and architectural heritage sites where appropriate. Ensure the archaeological and architectural heritage significance of the site is taken into account when providing such access.

Objective CH51 Endeavour to accommodate and improve universal access to Council owned archaeological and architectural heritage sites open to the general public through the dissemination of information on the Council website outlining the accessibility of these sites and, where appropriate, after an evaluation has been carried out that the significance of the site will not be damaged, establishing a programme of works to improve physical access to Council owned property following best conservation principles.

APPENDIX 14.4 GEOPHYSICAL SURVEY REPORT

APPENDIX 14.5 ARCHAEOLOGICAL TEST REPORT

GEOPHYSICAL SURVEY

REPORT

Auburn House,

Auburn, Streamstown,

Malahide,

Co. Dublin

Date:
13/02/2020

Licence: 20R0002

J. M. Leigh Surveys Ltd.
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01 615 4647

J.M. Leigh Surveys Ltd.

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GEOPHYSICAL SURVEY SUMMARY SHEET
AUBURN HOUSE, STREAMSTOWN, MALAHIDE, CO. DUBLIN

Site Name	Auburn House	**Ref No.**	19066
Townland	Auburn, Streamstown	**Licence No.**	20-R-0002
County	Co. Dublin	**Licence Holder**	Joanna Leigh
ITM (centre)	E720985, N745234	**Purpose**	Pre-planning investigation
Client	Courtney Deery Heritage Consultancy Ltd.	**Reference No.**	N/A

Ground Conditions	Survey was conducted within several fields distributed across the application area. Ground conditions comprised short pasture with the exception of Areas D and F which comprised more overgrown ground cover strewn with modern litter and debris.
Survey Type	Detailed gradiometer survey totalling c. 6.4 hectares.

Summary of Results

Buried modern services are evident in the northern part of the application area. Former agricultural activity is suggested by the identification of plough trends and possible field divisions. Several curvilinear trends have been identified, some of which may represent the fragmented remains of ditched features; although their archaeological potential is tentative given the level of modern disturbance and litter across the application area. Several isolated responses have been identified; again, interpretation is extremely cautious given the modern disturbance. They may equally represent more deeply buried ferrous debris. Possible pathways have been identified in relation to the upstanding remains at Little Auburn.

Field Staff	Susan Curran & Joanna Leigh

Report Date	13/02/2020	**Report Author**	Susan Curran

Contents

Geophysical Survey Report
Auburn House, Streamstown, Malahide, Co. Dublin

1 Introduction

1.1 A geophysical survey has been conducted by J. M. Leigh Surveys at a site in the townlands of Auburn and Streamstown, Malahide, Co. Dublin. The survey was requested by Courtney Deery Heritage Consultancy Ltd. on behalf of Hatley Homes. The survey forms part of a pre-planning investigation.

1.2 The application area is contained within and around the grounds of Auburn House, comprising six fields on the southern side of Malahide, Co. Dublin. Figure 1 presents the site and survey location at a scale of 1:3,000.

1.3 There are no recorded monuments within the application area but several recorded monuments are located within the environs of the site, particularly within the grounds of Malahide Demesne which lies c. 500m to the north-east. These comprise a castle-tower house (DU012-030), an earthwork (DU012-029), and a church (DU012-031001). A graveyard (DU012-031006), two architectural fragments (DU012-031004 & DU012-031005) and two Sheela-na-gigs (DU012-031002 & DU012-031003) are associated with the church. A 16th/17th century house (DU012-024001) and associated Sheela-na-gig (DU012-024002) lie c. 980m to the north-west. A subcircular enclosure (DU012-078) is situated c. 330m to the south-west and a mound (DU012-028) is located c. 470m to the south.

1.4 The main aim of the survey was to identify any responses which may represent previously unknown archaeological remains within the application area. It is the objective of the survey to identify the location, nature and extent of any responses of potential archaeological interest.

1.5 The detailed gradiometer survey was conducted under licence 20R0002 issued by the Department of Culture, Heritage and the Gaeltacht.

2 Survey ground conditions and further information

2.1 Areas available for detailed survey within the application area were limited due to dense tree cover, landscaping, buildings and roadways. Detailed survey was contained within six fields (Areas A-F) of varying dimensions which are distributed across the application area. Areas A-F comprised pasture and were suitable for survey.

2.2 Areas A and B are located immediately to the north and east of Auburn House. Both comprised short pasture.

2.3 Areas C, D and E are located in the grounds of Little Auburn and constitute its gardens. As such, there was considerable magnetic disturbance in these areas. Area C comprised somewhat overgrown vegetation as well as modern litter and debris.

2.4 Area F is located to the south of Auburn House and is surrounded by modern housing. As with Area C, ground conditions comprised overgrown vegetation as well as modern litter and debris. The remains of a greenhouse (or polytunnel) and recent bonfire were evident on site.

2.5 Gates and metal fencing around the field perimeters produced magnetic disturbance; however, this has not affected interpretation of the results.

2.6 Numerous manhole covers and electricity poles were present across the application area and magnetic disturbance is prominent. Metal fencing around a tree in Area B also produced strong localised magnetic disturbance. The magnetic disturbance may mask any subtle responses resulting from archaeological features.

3 Survey Methodology

3.1 A detailed gradiometer survey detects subtle variations in the local magnetic field and measurements are recorded in nano-Tesla (nT). Some archaeological features such as ditches, large pits and fired features have an enhanced magnetic signal and can be detected through recorded survey.

3.2 Data was collected with a Bartington Grad 601-2 instrument. This is a specifically designed gradiometer for use in archaeological prospection. The gradiometer operates with a dual sensor capacity making survey fast and effective.

3.3 The instrument is calibrated in the field to ensure a constant high quality of data. Extremely sensitive, these instruments can detect variations in soil magnetism to 0.01nT, affording diverse application throughout a variety of archaeological, soil morphological and geological conditions.

3.4 All data was collected in 'zigzag' traverses. Grid orientation was positioned to facilitate fieldwork.

3.5 Data was collected with a sample interval of 0.25m and a traverse interval of 1m, providing 6400 readings per 40m x 40m grid. The survey grid was set-out using a GPS VRS unit. Survey tie-in information is available upon request.

3.6 The survey methodology, data presentation and report content adheres to the European Archaeological Council (EAC) (2016) 'Guidelines for the use of Geophysics in Archaeology'.

4 Data display

4.1 Summary greyscale images and accompanying interpretation diagrams are presented in Figures 2-5, all at a scale of 1:1,250.

4.2 Numbers in parenthesis in the text refer to specific responses highlighted in the interpretation diagrams (Figures 3 & 5).

4.3 Isolated ferrous responses highlighted in the interpretation diagram most likely represent modern ferrous litter and debris and are not of archaeological interest. These are not discussed in the text unless considered relevant.

4.4 The raw gradiometer data is presented in archive format in Appendix A1.01 (Areas A & B) & A1.02 (Areas C, D, E & F). The raw data is displayed as a greyscale image and xy-trace plot, both at a scale of 1:625. The archive plots are used to aid interpretation of the results and are used for reference only. These are available as PDF images upon request.

4.5 The display formats referred to above and the interpretation categories are discussed in the summary technical information section at the end of this report.

5 Survey Results

Areas A & B (Figures 2 & 3)

5.1 Several strong magnetic linear responses are evident in both Areas A and B which correspond to buried modern services. These pipes run approximately east-west and north-south across both areas and contribute to much magnetic disturbance along their paths.

5.2 Several curvilinear trends (1) have been identified within the south-eastern portion of Area A. These may be of archaeological potential and may represent the partial remains of ditched features. However, interpretation is extremely tentative here given the level of modern disturbance at the site.

5.3 Several discrete positive magnetic responses (2) are evident across both Areas A and B. Archaeological interpretation is tentative as there is no clear pattern. These responses may equally represent more deeply buried ferrous debris.

5.4 Two linear trends (3) are evident in the north of Area B, just to the east of a large tree which is surrounded by metal fencing. These do not form a coherent pattern and may be the remains of (possibly modern) agricultural activity.

5.5 Several linear trends and broad negative responses (4) have been identified in the southern half of area B. There is no clear pattern, and these may represent natural variations. However, it is possible that these represent plough damaged remains of former landscaped features. The incoherent nature of the responses makes interpretation cautious.

5.6 Parallel trends visible in the south-eastern corner of this area are indicative of ploughing activity.

5.7 A small area of increased magnetic response (5) has been identified in the western half of Area B and in proximity to the linear trends (4). This comprises several positive magnetic responses in addition to ferrous responses. Although it is possible that this represents a spread of burnt material, there are no further responses of potential interest here. An archaeological interpretation is highly tentative given the level of modern ferrous disturbance at the site.

Areas C, D, E & F (Figures 4 & 5)

5.8 Areas C and E are largely dominated by modern magnetic disturbance with the exception of a possible single isolated response (2) in the north-eastern corner of Area C. Similar isolated responses are also evident in Area F. However, an archaeological interpretation is extremely cautious given the volume of modern litter

and magnetic disturbance in these areas. There is no clear archaeological pattern and these may equally represent ferrous debris.

