



Location	Date	Field of view	35mm equivalent	Distance to site	Camera model
View 4 Proposed (yr1)	05/11/21	74°	24mm	586m	Canon EOS 5DS

Showing planting @ year1



Location	Date	Field of view	35mm equivalent	Distance to site	Camera model
View 5 Existing	10/08/22	74°	24mm	44.7m	Canon EOS 5DS



Location	Date	Field of view	35mm equivalent	Distance to site	Camera model
View 5 Proposed	10/08/22	74°	24mm	44.7m	Canon EOS 5DS



Location	Date	Field of view	35mm equivalent	Distance to site	Camera model
View 6 Existing	10/08/22	74°	24mm	260m	Canon EOS SDS





Location	Date	Field of view	35mm equivalent	Distance to site	Camera model
View 6 Proposed	10/08/22	74°	24mm	260m	Canon EOS SDS



Location	Date	Field of view	35mm equivalent	Distance to site	Camera model
View 7 Existing	10/08/22	74°	24mm	613.1m	Canon EOS 5DS



Location	Date	Field of view	35mm equivalent	Distance to site	Camera model
View 7 Proposed	10/08/22	74°	24mm	613.1m	Canon EOS 5DS

APPENDIX TO SECTION 13

TRAFFIC & TRANSPORTATION

APPENDIX 13.1

Construction programme

APPENDIX 13.2

PICADY output report

FINGAL COUNTY COUNCIL
PLANNING DEPARTMENT
Fw22A/2024/A1
11 JAN 2023
ADDITIONAL INFORMATION
REGISTRY

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: Junction 1 - AM and PM.j9

Path: M:\Projects\21\21-099 - Kilshane Lands\Design\Civil\Traffic\Junction Modelling - EIAR\Junction 1

Report generation date: 06/09/2022 13:43:41

- »Junction 1 - Existing Site Access - Scenario 1 - 2024 (Construction Phase), AM
- »Junction 1 - Existing Site Access - Scenario 1 - 2024 (Construction Phase), PM

Summary of junction performance

	AM		PM	
	Queue (PCU)	RFC	Queue (PCU)	RFC
Junction 1 - Existing Site Access - Scenario 1 - 2024 (Construction Phase)				
Stream B-C	0.0	0.00	0.1	0.05
Stream B-A	0.0	0.00	0.5	0.29
Stream C-AB	0.2	0.08	0.0	0.01

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

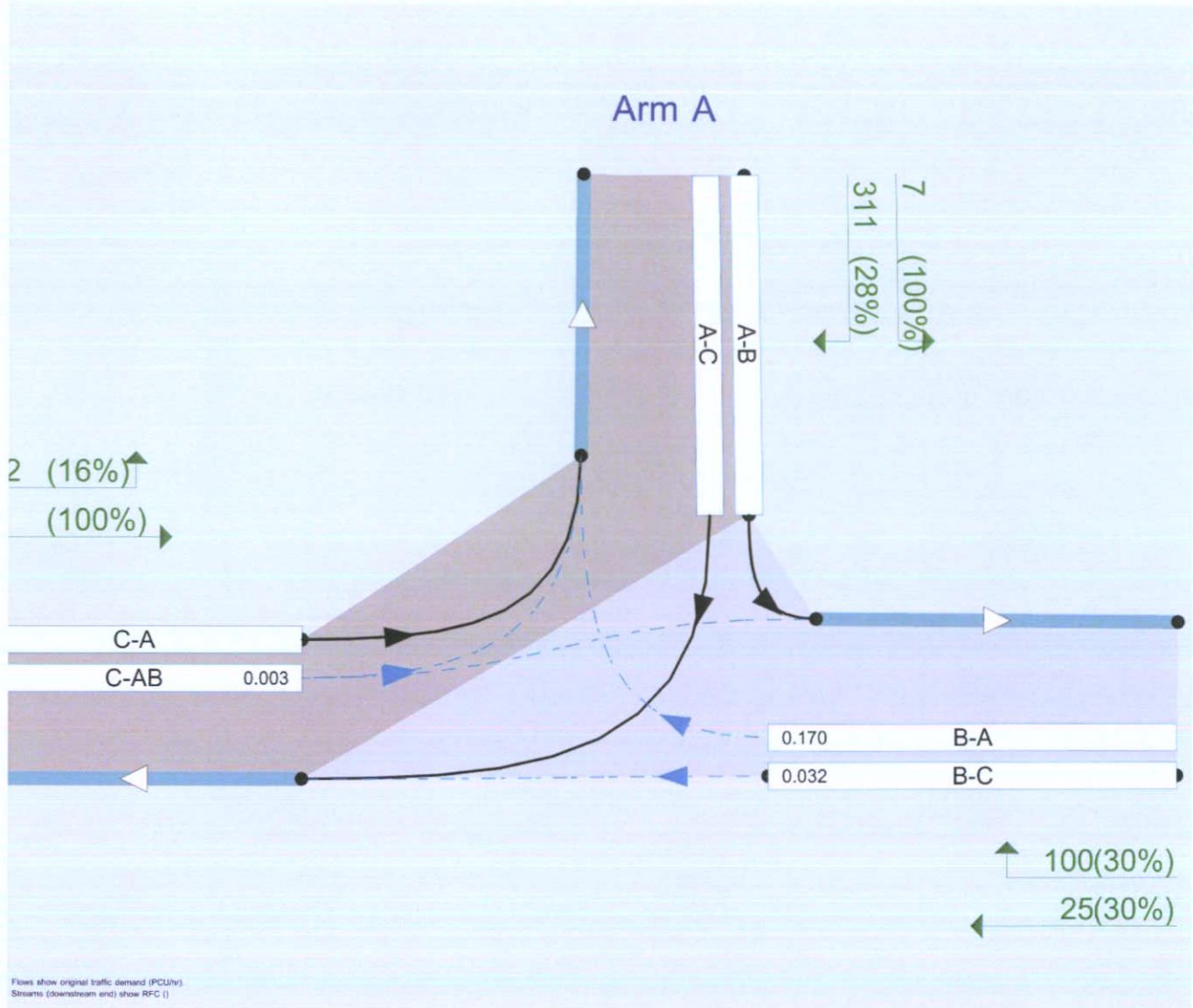
File summary

File Description

Title	
Location	
Site number	
Date	18/11/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DOMAINf.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	PCU	PCU	perHour	s	-Min	perMin



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	Scenario 1 - 2024 (Construction Phase)	AM	ONE HOUR	08:00	09:30	15
D2	Scenario 1 - 2024 (Construction Phase)	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Junction 1 - Existing Site Access	100.000

Junction 1 - Existing Site Access - Scenario 1 - 2024 (Construction Phase), 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		0.38	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	6.00			50.0	✓	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	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	5.00	2.50	2.50	2.50	✓	1.00	70	100

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	550	0.100	0.253	0.159	0.362
B-C	738	0.113	0.286	-	-
C-B	603	0.234	0.234	-	-

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)
D1	Scenario 1 - 2024 (Construction Phase)	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	693	100.000
B		✓	2	100.000
C		✓	271	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	106	587
	B	2	0	0
	C	245	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	30	22
	B	100	0	100
	C	60	30	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	0.00	0.0	A
B-A	0.00	0.00	0.0	A
C-AB	0.08	8.78	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	603	0.000	0	0.0	0.000	A
B-A	0	394	0.000	0	0.0	0.000	A
C-AB	28	616	0.045	28	0.1	8.421	A
C-A	176			176			
A-B	80			80			
A-C	442			442			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	577	0.000	0	0.0	0.000	A
B-A	0	363	0.000	0	0.0	0.000	A
C-AB	36	622	0.058	36	0.1	8.524	A
C-A	207			207			
A-B	95			95			
A-C	528			528			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	540	0.000	0	0.0	0.000	A
B-A	0	321	0.000	0	0.0	0.000	A
C-AB	50	631	0.080	50	0.2	8.710	A
C-A	248			248			
A-B	117			117			
A-C	646			646			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	540	0.000	0	0.0	0.000	A
B-A	0	321	0.000	0	0.0	0.000	A
C-AB	50	631	0.080	50	0.2	8.778	A
C-A	248			248			
A-B	117			117			
A-C	646			646			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	577	0.000	0	0.0	0.000	A
B-A	0	363	0.000	0	0.0	0.000	A
C-AB	36	622	0.059	37	0.1	8.661	A
C-A	207			207			
A-B	95			95			
A-C	528			528			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	603	0.000	0	0.0	0.000	A
B-A	0	394	0.000	0	0.0	0.000	A
C-AB	28	616	0.046	28	0.1	8.500	A
C-A	176			176			
A-B	80			80			
A-C	442			442			