5.9 Two linear trends are evident in Area D, both running east-west across the garden in front of the dwelling of Little Auburn. Given its proximity to the house, the more northerly trend (6) may represent the remains of a buried pathway or structure associated with the house. The second trend (7) corresponds with the location of a shallow brick pathway which is marked on the mapping. The two positive magnetic responses found along this feature are likely to be associated with the pathway.

5.10 A fragmented magnetic linear trend (8) is evident running approximately north-south from in the southern half of Area F. This is defined by multiple ferrous and other magnetic responses. A field boundary is depicted in this approximate location on the historic Cassini 6inch mapping and it is possible that (8) is representative of its remains.

5.11 Further linear trends (9) are also evident in this area and may be associated with the nearby housing (to the south and north) and/or the gardening activities for which there is visible evidence.

5.12 A curvilinear positive magnetic trend (10) is evident to the east of (8). This may represent the remains of a curvilinear ditched feature. The response is at the limits of instrument detection and this lies within an area which has undergone much modern disturbance. As a result, an archaeological interpretation is cautious.

6 Conclusion

6.1 The dataset is dominated by modern disturbance which may obscure any potential archaeological remains, in particular the buried modern services which crisscross Areas A and B.

6.2 Several possible isolated pit-type responses have been identified in the dataset. However, interpretation is extremely cautious given the level of modern disturbance and debris at the site. The responses are isolated, and no clear archaeological pattern is evident.

6.3 Several curvilinear trends have been identified within the survey areas. Archaeological interpretation is cautious. There are no clear responses and the trends most likely represent more recent agricultural activity or modern ground disturbance.

6.4 Former agricultural activity is indicated by the presence of plough trends in the southern half of Area B.

6.5 Probable former field divisions have been identified, particularly in Areas B and F, one of which may correspond with a field boundary depicted on historic mapping.

6.6 An area of increased magnetic response in Area B may represent a spread of burnt material. However, an archaeological interpretation is highly tentative given the level of modern ferrous disturbance at the site. This may represent modern ground disturbance.

6.7 A linear trend identified in the immediate environs of Little Auburn corresponds to the location of a shallow brick pathway, while a second trend which lies closer to the house may represent an associated structure or feature. The trends recorded here reflect the landscaping features associated with the house.

6.8 Consultation with a licensed archaeologist and with the Department of Culture, Heritage and the Gaeltacht is recommended to establish if any additional archaeological works are required.

Technical Information Section

Instrumentation & Methodology

Detailed Gradiometer Survey

This is conducted to clearly define any responses detected during scanning, or can be applied as a stand-alone methodology. Detailed survey is often applied with a sample interval of 0.25m and a traverse interval of 1m. This allows detection of potential archaeological responses. Data is collected in grids 40m x 40m, and data is displayed accordingly. A more detailed survey methodology may be applied where archaeological remains are thought likely. A survey with a grid size of 10m x 10m and a traverse interval of 0.5m will provide a data set with high resolution.

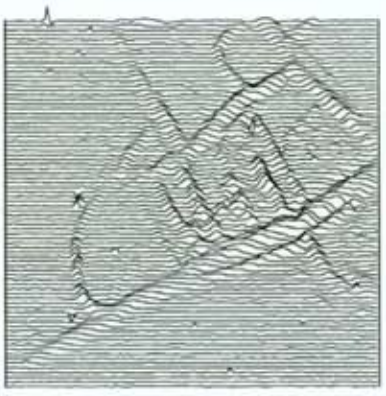
Bartington GRAD 601-2

The Bartington Grad 601-2 instrument is a specifically designed gradiometer for use in archaeological prospection. The gradiometer operates with a dual sensor capacity making survey very fast and effective. The sensors have a separation of 1m allowing greater sensitivity.

Frequent realignment of the instruments and zero drift correction; ensure a constant high quality of data. Extremely sensitive, these instruments can detect variations in soil magnetism to 0.1nT, affording diverse application throughout a variety of archaeological, soil morphological and geological conditions.

Gradiometer Data Display & Presentation

XY Trace



The data are presented as a series of linear traces, enabling a semi-profile display of the respective anomalies along the X and Y-axes. This display option is essential for distinguishing between modern ferrous materials (buried metal debris) and potential archaeological responses. The XY trace plot provides a linear display of the magnitude of the response within a given data set.

*Greyscale**

As with dot density plots, the greyscale format assigns a cell to each datum according to its location on the grid. The display of each data point is conducted at very fine increments, allowing the full range of values to be displayed within the given data set. This display method also enables the identification of discrete responses that may be at the limits of instrument detection. In the summary diagrams processed, interpolated data is presented. Raw un-interpolated data is presented in the archive drawings along with the xy-trace plots.

Interpretation

An interpretation of the data is made using many of the plots presented in the final report, in addition to examination of the raw and processed data. The project managers' knowledge and experience allows a detailed interpretation of the survey results with respect to archaeological potential.

**XY Trace and raw greyscale plots are presented in archive form for display of the raw survey data. Summary greyscale images of the interpolated data are included for presentation purposes and to assist interpretation.*

Glossary of Interpretation Terms

Archaeology

This category refers to responses which are interpreted as of clear archaeological potential, and are supported by further archaeological evidence such as aerial photography or excavation. The term is generally associated with significant concentrations of former settlement, such as ditched enclosures, storage pits and associated features.

? Archaeology

This term corresponds to anomalies that display typical archaeological patterns where no record of comparative archaeological evidence is available. In some cases, it may prove difficult to distinguish between these and evidence of more recent activity also visible in the data.

? Industrial

Such anomalies generally possess a strong magnetic response and may equate with archaeological features such as kilns, furnaces, concentrations of fired debris and associated industrial material.

Area of Increased Magnetic Response

These responses often lack any distinctive archaeological form, and it is therefore difficult to assign any specific interpretation. The resulting responses are site specific, possibly associated with concentrations of archaeological debris or more recent disturbance to underlying archaeological features.

Trend

This category refers to low-level magnetic responses barely visible above the magnetic background of the soil. Interpretation is tentative, as these anomalies are often at the limits of instrument detection.

Ploughing/Ridge & Furrow

Visible as a series of linear responses, these anomalies equate with recent or archaeological cultivation activity.

? Natural

A broad response resulting from localised natural variations in the magnetic background of the subsoil; presenting as broad amorphous responses most likely resulting from geological features.

Ferrous Response

These anomalies exhibit a typically strong magnetic response, often referred to as 'iron spikes,' and are the result of modern metal debris located within the topsoil.

Area of Magnetic Disturbance

This term refers to large-scale magnetic interference from existing services or structures. The extent of this interference may in some cases obscure anomalies of potential archaeological interest.

Bibliography

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English Heritage (2008) '*Geophysical guidelines: Geophysical Survey in Archaeological Field Evaluation.*' Second Edition.

Gaffney, C. Gater, J. & Ovenden, S. (2006) '*The use of Geophysical Techniques in Archaeological Evaluations.*' IFA Paper No. 6.

Gaffney, C & Gater, J (2003). '*Revealing the buried past: Geophysics for Archaeologists.*' Tempus Publishing Limited.

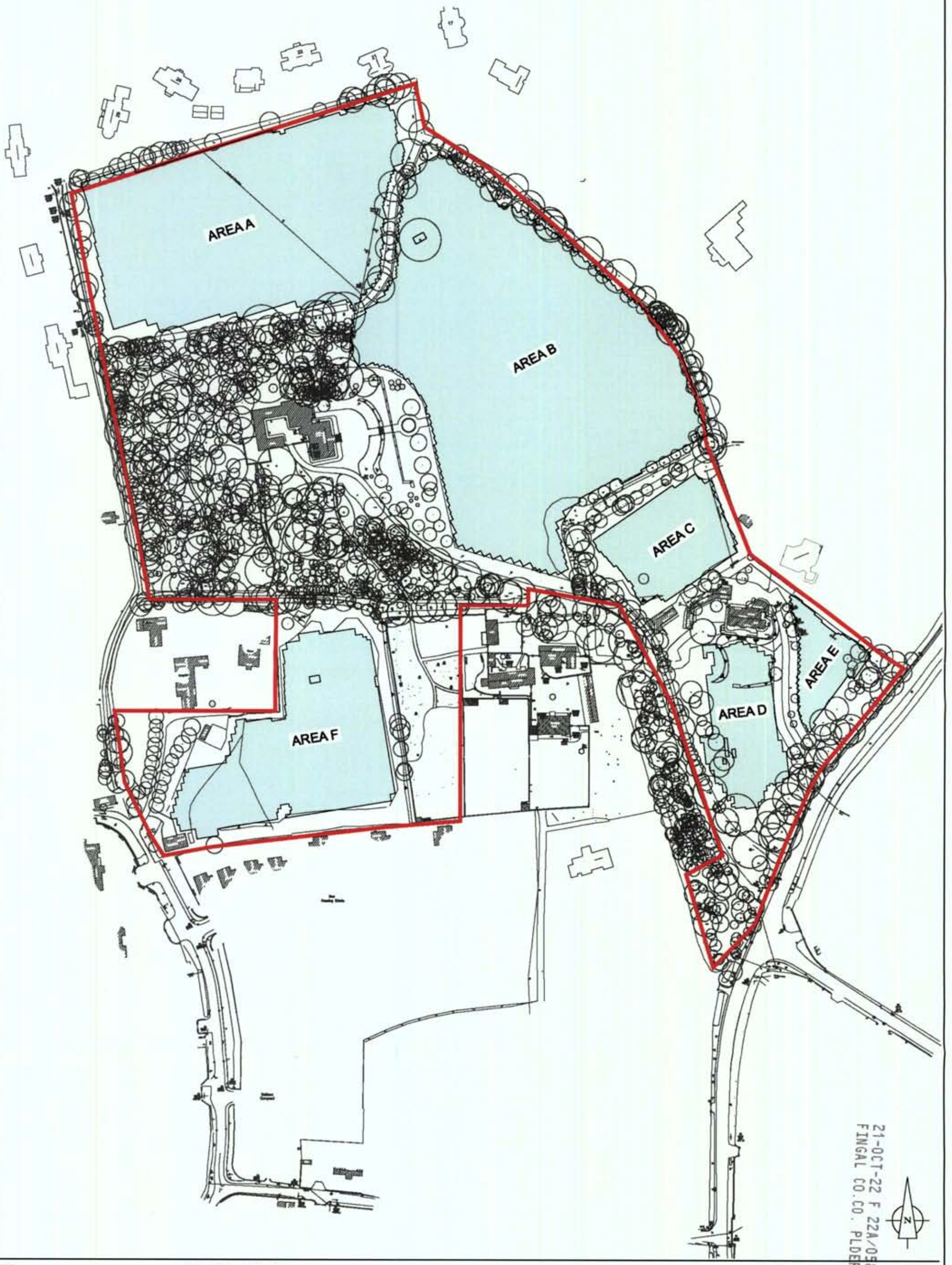
National Soil Survey of Ireland (1980) *General soil map second edition (1:575,000)*. An Foras Taluntais.

List of Figures

Figure	Description	Paper Size	Scale
Figure 1	Site & survey location diagram	A4	1:3,000
Figure 2	Summary greyscale image (A & B)	A3	1:1,250
Figure 3	Summary interpretation diagram (A & B)	A3	1:1,250
Figure 4	Summary greyscale image (C, D, E & F)	A3	1:1,250
Figure 5	Summary interpretation diagram (C, D, E & F)	A3	1:1,250

Archive Data Supplied as a PDF Upon Request

A1.01	Raw data XY-Trace plot & greyscale image (Areas A & B)	A0	1:625
A1.02	Raw data XY-Trace plot & greyscale image (Areas C, D, E & F)	A0	1:625



Application Area

Detailed Gradiometer Survey

0 metres 120

Client: Courtney Deery Heritage Consultancy Ltd.	Project: Geophysical Survey Auburn House, Streamstown, Malahide, County Dublin	Title: Site & Survey Location	J.M.Leigh surveys www.jmlsurveys.com

Scale @ A4:	1:3,000
Figure:	1
Licence No.:	20R0002
Issue Date:	13.02.2020

Client:
Courtney Deery Heritage Consultancy Ltd.

Project:
Geophysical Survey
Auburn House, Streamstown
Malahide, County Dublin

Title:
Areas A & B:
Summary Greyscale Image

J.M.Leigh surveys
www.jmlsurveys.com

Scale @ A3:	1:1,250
Figure:	2
Licence No.:	20R0002
Issue Date:	13/02/2020

AREA A

AREA B

AREA C

?Archaeology

Area of Increased magnetic response

Trend

Negative response ?Landscaping

Ploughing

Ferrous Pipe

Ferrous

Disturbance

0 metres 50

N

Client:
Courtney Deery Heritage Consultancy Ltd.

Project:
Geophysical Survey
Auburn House, Streamstown
Malahide, County Dublin

Title:
Areas A & B:
Summary Interpretation

J.M.Leigh surveys
www.jmlsurveys.com

Scale @ A3:	1:1,250
Figure:	3
Licence No.:	20R0002
Issue Date:	13.02.2020

0 metres 50

Client: Courtney Deery Heritage Consultancy Ltd.

Project: Geophysical Survey
Auburn House, Streamstown
Malahide, County Dublin

Title: Areas C, D, E & F:
Summary Greyscale Image

J.M.Leigh surveys
www.jmlsurveys.com

Scale @ A3:	1:1,250
Figure:	4
Licence No.:	20R0002
Issue Date:	13/02/2020

AREA B

AREA C

AREA D

AREA E

AREA F

New Housing Estate

?Archaeology
Trend
Ploughing
Ferrous Pipe
Ferrous
Disturbance

0 metres 50

Client:
Courtney Deery Heritage Consultancy Ltd.

Project:
Geophysical Survey
Auburn House, Streamstown
Malahide, County Dublin

Title:
Areas C, D, E & F:
Summary Interpretation

J.M.Leigh surveys
www.jmlsurveys.com

Scale @ A3:	1:1,250
Figure:	5
Licence No.:	20R0002
Issue Date:	13.02.2020

COURTNEY • DEERY

ARCHAEOLOGY & CULTURAL HERITAGE

Archaeological Impact Assessment Report

Auburn and Streamstown

Malahide Road, Co. Dublin

Pre-planning

Excavation Licence No.: 20E0057

Site Director: Gill McLoughlin

ITM: 721000E / 745230N

On behalf of

Hatley Homes Ltd

20 March 2020





CONTENTS

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EXECUTIVE SUMMARY

This report describes the results of an archaeological impact assessment including geophysical survey and archaeological testing carried out by Gill McLoughlin of Courtney Deery Heritage Consultancy Ltd. (Licence No. 20E0057). The work has been carried out pre-planning on behalf of Hatley Homes Ltd.

The site is located in the townlands of Auburn and Streamstown, in the lands surrounding Auburn House, off the Malahide Road, Co. Dublin (ITM 721000E / 745230N (Figure 1).

The testing took place over three days from the 3rd March 2020 and no features, finds or deposits of archaeological interest were identified in any of the trenches.

1. INTRODUCTION

1.1. General

This report describes the results of an archaeological impact assessment including geophysical survey and archaeological testing carried out by Gill McLoughlin of Courtney Deery Heritage Consultancy Ltd. (Licence No. 20E0057). The work has been carried out pre-planning on behalf of Hatley Homes Ltd and will be used to inform the design process. The assessment follows an archaeological and cultural heritage desk study (Crowley, 2019).

The site is located in the townlands of Auburn and Streamstown, in the lands surrounding Auburn House, off the Malahide Road, Co. Dublin (ITM 721000E / 745230N (Figures 1&2). The total area of the lands at Auburn and Streamstown is 12.7 hectares and it is zoned as RA – New Residential - under the Fingal County Development Plan.

The testing took place over three days from the 3rd March 2020 and no features, finds or deposits of archaeological interest were identified in any of the trenches. There are no recorded archaeological sites within the subject lands or their immediate vicinity, however Auburn House is a protected structure.