Junction 1 - Existing Site Access - Scenario 1 - 2024 (Construction Phase), 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		2.07	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)
D2	Scenario 1 - 2024 (Construction Phase)	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	318	100.000
B		✓	125	100.000
C		✓	504	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	7	311
	B	100	0	25
	C	502	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	100	28
	B	30	0	30
	C	16	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.05	9.23	0.1	A
B-A	0.29	17.04	0.5	C
C-AB	0.01	6.67	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	593	0.032	19	0.0	8.141	A
B-A	75	442	0.170	74	0.3	12.675	B
C-AB	3	810	0.003	3	0.0	6.666	A
C-A	377			377			
A-B	5			5			
A-C	234			234			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	571	0.039	22	0.1	8.536	A
B-A	90	418	0.215	90	0.3	14.221	B
C-AB	4	853	0.004	4	0.0	6.213	A
C-A	449			449			
A-B	6			6			
A-C	280			280			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	535	0.051	27	0.1	9.214	A
B-A	110	385	0.286	109	0.5	16.965	C
C-AB	6	914	0.006	6	0.0	5.595	A
C-A	549			549			
A-B	8			8			
A-C	342			342			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	535	0.051	28	0.1	9.226	A
B-A	110	385	0.286	110	0.5	17.039	C
C-AB	6	914	0.006	6	0.0	5.508	A
C-A	549			549			
A-B	8			8			
A-C	342			342			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	570	0.039	23	0.1	8.552	A
B-A	90	418	0.215	91	0.4	14.306	B
C-AB	4	853	0.004	4	0.0	5.985	A
C-A	449			449			
A-B	6			6			
A-C	280			280			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	592	0.032	19	0.0	8.159	A
B-A	75	443	0.170	76	0.3	12.772	B
C-AB	3	810	0.004	3	0.0	6.534	A
C-A	377			377			
A-B	5			5			
A-C	234			234			

TRANSYT 16

Version: 16.0.1.8473
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Results are NOT up to date. You should run the file and then refresh this report.

Filename: Kilshane Cross Junction_Rev2 - PM.t15

Path: M:\Projects\21\21-099 - Kilshane Lands\Design\Civil\Traffic\Junction Modelling - EIAR\Kilshane Cross Junction

Report generation date: 06/09/2022 14:51:02

- »A1 - Do Nothing 2022 : D1 - Do Nothing 2022, :
- »A2 - Scenario 2024 - Construction Phase (AM) : D2 - Scenario 2024 - Construction Phase (AM), :
- »A3 - Do Nothing 2040 : D3 - Do Nothing 2040, :
- »A4 - Scenario 2040 - Operational Phase (AM) : D4 - Scenario 2040 - Operational Phase (AM), :
- »A5 - Scenario 2040 - Masterplan (AM) : D5 - Scenario 2040 - Masterplan (AM), :

Summary of network performance

	Set ID	PI (£ per hr)	Total delay (Veh-hr/hr)	Highest DOS	Number oversaturated
Do Nothing 2022 - Do Nothing 2022					
Network	A1 D1	414.38	27.69	86% (TS B/1)	0 (0%)

	Set ID	PI (£ per hr)	Total delay (Veh-hr/hr)	Highest DOS	Number oversaturated
Scenario 2024 - Construction Phase (AM) - Scenario 2024 - Construction Phase (AM)					
Network	A2 D2	562.41	37.74	96% (TS C/1)	1 (7%)

	Set ID	PI (£ per hr)	Total delay (Veh-hr/hr)	Highest DOS	Number oversaturated
Do Nothing 2040 - Do Nothing 2040					
Network	A3 D3	689.25	46.41	96% (TS A/2)	3 (20%)

	Set ID	PI (£ per hr)	Total delay (Veh-hr/hr)	Highest DOS	Number oversaturated
Scenario 2040 - Operational Phase (AM) - Scenario 2040 - Operational Phase (AM)					
Network	A4 D4	812.34	54.87	99% (TS A/2)	3 (20%)

	Set ID	PI (£ per hr)	Total delay (Veh-hr/hr)	Highest DOS	Number oversaturated
Scenario 2040 - Masterplan (AM) - Scenario 2040 - Masterplan (AM)					
Network	A5 D5	4305.13	298.46	149% (TS C/1)	4 (27%)