Figure 1 Site location

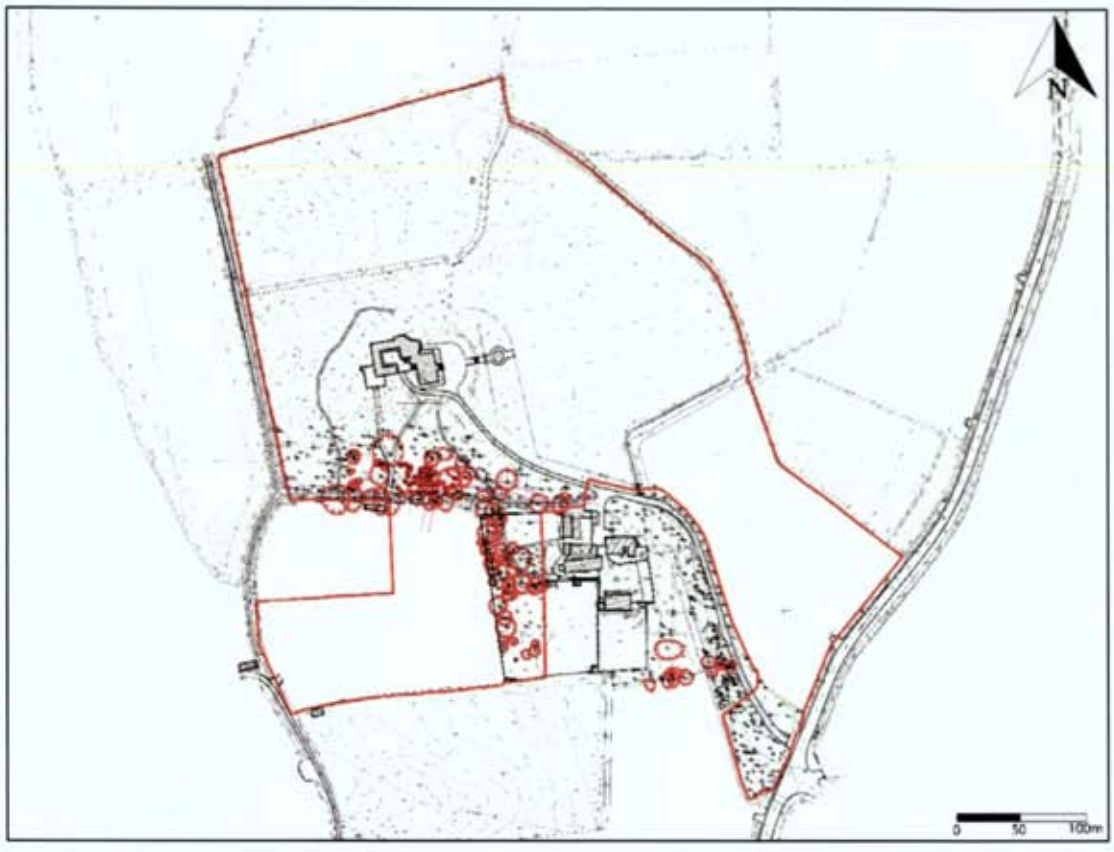

Figure 2 Location map (detail)

2. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1. Prehistoric Activity

The coastal area of north County Dublin has produced quantities of flint artefacts, including sites such as the raised beaches at Sutton, where Mesolithic and Neolithic flint artefacts have been found (Stout & Stout 1992) and at Paddy's Hill overlooking Malahide Estuary, at which flint scatters of Mesolithic, Neolithic and Bronze Age date have been identified (Keeling et al, 1994).

With the exception of Howth, prehistoric material has historically been relatively rare in this part of Fingal, and Stout and Stout (1992) speculate that centuries of continuous tillage north of the Liffey must have led to the destruction of a large number of archaeological monuments. However, more recent large-scale archaeological work associated with developments such as TII road projects has begun to identify more prehistoric remains in other parts of Fingal.

Overall, there is a significant body of Neolithic (c. 4000–2400 BC) material from north County Dublin. Excavations at nearby Feltrim Hill (DU012-02502), c. 615m to the southwest, revealed settlement evidence from the Neolithic in the form of pottery sherds and worked stones, although there were no apparent remains of houses (Hartnett & Eogan 1964). Stray finds in the area include leaf-shaped arrowheads, scrapers, a tanged arrowhead, a javelin head, two knives, and several polished stone axe heads (NMI Reg. No. 1965:13-16, 22, 55; 1966:63-92, 122-147, 1968:84-119, 172, 173, 1969:22-33).

This whole stretch of coast has a clear view of Lambay Island to the east where there is evidence for the production of Neolithic stone axes and flint tools (Cooney 2000, 196-7). The highest points of Lambay Island also have at least two cairns that may also date to the Neolithic.

A ring-ditch of Bronze Age date was uncovered during archaeological monitoring in Drinan townland, c. 1.3km northwest (SMR DU012-093; Licence No. 04E1066). The ring-ditch was located a short distance northeast of a multi-period site at which the earliest phase comprised of a cremation burial containing over 70 sherds of Western Neolithic pottery, alongside fragments of burnt bone (SMR DU012-094001; DU012-094002 to -094005; Licence No. 04E1604).

2.2. Early Medieval Activity

At the start of the early medieval period (5th – 12th century AD), the plains of north County Dublin, formed part of the over-kingdom of Brega. Though initially the Laigin controlled most of Dublin and north as far as the River Boyne, the extent of their hegemony was pushed south of the River Liffey over the course of the 5th century AD. With the collapse of the Laigin hegemony in the Midlands, the overkingship of Brega came to be dominated by Síl nÁedo Sláine, a dynasty of the southern Uí Néill (Byrne 1973). North Dublin was controlled by subject peoples—the Gailenga Becca, the Saitne and the Ciannachta (after Bolger 2006).

A holy well site (RMP DU012-016) known as Lady's well, is recorded c. 690m southwest of the subject lands, in Feltrim Quarry, but no known ecclesiastical centre is situated in the vicinity of this well, which was removed during quarrying operations.

The closest known settlement of early medieval date is the site of a recorded cashel on the western summit of Feltrim Hill, c. 900m southwest (DU012-025001). It comprised an oval area (35m E-W; 25m N-S) enclosed by a drystone wall, with an entrance in the east originally protected by an inner and outer timber gate (Eogan & Hartnett 1964, 21). Excavations in the late 1940s in advance of quarrying produced extensive evidence for an impressive domestic assembly on the site (ibid., 147).

Further settlement is evidenced by ringforts and an enclosure in the neighbouring Broomfield and Grange townlands (DU012-033, DU015-003001 & -003002), and the discovery of a ringfort which initially presented

as a cropmark on aerial photography in Kinsaley townland, c. 1km southeast (SMR file DU012-071; pers. comm. T. Condit).

The multi-period site from Drinan townland included a series of enclosures dating to the early medieval / medieval periods (DU012-094002 to -094005; Licence No. 04E1604). The most dramatic feature identified on site was a low-lying artificial mound that was surrounded by a large ditch. It was enclosed by a ditch and it overlay another substantial earlier ditch. It may have been a ringfort or ringwork, with settlement during the 11th or 12th centuries and possibly earlier (Halliday 2005).

Viking raids on the Irish coastline also commenced during the early historic period, and in AD 841–2 the Vikings wintered for the first time at Dublin. According to Ball (1920), the name Fingal— Fine Gall, the territory of the Gall, or strangers— was used to denote the district into which the Vikings made these predatory excursions. The harbour at Malahide—or possibly Baldoyle (Baile Dubh Gaill, or town/settlement of the dark[-haired] foreigners)— is reputed to have played an important part in early Vikings raids and the Danes were resident in AD 897. Evidence of Viking influence in the surrounding region is recorded in early documentary references to Swords, which first appear in the late 10th and early 11th century when the village became the target of the Ostmen or Vikings of Dublin. The Annals of the Four Masters record that in 1012 and 1016, Swords was burned by the Danes. Before the Battle of Clontarf in 1014, Brian Ború is also said to have burned Fingal and the district of Howth.

The Vikings of Dublin began to expand northwards in the mid-11th century, conquering Dublin's northern hinterland. Hamond McTurkill, the last Danish King of Dublin, retired to Malahide in 1171 (Lewis 1837, 337), and after his death, the Talbots are reputed in folklore to have been involved conquering his remaining kin and followers in the Malahide area: supposedly at the cluster of ringforts in Broomfield and Grange townlands, although the former townland name for Yellow Walls to the northwest of Malahide Demesne was Hamonstown or Hamonswood. Viking rule and settlement influenced the region for over 250 years, from the 9th to the 12th centuries. Bradley suggests Viking Dublin should be looked at as part of what he calls 'the rurally settled area of the Dublin Scandinavians' rather than as a number of successful trading settlements strategically located along the coast (Bradley in Simms & Fagan 1992).

2.3. Later Medieval Activity

Malahide village may have been site of pre-Anglo-Norman settlement, perhaps focused on an early church of St Fenweis that may have been located near to St Sylvester's church and adjacent to a holy well (DU012-023). A possible motte and bailey (DU012-034) at Wheatfields in Saint helens townland to the south of the village, appears likely to have served as the early seat of the Anglo-Norman lord Richard Talbot, who was granted lands at Malahide in the 1170s.

Richard Talbot, and soon after his kinsfolk, presumably began to set up a more permanent base of power rapidly following his land grant, in the 1170s or 1180s. In the absence of other strong evidence for an earlier foundation, the first phase of building at Malahide Castle may therefore probably be located in the 15th century, with a subsequent second major medieval phase— likely to have been accompanied by the initial building at the adjacent church —quickly following the manorial grant of 1475.

Malahide castle (DU012-030) was erected on an elevated situation in the present grounds of the Demesne, c. 755m northeast of the subject lands. Archaeological testing and excavation (Consent no. C451) uncovered a set of steps at the north-west corner of the older part of the castle, an early possible enclosing wall identified below the Butler's House as well as a substantial ditch (1.7m in width), which was sealed by the likely late medieval courtyard and probably originally enclosed the 15th-century tower house (RMP file description).

By the 16th century, Fingal was emerging as a distinct cultural zone and was known as the breadbasket of Dublin due its fertile agricultural land. Vital also to the medieval, and the later post-medieval economy in Malahide was the harvesting of marine resources— both fish and oysters from the famed beds in the estuary. Control over these resources, through the granting of the customs and admiralty of the port to Thomas Talbot, accompanied the grant of manorial status in the late 15th century (Byrne 1997, 25), and echoes of such conditions persisted in leases for a long time thereafter. By 1547, Malahide was described as one of the chief havens of Ireland because of its very safe harbour.