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

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DOMAIN\byrne
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display OD matrix distances	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber	c m
			✓			✓		✓	✓						

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	Veh	Veh	perHour	s	-Hour	perHour

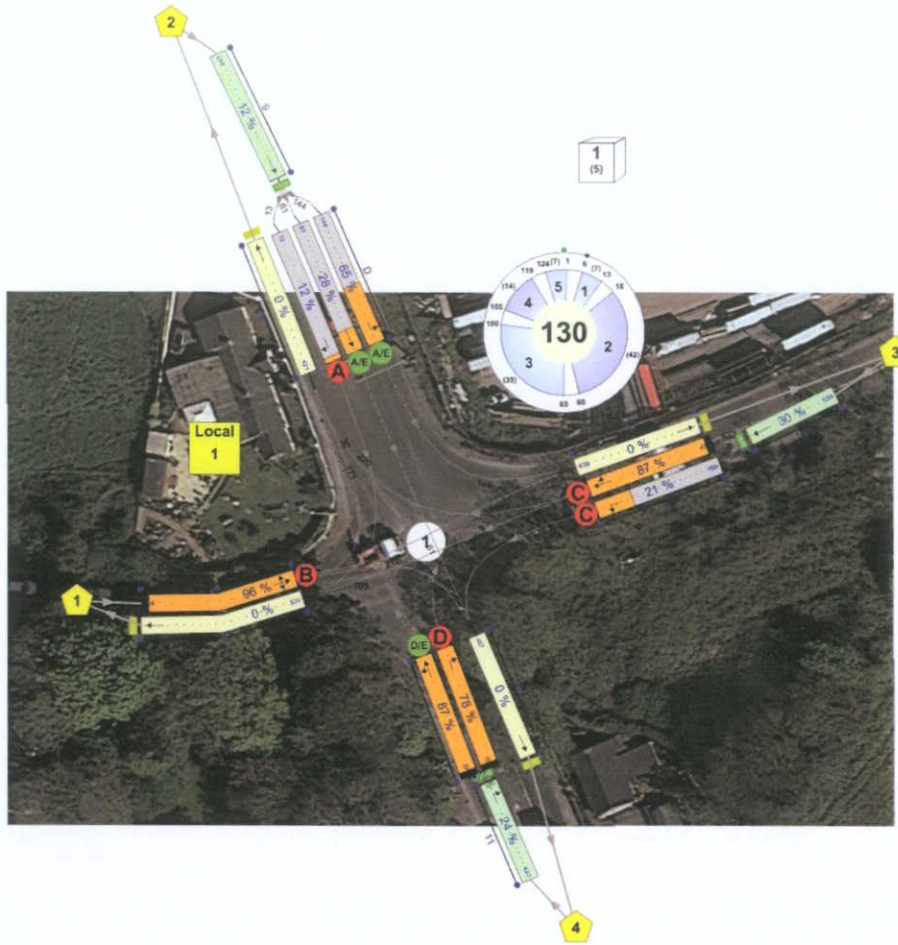
Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Average animation capture interval (s)	Use quick response	Do flow sampling	Uniform vehicle generation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	3.00	999	200	-1	3	60	✓			0	0	0.00

Network Diagrams



(untitled)
Diagram produced using TRANSYT 16.0.1.8473

A1 - Do Nothing 2022

D1 - Do Nothing 2022,

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Traffic Stream Signals	Arm D - Traffic Stream 1 - Signals (1, A/E)	Traffic Stream 1 controlling phase E never runs in the current stage sequence.
Warning	Traffic Stream Signals	Arm D - Traffic Stream 2 - Signals (1, A/E)	Traffic Stream 2 controlling phase E never runs in the current stage sequence.
Warning	Traffic Stream Signals	Arm B - Traffic Stream 1 - Signals (1, D/E)	Traffic Stream 1 controlling phase E never runs in the current stage sequence.
Info	Traffic Stream Signals	Arm D - Traffic Stream 1 - Signals (1, A/E)	Traffic Stream 1 controlling phase E never runs in stage sequence 1,2,3,4,5,6.
Info	Traffic Stream Signals	Arm D - Traffic Stream 2 - Signals (1, A/E)	Traffic Stream 2 controlling phase E never runs in stage sequence 1,2,3,4,5,6.
Info	Traffic Stream Signals	Arm B - Traffic Stream 1 - Signals (1, D/E)	Traffic Stream 1 controlling phase E never runs in stage sequence 1,2,3,4,5,6.

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (Veh-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignal PRC
1	06/09/2022 14:50:26	06/09/2022 14:50:26	0.98	08:00	130	414.38	27.69	85.68	B/1	0	0	B/1	10/1

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set (s)	Specific Demand Set (s)	Optimise specific Demand Set (s)	Include in report	Locked
Do Nothing 2022			✓	D1		✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
Do Nothing 2022					08:00		✓

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
A	L3120 Kilshane Road (East)		1
Ax	(untitled)		
B	R135 (South)		1
Bx	(untitled)		
C	L3120 Kilshane Road (West)		1
Cx	(untitled)		
D	R135 (North)		1
Dx	(untitled)		
9			1
10			1
11			1

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
A	1	(untitled)		✓	60.19	✓	Sum of lanes	1800	✓		Normal	
	2	(untitled)			25.00	✓	Sum of lanes	1800	✓		Normal	
Ax	1	(untitled)		✓	142.28						Normal	
B	1	(untitled)			15.00	✓	Sum of lanes	1800	✓		Normal	
	2	(untitled)			15.00	✓	Sum of lanes	1800	✓	✓	Normal	
Bx	1	(untitled)		✓	130.68						Normal	
C	1	(untitled)			25.00	✓	Sum of lanes	2103	✓		Normal	
Cx	1	(untitled)		✓	144.24						Normal	
D	1	(untitled)		✓	69.40	✓	Sum of lanes	1800	✓		Normal	
	2	(untitled)		✓	66.73	✓	Sum of lanes	1800	✓		Normal	
	3	(untitled)		✓	68.90	✓	Sum of lanes	1800	✓		Normal	
Dx	1	(untitled)		✓	155.87						Normal	
9	1			✓	49.01	✓	Sum of lanes	1800			Normal	
10	1			✓	33.76	✓	Sum of lanes	1800			Normal	
11	1			✓	37.23	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
A	1	2	(untitled)											1800
	2	1	(untitled)											1800
Ax	1	1	(untitled)											
B	1	2	(untitled)											1800
	2	1	(untitled)											1800
Bx	1	1	(untitled)											
C	1	1	(untitled)		✓	N/A	N/A	-2	4.00	✓	43	25.85		2103
Cx	1	1	(untitled)											
D	1	3	(untitled)											1800
	2	1	(untitled)											1800
	3	2	(untitled)											1800
Dx	1	1	(untitled)											
9	1	1	(untitled)											1800
10	1	1	(untitled)											1800
11	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	130

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (Veh/hr)	Normal Flow (Veh/hr)
A	1	102	102
	2	401	401
Ax	1	600	600
B	1	261	261
	2	156	156
Bx	1	370	370
C	1	543	543
Cx	1	304	304
D	1	137	137
	2	59	59
	3	12	12
Dx	1	397	397
9	1	208	208
10	1	503	503
11	1	417	417

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled	Second phase
A	1	1	C		
	2	1	C		
B	1	1	D	✓	E
	2	1	D		
C	1	1	B		
D	1	1	A	✓	E
	2	1	A	✓	E
	3	1	A		

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
C	1	3.00	30.00
9	1	5.88	30.00
10	1	4.05	30.00
11	1	4.47	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
A	1	1	10/1	A/1	7.22	30.00	✓	Straight	Straight Movement
	2	1	10/1	A/2	3.00	30.00	✓	Straight	Straight Movement
Ax	1	1	C/1	Ax/1	17.07	30.00	✓	Straight	Straight Movement
B	1	1	11/1	B/1	1.80	30.00	✓	Offside	98.84
	2	1	11/1	B/2	1.80	30.00	✓	Offside	96.11
Bx	1	1	A/1	Bx/1	15.68	30.00	✓	Nearside	23.66
Cx	1	1	B/1	Cx/1	17.31	30.00	✓	Nearside	33.73
D	1	1	9/1	D/1	8.33	30.00	✓	Straight	Straight Movement
	2	1	9/1	D/2	8.01	30.00	✓	Straight	Straight Movement
	3	1	9/1	D/3	8.27	30.00	✓	Straight	Straight Movement
Dx	1	1	C/1	Dx/1	18.70	30.00	✓	Nearside	25.85
Ax	1	2	D/1	Ax/1	17.07	30.00	✓	Nearside	51.65
Bx	1	2	C/1	Bx/1	15.68	30.00	✓	Offside	43.33
Cx	1	2	A/2	Cx/1	17.31	30.00	✓	Straight	Straight Movement
Dx	1	2	B/1	Dx/1	18.70	30.00	✓	Straight	Straight Movement
Ax	1	3	B/2	Ax/1	17.07	30.00	✓	Offside	42.21
Bx	1	3	D/2	Bx/1	15.68	30.00	✓	Straight	Straight Movement
Cx	1	3	D/3	Cx/1	17.31	30.00	✓	Offside	35.26
Dx	1	3	A/2	Dx/1	18.70	30.00	✓	Offside	74.00