2.4. Post Medieval Activity

The agricultural land of Fingal was of strategic importance to the city and this was targeted in the 17th century when both royalist Dublin and Confederate forces pursued a scorched earth policy across the north of Dublin County then containing 'the goodliest haggards of corn that ever was seen in those parts', to deprive their enemy from this bounty (Smyth 1992). Fishing resources were similarly targeted. The Earl of Ormonde had instructed the town and the Talbot's at Malahide Castle to take a Dublin garrison of 200 men in March 1641/2 during the Confederate War, but suggested that contrary to instructions for him to raze the villages and towns of Fingal, he should not do so to 'the fisher towns upon the coast in regard... ye market at Dublin may be prejudiced thereby' (Byrne 1997, 25).

Prior to the billeting of Dublin troops, Malahide appears to have fared better than many neighbouring areas because of the security provided by an economy spilt between marine resources and agriculture (Ibid.). Even following Cromwell's invasion, the locality was spared the worst ravages, with the apparent number of trees at Malahide Demesne a possible indicator of this. Such conditions, along with the ready defensibility of the castle following an undoubted refurbishment of its defences during its 1640s Dublin garrisoning, may have contributed to the confiscation of Malahide Castle by the regicide Miles Corbet in 1652, when the Talbots were forcibly removed to Connaught.

Following Corbet's flight from Ireland at the end of 1659, and his subsequent execution in the wake of Charles II's restoration to the throne, John Talbot managed to regain possession of the manor in the 1660s. John Talbot, and subsequent generations of his family, were obviously concerned to ensure that neither the requisitioning of the castle, nor its confiscation, were ever repeated, and there is a suggestion in surviving estate records (cf. Byrne 1997, 16, 69) that the main concern with renovations and upkeep to the castle and demesne involved not just modifications according to new ideas about polite architecture and landscape design, but also a desire to lessen the military appearance and effectiveness of the site.

By the late 18th century, prosperous Dubliners were leaving the city and establishing small country estates in the surrounding countryside, with coastal locations proving more attractive still. Auburn House ('Auburne') is mentioned as the seat of J. Crawford, Esq. In the mid-18th century, the property belonged to the Crawfords, a prosperous merchant family from Fermanagh. The house was built in about 1779, probably to mark the marriage of its owner, James Crawford, to Frances Vernon of Clontarf Castle in 1776; it is presumed that the courtyard, coach-house and walled gardens also date from this time (www.turtlebunbury.com/published/ published_interiors/ireland/pub_int_auburn). Bunbury describes Auburn House as one of the finest residences built at this time, it being 'a golden-brown three-storey mansion located within a wooded demesne adjacent to Malahide Castle' (Ibid.).

2.5. RMP / SMR Sites

There are no RMP / SMR sites located within the subject lands and only two within c. 500m (Figure 3). One is a mound (RMP DU012-028) c. 300m to the south that was excavated in 1982 and is thought to be the remains of an ornamental feature attached to the grounds of Auburn House (the mound was formed from medieval and post-medieval 'dump' material). The second is an enclosure (SMR DU012-078), also located in Auburn townland, c. 275m southwest of the subject lands. The site was identified by Dr Steve Davis as a cropmark on an aerial photograph in 2015 (SMR file).

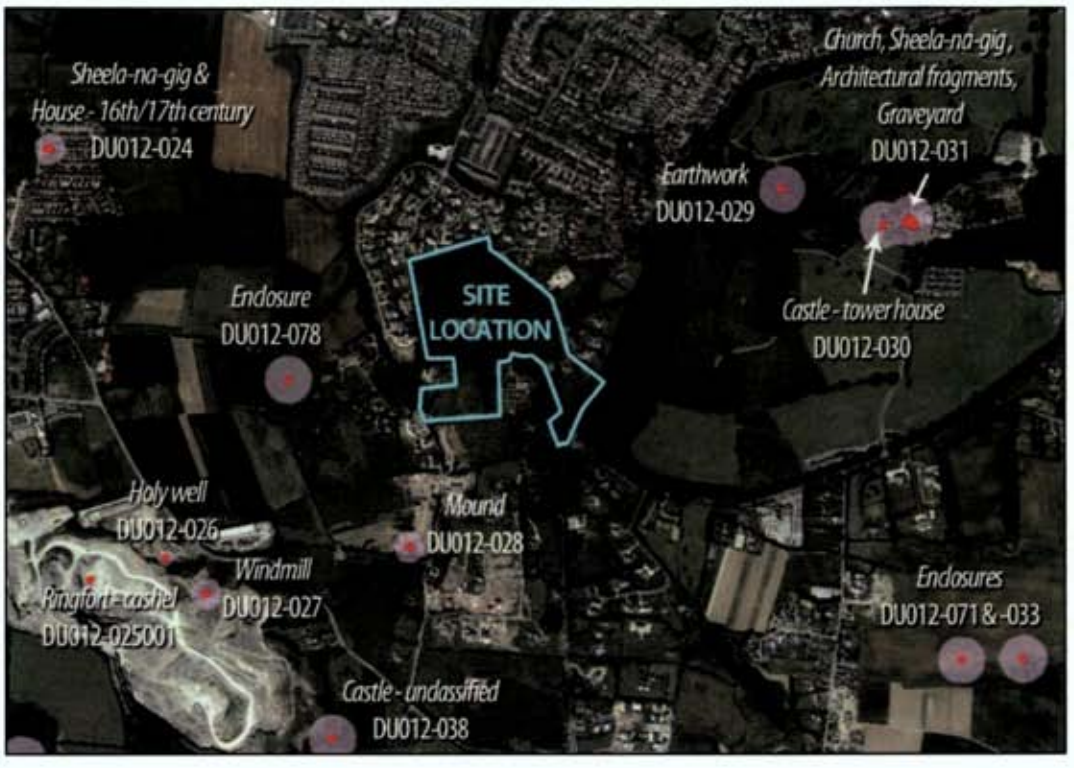

Figure 3 Recorded archaeological sites within 1km of subject lands

2.6. Stray Finds (National Museum of Ireland Topographical files)

Only three finds are recorded to Auburn townland, all of which are pottery sherds of unknown date (NMI Reg. Nos 1946:410-412). The volume of stray finds recorded to the surrounding townlands, particularly Feltrim Hill to the southwest and Paddy's Hill in Broomfield to the east, indicates significant activity and settlement in the wider area during the prehistoric period.

2.7. Cartographic sources

Down Survey

At the time of the mid-17th century Down Survey, the subject area lay within 'Mabstowne' (Mabestown), with the townland of Auburn presumably a much later division. Several small dwellings are depicted in the townland, described as 'foure or five cabbins' in the parish terrier, with the forfeited land formerly the possession of Chris Fagan of Feltrim. Malahide Castle is depicted as a fortified house surrounded by trees to the northeast, while the windmill on Feltrim Hill is also shown to the southwest.

'An Actual Survey of the County of Dublin', John Rocque

John Rocque, on his 1760 map of County Dublin (Figure 4), shows a property already occupying the lands at Auburn. The property comprised a house and outbuildings arranged around a courtyard, with a kitchen garden on the southwest side. The buildings were situated on the south side of 'Peas Fields Hill'. As now, the property was accessed off the Malahide Road. The present house was built around 1779, presumably replacing the earlier dwelling. Malahide Demesne is depicted, named 'Malahide Court'. There are small settlement clusters at' Streams Town', 'Mabes Town' and Feltrim. Feltrim Hill and the windmill are both depicted and named.

Figure 4 Rocque map of the County of Dublin (1760)

Figure 5 Taylor's map of Dublin (1816)

'Map of the Environs of Dublin', John Taylor

Taylor's map (Figure 5) is less detailed than Rocque's, but it provides some new information. Most notably, the present Auburn House is depicted and named, with woodland shown around it to the north, west and south. The house is shown occupying an elevated site, presumably the hill named on Rocque's map, 'Peas Fields Hill'. Malahide Demesne is named as the 'Court of Malahide', with both castle and church ruins indicated.

Ordnance Survey Mapping

The first edition OS six-inch map (Figure 6) represents the earliest accurate and detailed cartographic source for the study area. It shows Auburn House, with courtyard buildings arranged on its west side, and woodland to the north, west, and south (as on Taylor's map). The house is approached along a carriageway that leads north and westwards from the entrance on the Malahide Road. To the south and west of the carriageway

is a group of outbuildings, a walled garden and orchards. These form part of the Auburn estate and are in roughly the location of those depicted on Rocque's map of 1760. The remainder of the estate is divided into fields, with an area of parkland to the front (east) of the house. Mabestown townland is now only one small section on the east side of the Malahide Road (the remainder having been renamed Auburn), where it forms part of the large estate associated with Malahide Castle. The part of the subject lands that fall within Streamstown townland comprise fields outside the boundaries of both Auburn estate and the neighbouring Clairville.

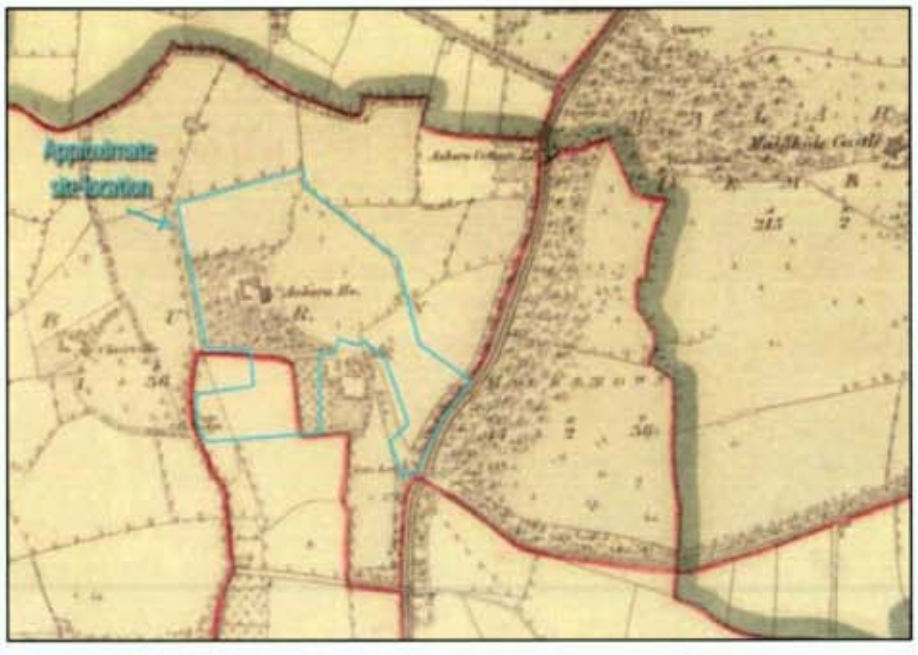

Figure 6 First Edition OS six-inch map, 1843

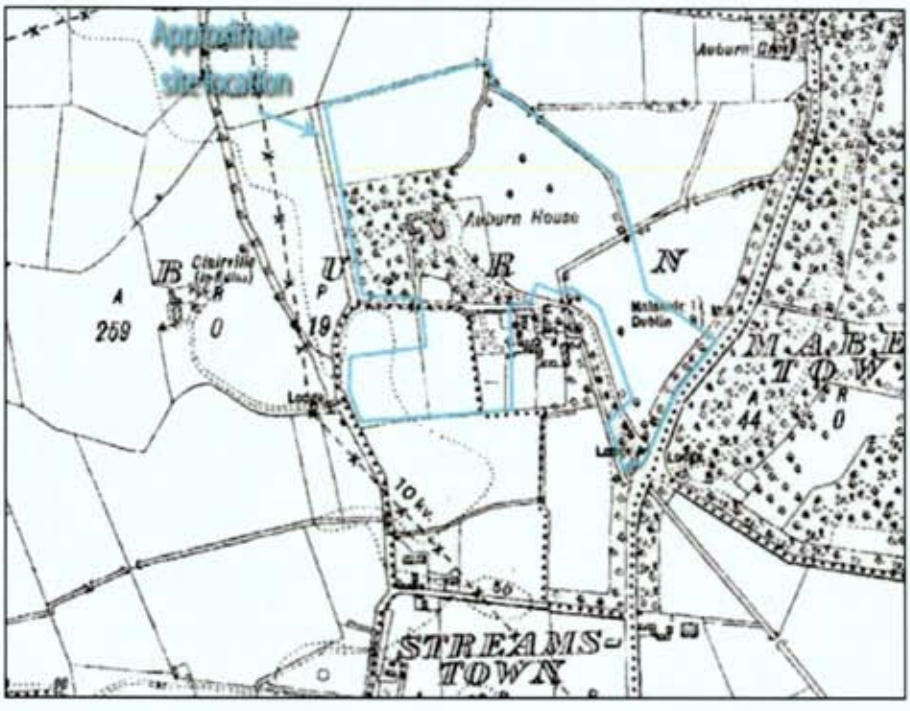

Figure 7 Revised Edition OS six-inch map, 1935-38

There are no significant changes on the OS 25-inch map of 1906-09 (not pictured), though the neighbouring Clairville house is indicated as being in ruin by this time. This remains the case on the revised six-inch edition OS map of 1935-38 (Figure 7). By this time, the walled gardens and orchards in the Auburn estate are empty plots.

3. SUMMARY OF PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

There have been no previous archaeological investigations within the subject lands and only two in the vicinity, one of which is the aforementioned excavation in 1982 of the mound (RMP DU012-028) in Auburn townland. In 2012, archaeological monitoring was undertaken of investigative slit-trenches excavated along the R107 road for a proposed new watermain (St Doolagh's to Streamstown). Nothing of archaeological significance was found (Licence No. 12E0185; Excavations Bulletin Ref. 2012:247).

Of those undertaken in the wider area, the discoveries in Kinsaley townland are particularly notable. A large enclosure (SMR site DU012-071) visible as a cropmark on aerial imagery was confirmed by geophysical survey and archaeological testing (Licence Nos 14R00314 & 14E0165). A second possible enclosure, previously unknown, was identified by geophysical survey and archaeological testing further north (Licence Nos 14R0038 & 14E0162). Another enclosure and two ringforts sites nearby are also visible on aerial imagery (RMP sites DU012-033, -003001 & -003002). This demonstrates both the efficacy of geophysical survey in this landscape and the prevalence of destroyed archaeological sites that survive below-ground.

3.1. Geophysical Survey

A detailed gradiometer survey was carried out in February 2020 by J.M. Leigh surveys Ltd. (Licence Reference 20R0002). Areas available for detailed survey within the application area were limited due to dense tree cover, landscaping, buildings and roadways. Detailed survey was contained within six fields (Areas A-F, Figure 8). Areas A and B are located immediately to the north and east of Auburn House and comprised short pasture. Areas C, D and E are located in the grounds of Little Auburn and constitute its gardens. There was much magnetic disturbance in these areas and Area C comprised overgrown vegetation as well as modern litter and debris. Area F is located to the south of Auburn House and is surrounded by modern housing and ground conditions were similar to those in Area C.

Survey Results Areas A and B *(Figures 9 and 10)*

Several strong magnetic linear responses correspond to modern services in both Areas A and B. Curvilinear trends in the southeast of Area A were deemed of archaeological potential, although interpretation was extremely tentative. Several discreet positive magnetic responses were indicated across both Areas A and B and archaeological interpretation was tentative as there was no clear pattern. Two linear trends in the north of Area B did not form a coherent pattern and were interpreted as possible modern agricultural activity. Several linear trends and broad negative responses were identified in the southern half of Area B, however there was no clear pattern and they were interpreted as possible natural variations, with the possibility that they could represent plough damaged remains of former landscaped features. The incoherent nature of the responses makes interpretation cautious. Parallel trends in the south eastern corner of Area B are indicative of ploughing activity. A small area of increased magnetic response was identified in the west of Area B in proximity to the linear trends. This comprises several positive magnetic responses in addition to ferrous responses. Although this could possibly represent a spread of burnt material, an archaeological interpretation was highly tentative given the level of modern ferrous disturbance at the site.

Survey Results Areas C, D, E and F *(Figures 11 and 12)*

Areas C and E are largely dominated by modern magnetic disturbance with the exception of a possible single isolated response in the north eastern corner of Area C and similar isolated responses are evident in Area F. In both areas there was no clear archaeological pattern and an archaeological interpretation was extremely cautious. Two linear trends were evident in Area D and represent pathways associated with Little Auburn House. A fragmented magnetic linear trend was identified in Area F oriented north-south and may represent a field boundary depicted on the Cassini 6-inch OS mapping. Further linear trends in Area F may be associated with nearby housing. A curvilinear positive magnetic trend in Area F may represent the remains of a curvilinear ditched feature, however an archaeological interpretation is cautious.