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
B	2	AllTraffic		

Signal Timings

Network Default: 130s cycle time; 130 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1	(untitled)		1	NetworkDefault	130	109

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Relative

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	7	300	0	0	Traffic
	B	(untitled)	40	300	0	0	Traffic
	C	(untitled)	35	300	0	0	Traffic
	D	(untitled)	7	300	0	0	Traffic
	E	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	A	1	0	0
	2	B	1	0	0
	3	C	1	0	0
	4	D	1	0	0

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4	24, 70, 110, 6	109	
	2	(untitled)	Single	1, 2, 4, 3	21, 49, 70, 90	109	
	3	(untitled)	Single	1, 3, 2, 4	20, 50, 80, 0	109	
	4	(untitled)	Single	1, 3, 4, 2	21, 52, 73, 93	109	
	5	(untitled)	Single	1, 4, 2, 3	20, 40, 60, 90	109	
	6	(untitled)	Single	1, 4, 3, 2	21, 42, 63, 93	109	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	5	5	5	5	

Banned Stage transitions for Controller Stream 1

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	5	5	5
	2	5	0	5	5
	3	5	5	0	5
	4	5	5	5	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	11	24	13	1	7
	2	✓	2	B	29	70	41	1	40
	3	✓	3	C	75	110	35	1	35
	4	✓	4	D	115	6	21	1	7

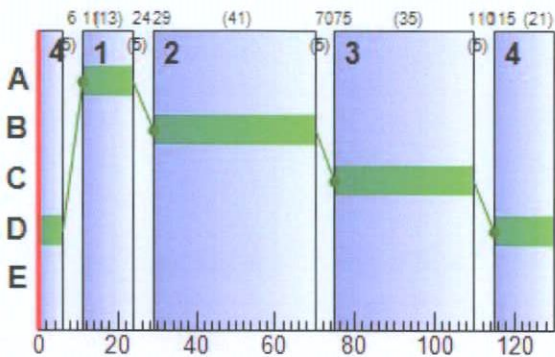
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	11	24	13
	B	1	✓	29	70	41
	C	1	✓	75	110	35
	D	1	✓	115	6	21

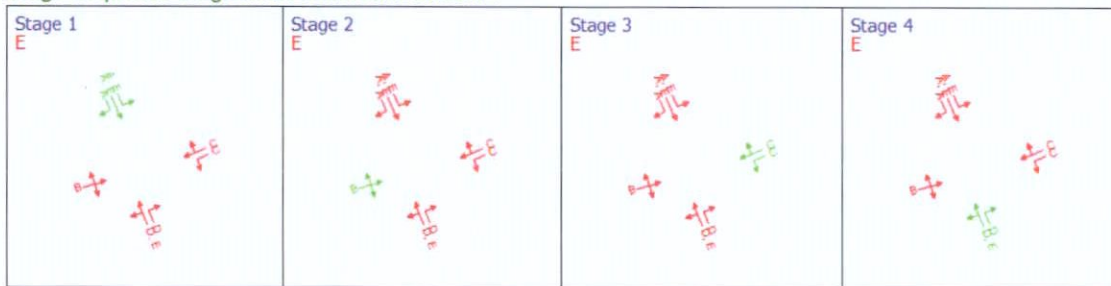
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
A	1	1	1	C	75	110	35
A	2	1	1	C	75	110	35
B	1	1	1	D	115	6	21
B	2	1	1	D	115	6	21
C	1	1	1	B	29	70	41
D	1	1	1	A	11	24	13
D	2	1	1	A	11	24	13
D	3	1	1	A	11	24	13

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00