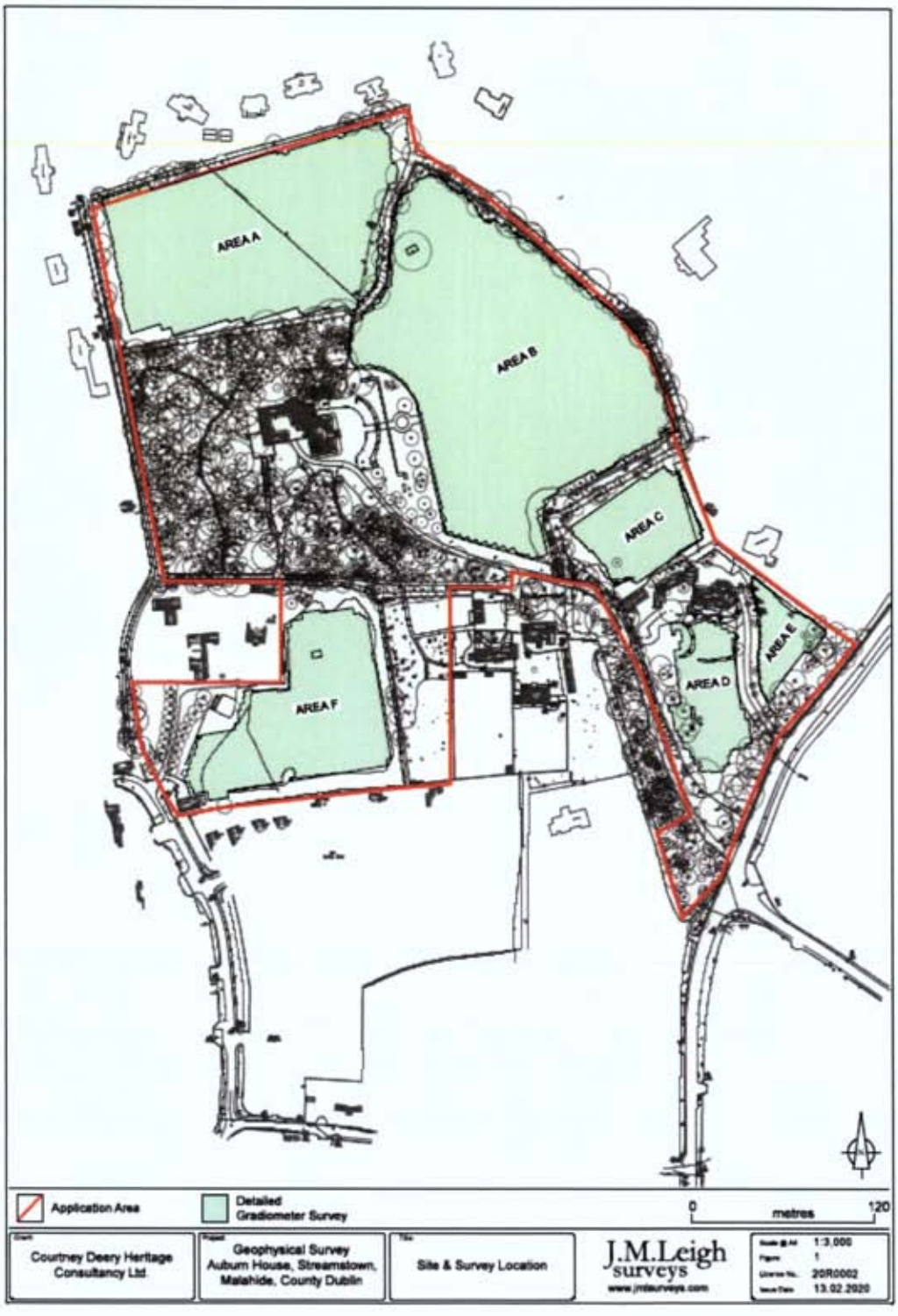

Figure 8 Survey Areas A-F

Figure 9 Geophysical survey, summary greyscale, Areas A and B

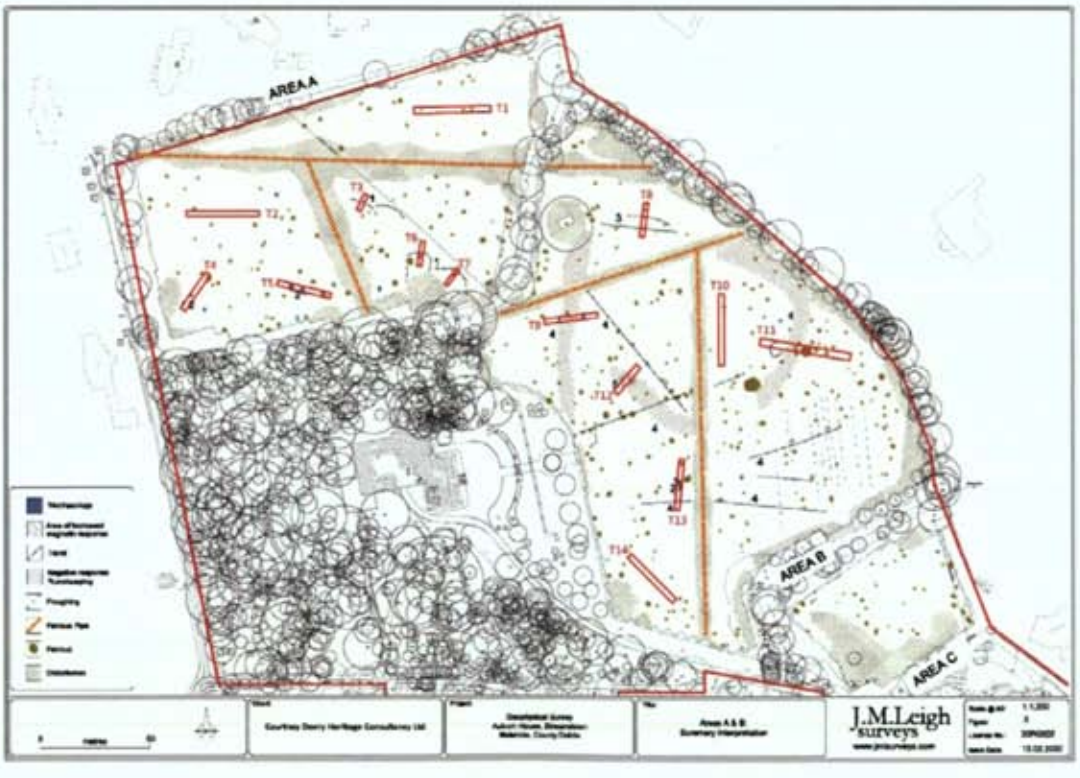

Figure 10 Geophysical survey, summary interpretation, Areas A and B and test trenches 1-14

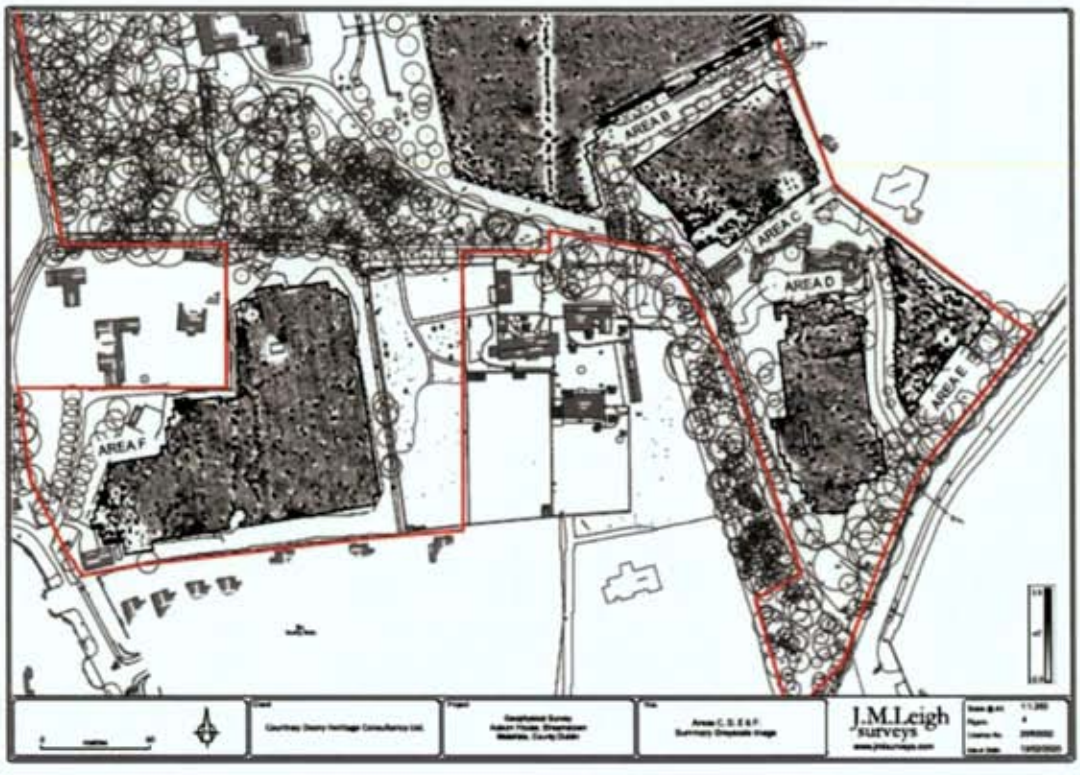

Figure 11 Geophysical survey, summary greyscale, Areas C, D, E and F

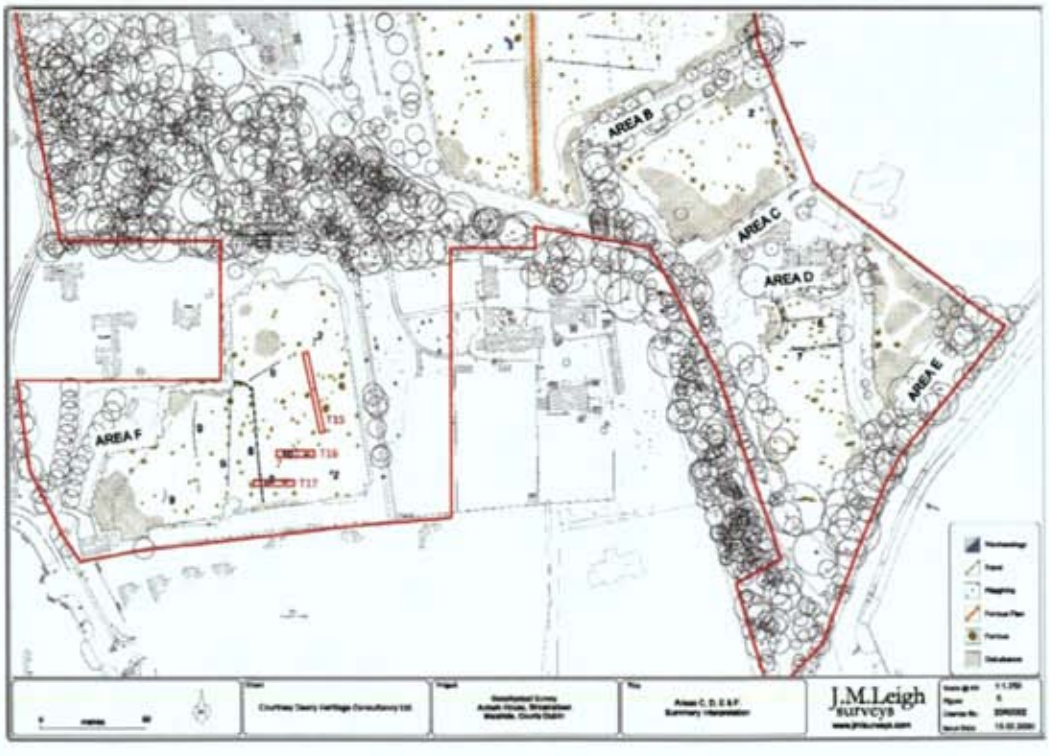

Figure 12 Geophysical survey, summary interpretation, Areas C, D, E and F and test trenches 15-17

4. ARCHAEOLOGICAL TESTING RESULTS

4.1. General

Archaeological testing was carried out over three days from 3rd March 2020. This was carried out using a mechanical tracked excavator fitted with toothless grading bucket. In total 17 test trenches totalling 430m linear metres were excavated and were placed to target anomalies indicated in the geophysical survey as well as control trenches to test areas where no anomalies were indicated (Figures 10 & 12).

4.2. Methodology

All trenches were excavated to the surface of archaeological or potential archaeological deposits or to the underlying natural subsoil, whichever was encountered first. Any potential archaeological features were cleaned and sectioned where necessary, to establish their nature, extent and character. Photographs and trench recording sheets were used to record the details of each trench.

4.3. Summary of test trenches T1 – T17

The natural subsoil on the site generally comprised, brown-yellow sandy silt, with frequent gravelly and sometimes stony inclusions towards the top of rises and light grey silty clay on lower areas. Trenches ranged in width from 1.2 - 1.8m wide and depths generally ranged between 0.25 – 0.3m.

Trenches 3-9, 11-13 and 16-17 were placed to test a range of anomalies indicated in the geophysical survey and these are detailed below in 4.3.1. Trenches 1, 2, 10, 14 and 15 were placed as control trenches to test areas where no anomalies were indicated in the survey results. No features, finds or deposits of archaeological interest were identified in any of the trenches.

Table 1 Summary of test trenches

Trench #	Area	Orientation	Length	Width	Depth	Results
1	A	E-W	40m	1.5m	0.3m	No archaeology
2	A	E-W	40m	1.5m	0.35m	No archaeology
3	A	SSW-NNE	15m	1.4m	0.45m	No archaeology
4	A	SW-NE	25m	1.5m	0.3m	No archaeology
5	A	NW-SE	25m	1.4m	0.4m	No archaeology
6	A	SSW-NNE	15m	1.6m	0.25m	No archaeology
7	A	SW-NE	10m	1.7m	0.25-0.3m	No archaeology
8	B	SSW-NNE	20m	1.8m	0.25m	No archaeology
9	B	WSW-ESE	20m	1.7m	0.25m	No archaeology
10	B	NNW-SSE	35m	1.6m	0.3m	No archaeology
11	B	E-W	40m	1.7m	0.25m	No archaeology
12	B	SW-NE	20m	1.8m	0.2-0.3m	No archaeology
13	B	NNE-SSW	25m	1.8m	0.3m	No archaeology

Trench #	Area	Orientation	Length	Width	Depth	Results
14	B	NW-SE	30m	1.2m	0.3m	No archaeology
15	F	NNW-SSE	40m	1.5m	0.3m	No archaeology
16	F	E-W	15m	1.5m	0.3m	No archaeology
17	F	E-W	15m	1.5m	0.3m	No archaeology

4.3.1 Geophysical trench results

Trenches 3, 6 and 7 were placed to investigate several curvilinear trends and ferrous responses in Area A. In trench 3 a band of gravel mid-way along the trench may correspond with the geophysical anomaly indicated in that location. In trench 6 a pit filled with mortar, slate and brick, up to 1m deep below the present ground level was identified and represents the dumped remains of a demolished modern structure. This deposit extended beyond the limit of the test trench to the east and west. In trench 7 a band of gravelly soil approximately mid-way along the trench appears to correspond with the anomaly on the geophysical survey.

Trenches 4 and 5 were placed to investigate several discreet positive magnetic responses with no clear pattern in Area A. Nothing corresponding with the geophysical anomalies was noted in trench 4 and gravelly patches were identified in trench 5 that could correspond with the survey results.

Trench 8 was placed to investigate two linear trends with no coherent pattern in Area B. No features were noted in the trench that would correspond with the geophysical survey results.

Trenches 9 and 11 were placed to investigate broad negative responses in Area B. There was no clear pattern and they were thought to possibly represent natural variations or plough damaged remains of former landscape features. In trench 9 changes in the natural subsoil from silty to gravelly natural are likely to correspond with the anomaly on the geophysical survey. In trench 11 the natural subsoil changes from sandy silt to pure silty clay and these variations may correspond with the geophysical survey results.

Trench 12 was placed to investigate another broad negative response, a small area of increased magnetic response and ferrous responses in Area B. This was thought to possibly represent a spread of burnt material, although an archaeological interpretation was highly tentative. Mid-way along the trench and corresponding with the geophysical anomalies a deposit of dark soil with modern inclusions was identified.

Trench 13 was placed to investigate an east-west linear trend and a discreet positive magnetic response in Area B. A shallow linear probable furrow oriented roughly east-west was identified in the trench and variations in the natural subsoil most likely account for the other anomalies in the survey results.

Trench 16 was placed to investigate a curvilinear positive magnetic trend possibly representing a ditched feature in Area F, although an archaeological interpretation was cautious. Nothing corresponding with the geophysical anomalies were identified in the trench.

Trench 17 was placed to investigate an isolated response and a fragmented magnetic linear trend oriented roughly north-south in Area F. Nothing corresponding with the geophysical anomalies were identified in the trench.

5. CONCLUSIONS AND FURTHER RECOMMENDATIONS

Testing at Auburn was carried out over three days from 3rd March 2020. No features, finds or deposits of archaeological interest were found in any of the trenches and the majority of the geophysical anomalies appear to correspond with variations in the natural subsoil. As such the archaeological potential of the area is considered low, however, based on the scale of the development, archaeological monitoring of topsoil removal is recommended.

Please note that all recommendations are subject to approval by the National Monuments Section of the Heritage and Planning Division, Department of Culture, Heritage and the Gaeltacht.

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Online Resources:

www.excavations.ie

www.libguides.ucd.ie

www.osi.ie

www.heritagemaps.ie

www.tcd.ie/downsurvey

PLATES

Plate 1 *Trench 1, Area A, looking west*

Plate 2 *Trench 4, Area A, looking southwest*

Plate 3 *Trench 5, Area A, looking northwest*

Plate 4 *Trench 7, Area A, looking northeast*

Plate 5 *Trench 9, Area B, looking east*

Plate 6 *Trench 11, Area B, looking east*

Plate 7 *Trench 13, Area B, looking north-northeast*

Plate 8 *Trench 15, Area F, looking north-northwest*

Plate 9 *Trench 17, Area F, looking east*

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